

ANNUAL IMPLEMENTATION REPORT

ENERGY COMMUNITY SECRETARIAT

1 SEPTEMBER 2015

The cover images of the IR 2015 feature the energy sector of Albania, the 2015 Energy Community Presidency in Office. The collage shows the Fierza Dam (total installed capacity up to 500 MW), one of the four hydroelectric dams on the Drin River. The oil tanks image originates from the Patos-Marina oilfield, which is one of the largest on-shore oilfields in Europe.

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The Secretariat expresses gratitude to the three companies for courtesy of providing photos for the IR 2015 publication.

ANNUAL IMPLEMENTATION REPORT 2014/2015

ENERGY COMMUNITY SECRETARIAT

1 SEPTEMBER 2015

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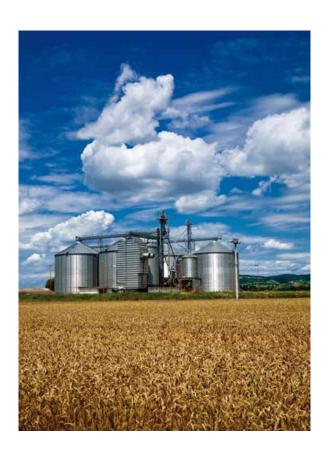
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Energy Community Secretariat Am Hof 4 1010 Vienna

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 Layout: Medium d.o.o. Pictures: www.fotolia.com, www.istockphoto.com, Energy Community photo contest participants

Preface

If I had to choose one adjective to describe the Secretariat's activities over the past year, it would be busy. This is certainly due to the growth of the *acquis*, the consequent surge of legislative activity and the rise of regional initiatives following the recent fears of a gas crisis. But I also believe this is the case because the Energy Community Secretariat has established itself as a reliable partner in the energy world.

We are more and more an active player in the Contracting Parties and the EU Member States. We don't just write compliance reviews from our desks in Vienna, but travel to our Contracting Parties and the rest of Europe meeting with technical experts as well as State representatives at the highest level as often as needed to achieve results. Our assistance to the Contracting Parties is increasingly hands on. This year we have gotten truly into the nitty-gritty of legislative drafting. We have prepared initial drafts of legislation ourselves such as Ukraine's Gas Market, Electricity Market and Energy Efficiency Laws. We have spent countless hours negotiating draft legislation article by article with the Contracting Party authorities and stakeholders.

As governments adopted the laws in question, our work was never done. This year, we have started to cooperate much more actively with national Parliaments. This included participation in parliamentary hearings as well as checking the compliance of legislative amendments submitted sometimes on the very eve of the vote.

The past year has brought a wave of activity from the European Union. The appointment of a Commission Vice-President for Energy Union together with a Commissioner for Energy and Climate is a clear indication that energy is once again a key priority for the EU. The "Roadmap for the Energy Union" was announced in February 2015. We have been working endlessly to ensure that the Energy Union doesn't make the EU an energy fortress, but instead serves to support the creation of a pan-European energy market encompassing all Energy Community Contracting Parties as equal partners.

This Implementation Report once again provides the most comprehensive overview of the progress made by the Contracting Parties in the implementation of the Energy Community *acquis*. It highlights the most recent progress made – our successes that we share with the Contracting Parties - as well as our failures – the hurdles to the transposition and implementation of law that were too big to overcome until now. These will be the focus of our endeavours over the next reporting period.

While it is not possible to name everyone who contributed to the drafting of this Report, I would like to thank especially Dr. Dirk Buschle, Deputy Director, who makes the Implementation Report come together every year and the members of the Energy Community Permanent High Level Group, our faithful and dedicated liaison officers in the Contracting Parties.

Janez Kopač, Director of the Energy Community Secretariat



Albanian Energy Minister Gjiknuri, Energy Community Presidency 2015, meets with Secretariat's Director Kopač



INTRODUCTION

2 ANNUAL REPORT

STATE OF IMPLEMENTATION



1 Introduction

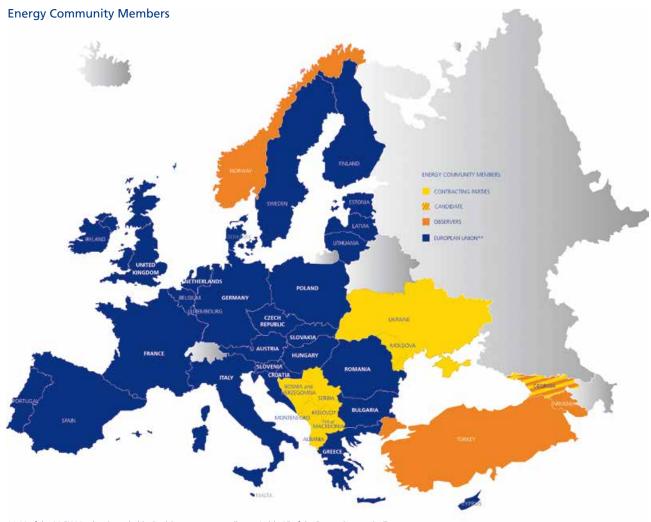
a. The Energy Community

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. The Energy Community strives to enhance security of supply and

competition, and to improve the environmental situation in its Contracting Parties.

The Treaty establishing the Energy Community was signed in October 2005 in Athens. Following ratifications by all Parties, the Treaty entered into force on 1 July 2006. As of 1 September 2015, the Parties to the Treaty are the European Union, and eight Contracting Parties, namely Albania, Bosnia and Herzegovina, Kosovo*1, former Yugoslav Republic of Macedonia, Moldova, Montenegro, Serbia and Ukraine.

¹ Following an agreement between the Serbian and Kosovo* Governments reached under EU facilitation, Kosovo* is the only denomination to be used within the framework of regional cooperation.



** 19 of the 28 EU Member States hold a Participant status according to Article 95 of the Energy Community Treaty

Source: Energy Community Secretariat

^{*} 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.

Pursuant to the Article 95, the European Union Member States can obtain the status of a Participant to the Treaty. Currently 19 of the 28 EU Member States are Participants to the Treaty, namely Austria, Bulgaria, Croatia, Czech Republic, Cyprus, France, Finland, Germany, Greece, Hungary, Italy, Latvia, the Netherlands, Poland, Romania, Slovakia, Slovenia, Sweden and the United Kingdom.

Armenia, Georgia, Norway and Turkey are Observers under Article 96 of the Treaty. Georgia has applied to join the Energy Community as a full member.

b. The Institutions

The implementation of the *acquis* is backed up by a strong institutional setting. This includes the Ministerial Council, as the supreme decision-making body, and the Permanent High Level Group (PHLG), which prepares the work of the Ministerial Council. The Energy Community Regulatory Board (ECRB), as well as the Fora for electricity, gas, and oil, has an advisory role towards the decision-making bodies.

Further strengthening the role of the institutions to better support the achievements of the Energy Community Treaty's objectives was one of the key findings of the Energy Community High Level Reflection Group Report in 2014. A process is currently under way to implement some of the Group's proposals.

Energy Community Institutional Setting



PERMANENT HIGH LEVEL GROUP (PHLG) REGULATORY BOARD (ECRB) ENERGY COMMUNITY SECRETARIAT

FORA
ELECTRICITY
GAS
OIL

Source: Energy Community Secretariat

c. The Secretariat

With its seat in Vienna, the Secretariat of the Energy Community is the only permanent and independent institution under the Treaty. In its threefold role, the Secretariat assists the Parties and institutions of the Treaty, enforces the implementation of the Treaty's *acquis* and monitors the state of implementation.

The Treaty envisages a dispute settlement mechanism to enforce the acquis obligations assumed by the Parties. Adopted in 2008, the Rules of Procedure for Dispute Settlement (currently under review) spell out a preliminary procedure carried out by the Secretariat and the creation of an Advisory Committee to support the Ministerial Council deciding on an existence of a breach by a Party. To clarify the factual and legal circumstances, the Secretariat manages the preliminary procedure. It initiates a case 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. In the course of this three-step procedure, the Party concerned has opportunity for making its arguments heard, to comply of its own accord with the requirements of the Treaty or to justify its position. Four dispute settlement cases upon complaints are currently open, and the Secretariat has opened another 11 cases on its own motion.

In accordance with Article 67(b) of the Treaty, the Secretariat is to review the proper implementation by the Contracting Parties of their Treaty obligations and submit Annual Implementation Reports to the Ministerial Council of the Energy Community.

d. Acquis

The Energy Community *acquis communautaire* under Title II of the Treaty comprises the core EU legislation in network energy, environment, competition, renewable energy, energy efficiency, oil and statistics. In the Energy Community context, network energy consists of electricity, gas and oil.

As a response to the evolution of EU energy law, the Treaty envisages the swift incorporation of new EU legislation to the Energy Community upon proposal by the European Commission. After entry into force of the Treaty, the Energy Community acquis has been extended several times.

The tables below display the Energy Community *acquis communautaire* presently in force. The implementation deadlines have been set by respective Ministerial Council Decisions. Due to their later accession, the implementation deadlines may differ for Moldova and Ukraine.

On 6 October 2011, the Ministerial Council adopted the socalled Third Energy Package for electricity and gas, with a general implementation deadline of 1 January 2015. The present Implementation Report 2015 is the first report that measures the Contracting Parties' compliance against that yardstick.

Acquis on Electricity

| Title of Document | General Implementation Deadline | Implementation Deadline Moldova / Ukraine |
|--|------------------------------------|--|
| Directive 2009/72/EC concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC | 1 Jan 2015 | 1 Jan 2015 |
| Regulation (EC) 714/2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) 1228/2003 | 1 Jan 2015 | 1 Jan 2015 |
| 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 | 1 Jan 2014 | 1 Jan 2014 |
| Regulation (EU) 543/2013 on submission and publication of data in electricity markets and amending Annex I to Regulation (EC) No 714/2009 | 24 Dec 2015 | 24 Dec 2015 |
| Directive 2005/89/EC concerning measures to safeguard security of electricity supply and infrastructure investment | 31 Dec 2009 | Moldova: 31 Dec 2010 Ukraine: 1 Jan 2012 |

The electricity *acquis* sets minimum requirements for the establishment of competitive electricity markets, including the development of coherent, transparent and non-discriminatory security of supply policies. The deadline for market opening for households was 1 January 2015.

Decision 2011/02/MC-EnC sets separate deadlines for Article 9 of Directive 2009/72/EC on the unbundling of transmission system operations, namely of 1 June 2016 and 1 June 2017 for Article 9(1) and Article 9(4) respectively. Article 11 on certification in relation to third parties is to be implemented no later than 1 January 2017.

The PHLG adopted Regulation (EU) 543/2013 on transparency of electricity markets at its June 2015 meeting. The aim of the Regulation is to facilitate the collection, verification and processing of data and to make the collected data available to the public through a central information transparency platform. The Secretariat will review the Contracting Parties' compliance with the Regulation in its 2016 Implementation Report.

Priority Projects in Electricity Market Integration

Spot Market Development

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Establishing organised day-ahead markets ready for coupling with each other would fix various problems in the electricity markets. It would allow for the formation of competitive and transparent prices, boosting market development and sustainability. Price regulation would have to phased-out and market participation requirements would need to be harmonised. Applying existing European standards in the implementation would bring coherence with the European Target Model, and allow for the integration of markets too small for competitive price formation into a bigger market. The investments needed for achieving this are limited, but implementation requires significant efforts for law-makers and regulators, as well as for the industry.

Cross-Border Balancing

Electricity balancing in most of the Western Balkans is characterised by a non-market-based and nationally-oriented approach and limited transparency. Thus, balancing resources are not used as efficiently and effectively as it would be possible through the introduction of cross-border balancing cooperation in the Western Balkans. Given that balancing is a prerequisite for ensuring operational security, proper market functioning and the integration of renewables, this is an important field where strengthened regional cooperation would give rise to significant improvements in technical performance, competition and cost savings.

Cross-border Capacity Allocation

The coordinated allocation of long-term cross-border transmission capacities is one of the cornerstones of early stage market integration. The Coordinated Auction Office in Southeast Europe (SEE



CAO) has finally taken up its operation and is continuously growing with regard to the borders it services. The allocation of cross-border capacities through *SEE CAO* represents a coordinated approach leading to reduced transaction costs, better competition, more transparent pricing and lower system cost. The system operators of Bulgaria, Hungary, Romania, Serbia and former Yugoslav Republic of Macedonia showed reluctance towards regional cooperation in this regard. In order to achieve full market integration, it is crucial that all forward capacities within the Southeast European Region are allocated centrally.

Governance - Western Balkans 6 Initiative

An important step towards the realisation of the electricity market priorities was achieved at the Vienna Summit of the Western Balkans 6 Initiative on 27 August 2015. Here, the heads of government, foreign and economic ministers of the six Western Balkan countries decided to set up a regional energy market by establishing power exchanges, a regional balancing market and making best use of the SEE CAO. The agreement also covers a number of measures targeting the removal of barriers that pre-condition the implementation of the three regional market pillars.

Acquis on Gas General Implementation Implementation Deadline Title of Document . Moldova / Ukraine Deadline Directive 2009/73/EC concerning common rules for the internal market in natural gas and repealing 1 Jan 2015 1 Jan 2015 Directive 2003/55/EC Regulation (EC) 715/2009 on conditions for access to the natural gas transmission networks and repealing 1 Jan 2015 1 Jan 2015 Regulation (EC) 1775/2005 Moldova: 31 Dec 2010 Directive 2004/67/EC concerning measures to safeguard security of natural gas supply 31 Dec 2009 Ukraine: 1 Jan 2012

The deadline for market opening for households in the gas sector is 1 January 2015. Decision 2011/02/MC-EnC sets separate deadlines for Article 9 of Directive 2009/73/EC on the unbundling of transmission system operations, namely of 1 June 2016 and 1 June 2017 for Article 9(1) and Article 9(4) respectively. Article 11 on certification in relation to third parties is to be implemented no later than 1 January 2017. In view of the unique characteristics of its gas market, the Ministerial Council Decision 2012/05/MC-EnC granted Moldova an extended implementation deadline. As regards the provisions of Article 9 of Directive 2009/73/EC, the deadline of 1 January 2020 applies for Moldova.

The discussion on the adoption of Regulation (EU) 994/2010 of 20 October 2010 concerning measures to safeguard security of

gas supply has been ongoing since 2013. In parallel, the revision of the Regulation has started at the EU level. The recent Energy Union Communication foresees preventive and emergency plans in gas supply at regional, EU level as well as that of the Energy Community. This underlines the need for a joint approach. At the June 2015 PHLG, the European Commission proposed that the Ministerial Council adopts a General Policy Guideline leading to the implementation of the revised Regulation (EU) 994/2010 in the Energy Community as a self-standing legal act referred to as the "Joint Act on Security of Gas Supply". The Joint Act would be based on the structure and the content of the revised Security of Gas Supply Regulation. The Commission would make a legislative proposal for the Joint Act once the revised Regulation is adopted at the EU level.

| Acquis on Environment | | |
|---|------------------------------------|--|
| Title of Document | General Implementation Deadline | Implementation Deadline Moldova / Ukraine |
| Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment, as amended by Directives 97/11/EC and 2003/35/EC | 1 Jul 2006 | Moldova: 31 Dec 2010 Ukraine: 1 Jan 2013 |
| Directive 1999/32/EC relating to a reduction in the sulphur content of certain liquid fuels and amending Directive 93/12/EEC | 31 Dec 2011 | Moldova: 31 Dec 2014 Ukraine: 1 Jan 2012 |
| Directive 2001/80/EC on the limitation of emissions of certain pollutants into the air from large combustion plants | 31 Dec 2017 | Moldova: 31 Dec 2017 Ukraine: 1 Jan 2018 |
| Directive 2010/75/EU on industrial emissions (integrated pollution prevention and control) - for new plants | 1 Jan 2018 | 1 Jan 2018 |
| Article 4(2) of Directive 79/409/EEC on the conservation of wild birds | 1 Jul 2006 | Moldova: 31 Dec 2010 Ukraine: 1 Jan 2015 |

Directive 85/337/EEC aims at identifying and assessing environmental consequences of projects before a building or operation permit is granted. The key objective of the Sulphur in Fuels Directive 1999/32/EC is to ensure effective protection from the risks resulting from SO_2 emissions, by imposing thresholds meant to prevent sulphur deposition exceeding critical loads and levels. Article 13 of the Treaty invites the Contracting Parties to accede to the Kyoto Protocol, which all Contracting Parties with the exception of Kosovo* have already done.

The overall aim of the Large Combustion Plants Directive 2001/80/EC is to reduce emissions of acidifying pollutants, particles, and ozone precursors. Based on Ministerial Council Decision 2013/06/MC-EnC, the provisions of Chapter III, An-

nex V, and Article 72(3)-(4) of the Industrial Emission Directive 2010/75/EU are applicable to new plants as from 2018 onwards. By Decision 2013/05/MC-EnC, Article 4(6) of Directive 2001/80/EC was adapted for the specific purposes of the Energy Community, including the period for using *National Emission Reduction Plans* which will expire at 31 December 2027.

The partial adoption of Directive 2010/75/EU had no direct impact on operators of existing plants, who were only to endeavour the implementation of Directive 2010/75/EU. In June 2015, the PHLG endorsed a draft Decision, where a new implementation deadline for existing plants was determined. Accordingly, "for existing plants", Contracting Parties shall implement those provisions by 1 January 2028 at the latest. Prior

to that date, they shall endeavour to implement the provisions of Chapter III and Annex V within the shortest possible timeframe, in particular in the case of retrofitting existing plants. The PHLG tabled the draft Decision for adoption at the Ministerial Council in October 2015 in Tirana.



Large Combustion Plants

(National Emission Reduction Plans and Opt-out)

The end of 2015 marks a key deadline on the pathway for the implementation of the Large Combustion Plants Directive (2001/80/ EC) in the Energy Community. While full-scale implementation of the Directive's provisions will only start from 2018, the Contracting Parties have the possibility to submit *National Emission Reduction Plans (NERPs)* to the Secretariat by 31 December 2015. By the same deadline, operators of combustion plants have to decide whether to apply for the limited lifetime derogation (opt-out), as an alternative means of implementation.

Decision 2013/05/MC-EnC of the Ministerial Council provided the possibility for Contracting Parties to use, until 31 December 2027, a *NERP* as an alternative to setting the emission limit values of the Large Combustion Plants Directive for each combustion plant individually. A *NERP* establishes overall ceilings for three pollutants (sulphur dioxide, nitrogen oxides and dust) for the conglomerate of combustion plants brought under its scope.

The Decision allows operators of large combustion plants to be subject to the opt-out implementation alternative. This means that for a maximum of 20,000 operational hours between 1 January 2018 and 31 December 2023, the plant can be kept in operation while not meeting the emission limit values of the Large Combustion Plants Directive. However, once the 20,000 operational hours



limit is reached or, in any case, from 1 January 2024 onwards, the plant must either shut down or continue operating as a new plant – and meet more stringent requirements on emissions into the air.

Operators of combustion plants with the intention of being subject to the opt-out regime have to inform, in the form of a written declaration, their national competent authorities by 31 December 2015. Based on those declarations, the Ministerial Council shall endorse the list of opted-out plants in 2016. Contracting Parties may decide to implement a combined approach of using the *NERP*, opt-out and individual compliance implementation alternatives in parallel.

Acquis on Competition

The acquis on competition 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.

With reference to Article 106 of the TFEU, public undertakings, including undertakings providing services of general economic interest, must also comply with the above rules.

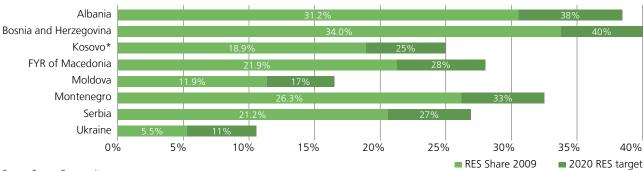
The Contracting Parties are under an obligation to introduce, to the extent the trade of network energy between the Contracting Parties may be affected, rules prohibiting cartels (agreements between undertakings, decisions by associations of undertakings and concerted practices), abuses of a dominant position, and rules prohibiting State aid. Moldova and Ukraine are under the same obligation from May 2010 and February 2011 respectively. The respective prohibitions are to be applied to public undertakings and undertakings to which special or exclusive rights have been granted by virtue of Article 19 of the Treaty.

Acquis on Renewable Energy Title of Document General Implementation Deadline Moldova / Ukraine Directive 2009/28/EC on the promotion of the use of energy from renewable sources 1 Jan 2014 1 Jan 2014

By Decision 2012/03/MC-EnC, the Ministerial Council adopted Directive 2009/28/EC and determined the Contracting Parties' binding national targets to be achieved through the use of

renewable energy in the electricity, heating and cooling, and transport sectors by 2020. For determining the targets, a similar methodology as for the EU Member States was applied.

Energy Community Renewable Energy 2020 Targets



Source: Energy Community

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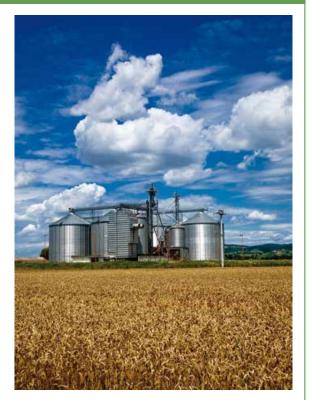
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Biofuels Sustainability Criteria

Directive 2009/28/EC brings together three energy sectors - electricity, heating and cooling and transport. For transport, the Directive introduces a set of legally binding sustainability criteria. To be considered sustainable and thus eligible to count towards a country's renewable energy target, biofuels used in transport must achieve greenhouse gas savings of at least 35% over their entire life cycle compared to fossil fuels. Those savings have to rise to 50% in 2017 and to 60% in 2018 for biofuels from new production plants. Further, biofuels cannot be produced from raw materials obtained from land with high biodiversity nor grown in areas converted from land with a previously high carbon stock, regardless if the biofuels are produced domestically or imported into the EU. The same criteria have to be met by bioliquids used for electricity and heat production. Further, the fulfilment of the sustainability criteria has to be verified by a dedicated body according to rules for certification schemes set in the Directive.

Meeting the prescribed requirements was very challenging even for the EU Member States with their well-structured legal framework and developed biofuels markets. For the Contracting Parties the implementation of the sustainability criteria is an enormous task. None of them has transposed the relevant Articles (17 to 21) of the Directive by the deadline of 1 January 2014. There are several reasons for this failure: neglect of the transport sector in the overall renewable energy framework; lack of knowledge of the sustainability criteria (often confused with fuel quality only), not understanding the mandatory application on imported biofuels, and missing cooperation among stakeholders involved in agriculture, energy, environment and fiscal policies.

A series of dedicated workshops launched by the Secretariat resulted in tailor-made recommendations on the future steps necessary to adopt the criteria in each country. They should be implemented immediately. Without (certified) sustainability, biofuels cannot be



calculated towards the renewable target, 10% by 2020. Without an adequate certification system in place, producers of raw materials in the Contracting Parties will also face serious obstacles in exporting their products to the European Union.

Acquis on Energy Efficiency Title of Document Directive 2006/32/EC on energy end-use efficiency and energy services and repealing Council Directive 93/76/EEC 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 30 Sep 2012

Directive 2006/32/EC strives for the adoption of an indicative energy savings target of 9% for the ninth year of application of this Directive, and the development of *National Energy Efficiency Action Plans (NEEAPs)*. Directive 2010/31/EU provides the legal framework for setting minimum energy performance requirements for new and existing buildings. Directive 2010/30/EU and the corresponding implementing legislation establish the legal framework for labelling and consumer information regarding energy consumption for energy-related products.

The Energy Community is presently preparing for the adoption of Directive 2012/27/EU on Energy Efficiency. Once adopted, it would entail binding energy efficiency targets. In October 2013, the Ministerial Council adopted a Recommendation as a basis for preparing the adoption of the Directive. The Commission's proposal on a draft Decision was on the agenda of the PHLG in June 2015. If adopted by the Ministerial Council in October 2015, the Decision would set "a 20% headline target on energy efficiency in the Energy Community in 2020" and set requirements to use energy more efficiently at all energy chain, from supply to final consumption.

| ۵ | Acquis on Oil | |
|-------------------------|---|------------------------------------|
| Title of Do | ocument | General Implementation Deadline |
| Council Dir products | ective 2009/119/EC imposing an obligation on Member States to maintain minimum stocks of crude oil and/or petroleum | 1 Jan 2023 |

Aiming to maintain a high level of security of oil supply, the Directive requires stockholding for 90 days of net imports or 61 days of inland consumption in the preceding year. Moreover the

competent authorities are to be in a position to release quickly, effectively and transparently some or all of their stocks in the event of a major supply disruption.

| Acquis on Statistics | |
|---|------------------------------------|
| Title of Document | General Implementation Deadline |
| Directive 2008/92/EC concerning a Community procedure to improve the transparency of gas and electricity prices charged to industrial end-users | 31 Dec 2013 |
| Regulation (EU) 147/2013 amending Regulation (EC) 1099/2008 on energy statistics, as regards the implementation of updates for the monthly and annual energy statistics | 31 Dec 2013 |
| Regulation (EC) 1099/2008 on energy statistics | 31 Dec 2013 |

The Ministerial Council's Decision 2013/02/MC-EnC to include statistical *acquis* aims to ensure the collection, compilation and dissemination of consistent, accurate and coherent energy related data. The annual and monthly statistics shall follow harmonized methodology developed by the *Statistical Office of the European Union (EUROSTAT)* and the *International Energy Agency (IEA)*. Price statistics shall follow *EUROSTAT* rules and methodology.

At the EU level, Regulation (EC) 1099/2008 was amended through Commission Regulation (EU) 431/2014. This brings about a requirement to generate detailed statistics on final energy consumption and its gradual integration into the statistical scope. The new Regulation is expected to be adopted by the Ministerial Council in October 2015 with a general implementation deadline of 31 December 2016.

e. Energy Sector Overview

50.8%

With the exception of Ukraine, the Energy Community consists of small scale national energy markets. Only five of the eight Contracting Parties are, at least partially, gasified, while Albania, Kosovo* and Montenegro do not have a gas market. This is expected to change in the near future with the construction of the Trans Adriatic Pipeline. (TAP) While having substantial coal resources, the region is a great importer of natural gas and oil.

Although some progress has been achieved, the Energy Community still has a significant untapped renewable energy and energy efficiency potential. With an expected increase in energy consumption in the region, it will be important that this demand is met in a sustainable manner.

Energy Community Fuel Mix in Primary Production in 2013 -1-Total primary production 109,543 ktoe 15.0% Solid fossil fuel 19.9% Oil and petroleum products Gas Nuclear 1.1% 0.1% Other RES 7.9% Hydro power

4.4%

3.3%

Source: EUROSTAT, Contracting Party national statistical institutes, compiled by the Energy Community Secretariat

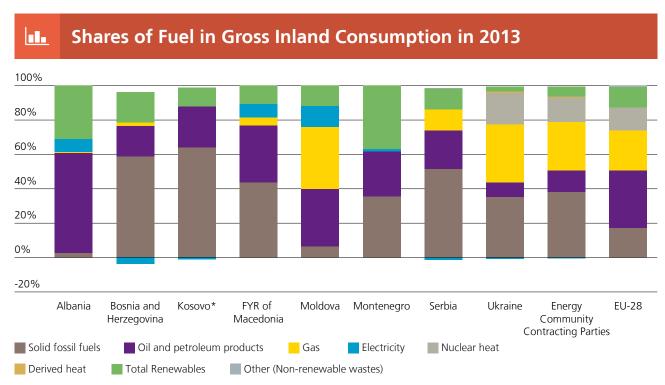
When looking at the primary production fuel mix in the Energy Community, the dominance of solid fossil fuels with a share of more than 50% is the first most striking observation. With the exception of Albania and Moldova, solid fossil fuels are the number one fuel in the Contracting Parties. Whilst Serbia and Ukraine have rather a balanced portfolio of energy sources, the energy mix of the other Contracting Parties is dominated by merely two fuels. The share of gas production is significant only in Serbia and Ukraine. Oil and petroleum products play an important role in Albania. Ukraine is the only Contracting Party with heat and electricity generated from nuclear power.

In parallel to the continuous dominance of solid fossil fuels, there is a positive development to be observed in terms of the uptake of energy from renewable sources. Over the last five years, there has been a strong upward trend in the share of renewable energy (7,561 ktoe in 2009 versus 8,685 ktoe in 2013). Whilst hydro is still predominant in Albania and Montenegro, solid biomass has the highest renewable energy fuel share in the other six Contracting Parties.

Solid biomass

Geothermal

When comparing energy production with gross inland consumption (chart on the next page) in the Energy Community, a number of conclusions can be drawn. Although still the most dominant fuel, the share of solid fossil fuels is lower (38%) in gross inland consumption than in the primary production. Also, the importance of gas in the gross inland consumption is substantially greater (28%). Similarly, the share of consumed oil and oil products (13%) outweighs the share of crude oil in primary production (5.3%).

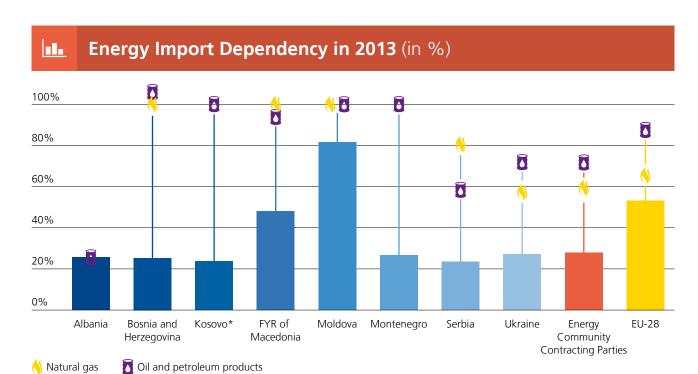


Source: EUROSTAT, Contracting Party national statistical institutes, compiled by the Energy Community Secretariat

In comparison, oil and oil products (33%) followed by gas (23%) and solid fossil fuels (17%) are the leading fuels in gross inland consumption of the EU-28. Whilst the Energy Community Contracting Parties' share of renewable energy in gross inland consumption amounts to 6%, the EU-28 share is twice as high (12%).

Coal, mainly domestic lignite, amounts to more than 50% of the gross inland consumption of energy in Bosnia and Herzegovina (64%), Kosovo* (66%) and Serbia (53%). It is the most important fuel in five of the eight Contracting Parties. Oil and oil products, on the other hand, play an important role in the energy mixes of Albania (58%), Moldova (33%) and former Yugoslav Republic of Macedonia (33%). The share of gas is significant in Moldova (36%), Ukraine (34%) and Serbia (12%). Ukraine and Bosnia and Herzegovina, and to a smaller extent Serbia and Kosovo* were net exporters of electricity in 2013.





Source: EUROSTAT, Contracting Party national statistical institutes, compiled by the Energy Community Secretariat

The share of net imports in gross inland consumption indicates the country's overall energy dependency. It is interesting to note that the average EU dependency on energy imports (53.2%) is substantially higher than the ratio for the Energy Community Contracting Parties (27.8%). As in 2012, energy dependency is the highest in Moldova (85%)

Characteristic to the Energy Community, the region is dependent on imports of crude oil and petroleum products (16.8

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mtoe import of oil versus 5.8 mtoe production in 2013). In the countries that are gasified, the same pattern applies for natural gas. As the graphic above shows, the import dependency on these two fuels varies from significant to absolute. Bosnia Herzegovina, former Yugoslav Republic of Macedonia and Moldova are completely dependent on imports of gas and oil. Kosovo* and Montenegro do not have a gas market, but are 100% dependent on oil imports.

Oil – A Key Part of Security of Energy Supply

In the Energy Community, security of oil supply is of special concern due to a high import dependency with a limited number of domestic producers. This dependency is aggravated by the lack of interconnections to facilitate oil flows and insufficient storage capacities.

The Contracting Parties made significant progress towards enhancing both domestic and regional oil supply security with the Decision of the Ministerial Council to adopt Directive 2009/119/EC on Imposing an Obligation to Maintain Minimum Stocks of Crude Oil and/or Petroleum Products by 1 January 2023. By this date, all Contracting Parties are required to hold oil stocks of 90 days of average net daily imports or 61 days of average daily inland consumption, whichever of the two quantities is greater, in order to mitigate a supply crisis. They must ensure the procedures and structures enabling the authorities to release quickly, effectively and transparently emergency stocks in the event of a major supply disruption and to impose restrictions on consumption.

Yet to date, there is a lack of clear intermediate deadlines for progressing towards full compliance with Directive 2009/119/EC. This is partly due to the belief in many of the Contracting Parties that the 2023 deadline for fully implementing the Directive is



still far away. However the opposite is true considering all the necessary steps which must be taken to successfully establish a workable emergency stockholding system. In order to help the decision-makers in the Contracting Parties to understand and support the process of meeting the final target, a concrete action plan is required to lay down specific tasks to be achieved each year, setting key dates for main milestones which would serve as a basis for assessing progress.

Final Consumption of Energy per Capita in 2013 (in kgoe) 2,400 FU-28 2,000 1,600 1,424 1,251 1,158 1,200 1,121 904 853 800 716 703 567 400 0

Moldova

Montenegro

Source: EUROSTAT, Contracting Party national statistical institutes, compiled by the Energy Community Secretariat

Kosovo*

FYR of

Macedonia

The final energy consumption per capita quantifies the amount of energy consumed per inhabitant. An economic structure with a higher share of intensive industry combined with lower energy consumption and income per capita is rather common to the Contracting Parties. In 2013, the average energy consumption per capita in the Contracting Parties was 43% lower than the EU-28 average.

Bosnia and

Herzegovina

Albania

This could be seen as an indicator of lower economic development in the Energy Community region. The double dip recession in 2009 and 2012, the devastating floods in Serbia and Bosnia and Herzegovina, the weak EU recovery in combination with the crisis in Ukraine support this line of argument.

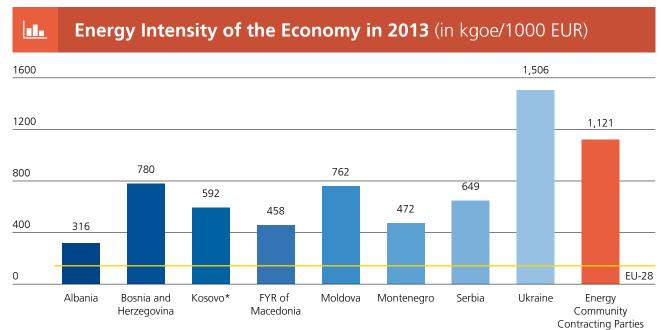
Serbia

Ukraine

Energy Community

Contracting Parties

Whilst declining at the overall Energy Community level, final energy consumption increased only in Albania and Moldova, and slightly in Kosovo* from 2012 to 2013.



Source: : EUROSTAT, UN Statistical Division, Contracting Party national statistical institutes, compiled by the Energy Community Secretariat

Energy intensity is calculated as the gross inland consumption of energy divided by the gross domestic product. Expressed in toe per million EUR, it indicates the amount of energy used to produce one unit of GDP. Whilst the value varies widely among countries, it strongly correlates with the level of industrialization and the economy's mix of services and manufacturing. Undoubtedly, also the attention which a country pays

to energy efficiency, together with the policies in place, plays an essential role.

In 2013, energy intensity in the Contracting Parties was six times higher than the average energy intensity in the European Union. Albania, with the lowest ratio, has an energy intensity indicator twice that of the European Union.

A B Energy Efficiency as the "First Fuel" Nowhere else in Europe does energy efficiency have such great potential than in the Energy Community Contracting Parties, where the average energy intensity is approx. six times higher than in the EU. To tap into this potential, the Secretariat has a multifaceted approach towards adoption and implementation of energy efficiency acquis, including facilitating innovative financing in cooperation with national implementing agencies, the European Commission, N International financial institutions (IFIs) and the donors' community. The Secretariat's publication "Energy Community - Tapping on its Energy Efficiency Potential" published in June 2015 gives a detailed overview. One of the best examples of this approach is the "Regional Energy Efficiency Programme for the Western Balkans" (REEP) implemented by European Bank for Reconstruction and Development (EBRD) in F partnership with the Energy Community Secretariat. REEP combines investment financing, incentives and technical assistance. 0

Following extensive consultations between 2013 and 2015, the EU and the Energy Community Contracting Parties prepared Directive 2012/27/EU on Energy Efficiency for adoption by the Ministerial Council in October 2015. The Energy Efficiency Directive sets a 20% headline target on energy efficiency by 2020 and introduces measures on supply and end-use side, including building renovation targets and energy efficiency obligation schemes, promotion of high-efficiency cogeneration, etc.

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In its endeavour to assist Ukraine in the development of its legal framework, the Secretariat drafted in May 2015 the Energy Efficiency Law for Ukraine compliant already with Directive 2012/27/EU and is working with Ukrainian stakeholders to finalize it before the end of 2015. If adopted this year, Ukraine will become the first Contracting Party to fully transpose this new piece of acquis.

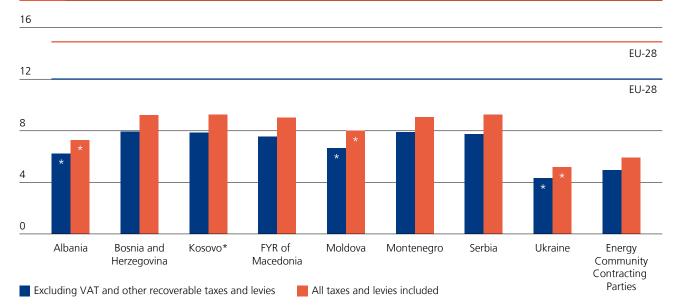


Old, inadequately maintained energy industry is one of the reasons for the high energy intensity in the Energy Community region. In parallel, the still widespread practice of price regulation keeps the region's energy prices at relatively low levels. In return, the low prices provide little impetus for the industry to increase energy efficiency.

Following the adoption of the statistical *acquis*, the Contracting Parties now have the obligation to report on the prices charged to industrial end-users. The chart on the next page displays the prices for the second half of 2014, benchmarked with the respective prices for electricity industrial end-users in the EU.



Prices of Electricity Charged to Industrial End-Users in EUR cent/kWh (consumption band IC 500 MWh < consumption < 2 000 MWh), in second half of 2014



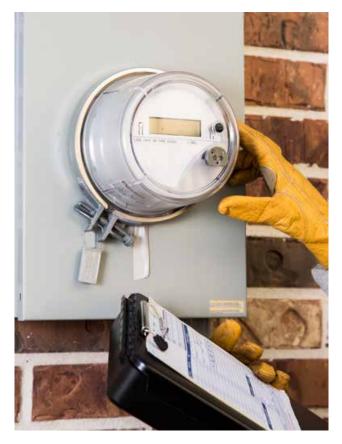
* For Albania, Moldova and Ukraine, the amounts present average prices for all industrial consumers, compiled by the Energy Community Secretariat from the ERRA tariff database

Source: EUROSTAT and ERRA tariff database

Among the Contracting Parties, the price differences in electricity charged to industrial end-users are rather limited. In terms of energy costs, similar price levels would imply a business environment with a similar level of competitiveness. When compared with the EU average, the Contracting Parties' electricity prices for industrial end-users were two and a half times lower.

The Contracting Parties report on their household prices on a voluntary basis. The differences in the price charged to typical household end-users are substantially greater varying from an average price of 10 cent per kWh in Albania to ten times less in Ukraine. When compared with the EU average, the Energy Community electricity prices charged to typical household end-users in 2014 were seven times lower.

In the Energy Community, consumption of electricity in households amounts to 36% of the final consumption of electricity. Yet, the price signals on the retail market do not correlate with the measures to improve energy efficiency and energy saving. With dominantly regulated prices for households, the overall low level of regulated tariffs continues to substitute targeted measures to protect vulnerable customers.





2 Annual Report

The Annual Report on the Activities of the Energy Community² highlights key Energy Community activities, initiatives and achievements in the period from 1 August 2014 to 31 August 2015. It complements the Annual Implementation Report 2015, which provides a comprehensive account of the progress undertaken by the Energy Community Contracting Parties and institutions to implement the Energy Community acquis.

a. This Year's Highlights

1. Energy Community Celebrates 10th Anniversary

To mark the 10th anniversary of the signing of the Energy Community Treaty, a celebration ceremony was held on 27 August in the State Hall of the Austrian National Library in Vienna. The celebration brought together Prime Ministers, Ministers of Economy, Energy and Foreign Affairs, members of the European Commission, Parliamentarians and other high level guests. Albanian Prime Minister Edi Rama, representing the Albanian Presidency of the Energy Community, delivered the keynote speech. Other speakers



were Vice-Prime Minister of Ukraine Valerii Voschevskyi, Prime Minister of Serbia Aleksandar Vučić, Vice-President of the European Commission for Energy Union *Maroš Šefčovič*, European Commissioner in charge of European Neighbourhood Policy and Enlargement Negotiations Johannes Hahn and Chairman of European Parliament Energy Committee and Energy Community High Level Reflection Group Jerzy Buzek.

"From the regional pre-accession tool, the Energy Community has developed into an eminent instrument for our joint security of supply, for our debates on how to cooperate better...how to converge our legal and also infrastructural systems. It helped us to promote safe, secure and predictable production and transportation of energy in the closest EU neighbourhood. The Energy Community would clearly play a very important pivotal role not only in the internal dimension but also in the external dimension of the Energy Union."

> Vice-President of the European Commission for Energy Union Maroš Šefčovič, Speech at the celebration ceremony of the 10th anniversary of the Energy Community









Celebration ceremony of the 10th anniversary of the Energy Community

² The Annual Report on the Activities of the Energy Community follows the requirements of Article 52 of the Energy Community Treaty.

2. Energy Community – An Integral Part of the Energy Union

In its "Framework Strategy for a Resilient Energy Union" published on 25 February 2015, the European Commission declared that a strengthened Energy Community will be part of the future Energy Union. The Commission vowed "to strengthen the Energy Community, ensuring effective implementation of the EU's energy, environment and competition acquis, energy market reforms and incentivising investments in the energy sector."

In this regard, this year has seen concrete progress to implement some of the proposals of the High Level Reflection Group, led by Prof. *Jerzy Buzek*, Chairman of the Industry, Research and Energy Committee in the European Parliament, in its Report "An Energy Community for the Future"³. This includes proposals to adopt new *acquis communautaire* as well as improve the functioning of the Energy Community institutions, including enhancing the role of national parliaments and civil society organisations in the Energy Community process.

3. Security of Gas Supply Reinforced

In 2014, the European Union conducted the so-called gas stress tests. The Energy Community Contracting Parties as well as its Observers, notably Georgia, Turkey and Norway, took part with the support of the Energy Community Secretariat. This is the first time that such a detailed Europe-wide analysis of the security of gas supply situation was carried out according to common standards and specific scenarios.

The results of the stress tests showed clearly that cooperation among the Contracting Parties and the EU Member States is vital for security of gas supply since the Contracting Parties and EU Member States share the same gas supply infrastructures. A cooperative approach could significantly reduce the impact on the most vulnerable countries, among which are the majority of the Contracting Parties.

Recognising the results of the stress tests, work is underway to extend the upgraded EU Regulation (EC) 994/2010 on Measures to Safeguard Security of Gas Supply to the Energy Community Contracting Parties and establish a joint regulatory regime for cross-border issues between the Energy Community and the EU Member States. This includes a common energy crisis management system through preventive and emergency plans.

4. Enhancing Electricity Balancing Cooperation

Activities to enhance regional electricity balancing cooperation in the Energy Community were intensified during the reporting period. The Secretariat organized a series of meetings of the Contracting Parties' transmission system and market operators

with the aim to ensure the harmonized development of balancing markets and explore options for their integration. The meeting resulted in an initiative to commence joint activities on implementing regional balancing cooperation models in line with the EU Electricity Balancing Network Code.

Additional meetings of the Energy Community market operators took place with a focus on an early identification of implementation challenges and barriers at national level to the development of non-discriminatory and cost-reflective imbalance settlement mechanisms. To support the Contracting Parties, the Secretariat also conducted an in-depth analysis of the current legal framework governing electricity balancing. The analysis identified the legal barriers and implementation challenges to regional balancing cooperation at national level, which were later discussed and supported at the Western Balkans 6 Ministerial Meeting hosted by the Secretariat on 2 July 2015.

5. Strengthening Regulatory Cooperation

In the reporting period⁴, the Energy Community Regulatory Board (ECRB) contributed to Energy Community policy discussions on various aspects of energy market regulation such as regulatory incentives to promote network investment, regulatory independence and treatment of interconnectors and interconnection points between the Energy Community Contracting Parties and EU Member States and related implementation of Third Package Network Codes. Further sector specific work was executed in relation to harmonised regulatory positions related to the Coordinated Auction Office in South East Europe (SEE CAO) and assessment of the gas quality standards in the Energy Community. Continuous emphasis was also put on consumer protection and consumer awareness. In addition, ECRB strengthened its monitoring activities via the preparation of an integrated Market Monitoring Report on gas and electricity retail and wholesale market functioning.



First ECRB- MedReg Roundtable, Athens

³ The report is available at https://www.energy-community.org/portal/page/portal/ENC_HOME/DOCS/3178024/Energy_Community_HLGR_Report_FINAL_WEB.

⁴ The ECRB publishes a detailed report on its activities on an annual basis at the end of each calendar year. The reports are available at https://www.energy-community.org/portal/page/portal/ENC_HOME/DOCUMENTS?library.category=1298.

ECRB continued its international cooperation with other regional regulatory bodies, in particular the Council of European Energy Regulators (CEER) and the Mediterranean Energy Regulators (MedReg). In 2015, the collaboration with the Agency for Cooperation of Energy Regulators (ACER) received further impetus via integration of the Contracting Parties' regulators in ACER's Gas Regional Initiative South South East, including concrete pilot projects on joint implementation of the Third Package acquis at common EU and Energy Community borders. Further to this, concrete discussions were launched related to the possibility of Contracting Parties regulators' participation in ACER meetings, subject to implementation of the Third Energy Package.

6. Connecting with National Parliaments

Without the support of national parliaments, the adoption of national energy reforms would simply be impossible. Engagement with national parliaments is thus an increasing focus of the Secretariat's work. Starting in 2013, the Secretariat has worked to raise awareness of the Energy Community Treaty and its obligations by annually presenting the state of play of *acquis* implementation to each national parliament and holding an annual meeting with Parliamentarians of all eight Contracting Parties. Upon their request, the Energy Community Secretariat attended parliamentary hearings and continued to ensure the compliance of legislative amendments tabled by parliamentarians with the Energy Community legal framework.

For the first time, a joint meeting between members of the European Parliament and members of the Energy Community Contracting Parties' Parliaments took place in Brussels in May 2015. The meeting served to assess the Energy Community's role in contributing to tackling shared energy policy objectives and future challenges. Parliamentarians concluded by calling for the institutionalisation of this cooperation via the establishment of a parliamentary assembly.



Energy Community Parliamentarians, European Parliament, Brussels

7. Cooperation with Our Partners

Be it ensuring the coherence of energy market regulation across borders or implementing concrete measures to ensure security of gas supply, the Energy Community works with other regional and international organisations to maximize synergies. The Secretariat also continuously acts as "matchmaker" to bring together donors and *International Financing Institutions (IFIs)* with energy projects in need of financing.



8. Working Together to Make Energy Efficiency the First Fuel

In 2013, with the support of the European Union and in partnership with the Energy Community Secretariat, the *European Bank for Reconstruction and Development* established the *Regional Energy Efficiency Programme (REEP)* for the Western Balkans. As member of its steering committee, the Energy Community Secretariat participates directly in the execution of *REEP*.

REEP combines investment financing, incentives and technical assistance designed and implemented in close cooperation with the Contracting Parties, the Energy Community Secretariat and the Energy Efficiency Coordination Group. This includes the drafting of legislation to enable the creation of Energy Service Companies (ESCOs) and implementation of the Energy Performance in Buildings Directive, public procurement rules and guidelines for the purchase of energy efficiency equipment, utility energy efficiency policies and reforms of energy tariffs, metering and billing.



Presentation of Energy Efficiency Monitoring and Verification Platform, Energy Community Secretariat, Vienna

Another success story is the cooperation between the Energy Community Energy Efficiency Coordination Group and *Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)*, which resulted in the creation of an innovative, web-based Energy Efficiency Monitoring and Verification Platform to map the implementation of *Energy Efficiency Action Plans* in the Contracting Parties. The added value of the platform is the vertical coordination between different policy levels (national and sub-national) in terms of systematic planning and monitoring of implemented projects and programmes related to energy savings and CO₂ emission reduction. The platform was selected for financing under the EU's Horizon 2020 Programme, which will further develop and disseminate the tool in Europe. This is the first known example of 'exporting' knowledge and know-how from the Energy Community Contracting Parties to EU Member States.

b. Secretariat

During the reporting period, the Energy Community Secretariat consisted of 23 permanent staff members holding 15 nationalities. Eight interns, five secondees and two research fellows gained valuable knowledge at the Secretariat and contributed to its work.

In February 2015, the Secretariat was very proud to receive the Champion of Regional Cooperation Award from the *Regional Cooperation Council (RCC)* for its contribution to regional cooperation in South East Europe.



Handover of award by *RCC* Secretary General to Energy Community Director Kopač, Sarajevo

"The Energy Community Secretariat has substantially contributed to the implementation of the RCC's SEE 2020 Strategy in the area of energy policy. Through its professional performance as well as effective cooperation, the Energy Community Secretariat represents a model of a successful regional cooperation organisation", said Goran Svilanović, Secretary General of Regional Cooperation Council, during the award ceremony.

1. Assistance to the Contracting Parties

The Secretariat has worked intensively to support the Contracting Parties in the transposition and implementation of the Energy Community *acquis communautaire*. This year, the overwhelming focus was on the transposition of the Third Energy Package in electricity and gas and energy efficiency legislation. The Secretariat has conducted comprehensive compliance reviews of all draft legislation in order to ensure its compliance with the Energy Community Treaty.

To support the transposition and implementation of the Third Energy Package even further, the Secretariat drafted by itself and subsequently submitted eight primary and nine secondary draft laws to the Contracting Parties' authorities. In the area of energy efficiency, the Secretariat prepared four primary and 18 secondary laws, partly in cooperation with other stakeholders under the *Regional Energy Efficiency Programme (REEP)*.

In addition, the Secretariat supported the Contracting Parties via coordination of technical assistance, capacity building and specialised national and regional workshops. This included the financing of technical assistance aimed at the transposition of Council Directive 2009/119/EC on Maintaining Minimum Oil Stocks.

During the reporting period, the Secretariat, which acts as the guardian of the Energy Community Treaty, opened two new dispute settlement cases, while five cases were closed. 23 cases were open at the time of publication of this report.

2. Events

Not counting *ad-hoc* workshops and working group meetings, the Energy Community Secretariat organised over 60 official events⁵, which attracted around 1,800 participants. The Secretariat organised events on topical issues such as State aid, energy efficiency, power exchanges, market coupling and Third Energy Package transposition, including Network Codes.



Western Balkans 6 Ministerial Meeting, Energy Community Secretariat, Vienna

3. Communications

127,313 visitors accessed the Energy Community website in 2014, representing a 52% increase from the previous year. Complementing its Annual Implementation Report, the Secretariat now regularly updates its website via dedicated country and sector specific pages in order to reflect the progress made by the Contracting Parties in implementing the *acquis* throughout the year. As another communication tool to engage with stakeholders, the Energy Community Secretariat established a Twitter account in March 2015. In addition to experts' commentary frequently featuring in the press, 13 feature articles, opinion pieces and interviews conducted by the Secretariat were published.



127,313 website visitors in 2014

In the reporting period, the Secretariat carried out a public consultation on organised electricity markets and on options for the implementation of proposals on the future of the Energy Community. To the latter, 62 replies were submitted from 20 countries, comprising of responses from central governmental authorities in Energy Community Contracting Parties and EU Member States, regulatory authorities and their regional associations, *International Financial Institutions*, economic operators and their associations, EU bodies, members of the European Parliament, NGOs, civil society, individuals and academics.

4. Studies and Publications

Every year, the Energy Community finances studies, which support its work and contribute to meeting its objectives. During the reporting period, the Secretariat published three studies:

- "SEE Regional Balancing Integration";
- "How to get more fair gas prices?";
- "Realising Priority Infrastructure Projects for Energy Community".

The Secretariat published so-called 'Policy Guidelines' that aim to steer the Contracting Parties in the implementation of the Energy Community *acquis communautaire*. The Guidelines are used by the Secretariat when assessing the compliance of the Contracting Parties with their obligations. Five Policy Guidelines were published in the reporting period in the following areas:

- Independence of national regulatory authorities;
- VAT treatment of electricity cross-border trade;
- Preparation of national emission reduction plans;
- Definition of new and existing plants;
- Application of the Energy Community *acquis* between the Contracting Parties and the European Union.



Image of NRA independence guidelines

⁵ Energy Community events calendar - https://www.energy-community.org/portal/page/portal/ENC_HOME/CALENDAR?pSelectedYear=2015.

In addition, the Secretariat compiled projects, programmes and investment credit lines that support energy efficiency in the publication "Energy Community – Tapping on its Energy Efficiency Potential". It updated the "Energy Community Facts in Brief", which provides a concise overview of the organisation's objectives, structure and activities. The Secretariat also published for the first time a country policy briefing "Energy Community Country Brief – Spotlight on Ukraine", which provided a comprehensive overview of the state of energy reforms in Ukraine.

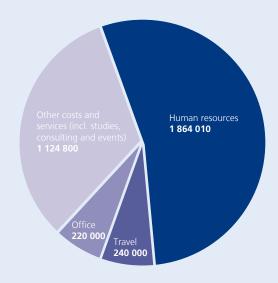


Borko Raicevic Launch of "Energy Community – Tapping on its Energy Efficiency Potential" publication, EU Sustainable Energy Week Policy, Brussels

c. Energy Community Budget 2014

The Energy Community's revenue consists of members' contributions; donations from the Republic of Austria; bank interest and other income (amounting to less than 1% of the total budget). The EU is by far the largest contributor, accounting for almost 95% of the contributions.

Final Budget 2014 (in EUR)



The final budget for 2014 amounted to 3,448,810 EUR.



What a Difference a Package Makes – The State of Implementation in 2015

Dirk Buschle, Deputy Director of the Energy Community Secretariat



This Implementation Report is the first one under the Third Energy Package. It was quite easy to underestimate its impact on the governance of the energy sectors in the Contracting Parties when the Third Package was incorporated by the Ministerial Council in 2011. After all, regular updates of the acquis communautaire in line with the developments in the EU are supposed to constitute business as usual in the Energy Community. Even when the EU adopted the Third Package back in 2009, it was essentially conceived as a mere continuation of the logic of previous packages and innovations, most notably by tightening the unbundling regime and strengthening energy regulators. And finally, if we are honest, we have seen many an implementation deadline come and go in the Energy Community without noticing tangible changes in the realities. So the 1 January 2015, the day when the implementation deadline for the Third Package expired, was not necessarily predestined to be anything but an ordinary day.

It was, though. Looking back now after more than half a year, the entry into force of the Third Package must be considered a true Copernican moment for the Energy Community. There are a number of reasons for that. Firstly, the Third Package as an energy governance software upgrade does indeed contain some elements which do not allow any longer for the well-known pattern of proper transposition of the *acquis* while delaying its implementation. Unbundling is a case in point. For the first time, the Third Package envisages a procedure, involving the

national regulator but also the Secretariat, which will ensure that unbundling will take place in real terms, not only on paper. As Third Package unbundling by definition includes unbundling under the previous packages, the certification procedure will also offer a chance to thoroughly review what has been achieved so far by and in each Contracting Party. The Secretariat will not miss that chance.

Secondly, the deadline of 1 January 2015 in the Energy Community concerns not only the Third Package in the strict sense. According to the Treaty, household consumers are to be considered eligible *i.e.* vested with the right to change supplier as of the same date. This right is of a fundamental nature. Eligibility is the basis for turning the Energy Community membership of a country into true benefits for its customers. Denying customers the right to choose, as former Yugoslav Republic of Macedonia decided to do during last year, goes against the very essence of a Contracting Party's commitments.

Besides eligibility for all customers, including households, on 1 January 2015 another important obligation which so far has not been given much attention became effective. It is the obligation to legally and functionally unbundle distribution system operation and supply of electricity and gas. Again, this puts the focus on the retail side of the markets. Currently, most Contracting Parties are lagging behind with compliance. The Secretariat will step up its efforts to facilitate distribution



Energy Community Secretariat 2015

unbundling in the upcoming period. It will be assisted by a network of distribution system operators which may provide an interesting model also for the EU.

Thirdly, and maybe most importantly, those who underestimated the Third Energy Package must have failed to see the dynamics resulting from transposition as a process. The true advantage of the Third Package was indeed that it forced all Contracting Parties to revisit their primary energy legislation, and to check the law on the books against the efficiency of their energy sector reality. Looking at those countries which have successfully transposed the Third Package already – Serbia as well as Albania and Ukraine in parts – you can tell that they were probably not always happy with what they saw. Let us take market opening as an example, an area not even directly addressed by the Third Package. Market opening, together with cross-border integration of markets, is one of the Energy Community's main objectives. In the past, it has progressed rather erratically and at a low speed. In many cases, the regulatory authorities, which are tasked with price regulation in most Contracting Parties, proved to be incapable of devising and following through a path to market opening in line with the acquis. Given the economic and social sensitivity of the matter, it turned out that only the legislator can realistically take such a controversial decision. Those countries which have transposed the Third Package earlier this year indeed used the obligation to amend their primary legislation for making clear and binding commitments to market opening and for defining the path towards it. This heralds a shift in paradigm towards greater liberalization of the energy markets at last. The shift is likely to be motivated by the Energy Community rules as much as by the comprehension that without more radical reforms, the energy sectors and the undertakings involved will inevitably collapse. Albania provided an impressive example for such radical reforms during the reporting period.

The upcoming period will be crucial to see whether the late-comers in terms of Third Package transposition will indeed follow the liberalization trend and whether all Contracting Parties will also be serious in fighting dominance of the incumbents and effectively curbing the comprehensive influence of the state over the supply chain. After 2015, the focus will shift again from legislators to regulators, including energy regulators as well as competition and State aid enforcers. The regulators' job will be just as tough as the legislators' task to implement market opening in the laws – and this time the regulators must prove that they are capable of using the privileges granted to them by virtue of the Third Package independently, in a proactive manner and in the interest of the entire energy sector. As part of the reform discussions, the Energy Community will have to make available the capacities and procedures it takes to support them in their struggles.

In the past eight months, the (unfinished) process of transposing the Third Package has taught us a lesson not only about the value of the acquis communautaire for countries undergoing energy transitions. We also saw an unprecedented level of cooperation between the Secretariat and the Contracting Parties during that process. In those countries which already passed new laws – Albania, Serbia and Ukraine – collaboration during the entire process, from the first draft to the final compliance review, from supporting it in Government to discussions with stakeholders and in Parliament, was more intense than ever before. The results of this process are probably most striking for Ukraine's gas sector governance: in the past almost a synonym for crisis, the country adopted one of the world's most liberal gas laws in compliance with the EU's rule – a breakthrough for Europe's supply security and a sine qua non for the country's full integration into the internal energy market.

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Pan-European Security of Gas Supply

Security of gas supply for the whole of Europe cannot be achieved if the Energy Community is left out of the EU legislative security of supply framework. At the same time, the Contracting Parties cannot reach a satisfactory level of security without the EU Member States' involvement. Mitigating supply risks is only possible under a cooperative approach between EU Member States and the Contracting Parties and a common institutional and regulatory framework, which was underlined by the recent gas stress tests. The stress tests also demonstrated that the Contracting Parties would need a more efficient tool to comply with EU security of supply standards.

Although the application of Regulation (EU) 994/2010 has led to clear improvements in the EU's security of supply situation since its adoption, this Regulation is not yet part of the Energy Community legal framework. Thus no binding mechanisms exist between the Contracting Parties and their EU neighbours to reduce security of supply risks. The revised Regulation (EU) 994/2010, currently being drafted at EU level, would bring a much higher level of security of gas supply for the whole of Europe if it would be adopted, and



diligently applied, in the EU as well as the Energy Community Contracting Parties.

In this context, the most efficient approach to be taken is to apply Title IV of the Energy Community Treaty, which would allow for the design of true pan-European energy governance for a single Europe-wide energy market. The Ministerial Council is expected to express itself on this option in October 2015.

In three countries mentioned, another concept featuring in the Energy Community reform debate turned into a reality, before the Ministerial Council even got the chance to debate it: conditionality. Tying financial support by financial institutions such as the *World Bank* or the *International Monetary Fund (IMF)* with the adoption of legislation in line with the Third Package and compliance certified by the Secretariat turned into an extraordinary boost for domestic energy sector reforms.

Mutatis mutandis, this technique was also applied very recently to tackle one of the great unfulfilled promises of the Energy Community - regional market integration in the Western Balkans, the cradle of the Energy Community. As Prime Minister Edi Rama put it in his speech marking the Energy Community's anniversary, a decade of false dreams of energy autarchy and vested interests in all Balkan countries have prevented that regional market from becoming a reality. The so-called Berlin Process, culminating in the Vienna Summit in August this year, provided new momentum and hope to overcome the deadlock. To quote another protagonist, Commissioner Johannes Hahn, the European Union's efforts to improve connectivity and thus infrastructure hardware in the region must be accompanied by an upgrade of the software, i.e. regional energy governance. Together with four electricity projects eligible for EU funding, six of the Contracting Parties "have decided to establish a regional energy market by establishing power exchanges and a regional balancing market as well as making the best use of the already existing Coordinated Auction Office" according to the Vienna Summit's final declaration. They also "agree on the priority list of 'soft measures' in energy covering specific national issues to implement the Energy Community acquis and have invited the Energy Community Secretariat to take the lead to develop the regional energy market and to help implementing these 'soft measures'." In the gas sector, the Central East South Europe Gas Connectivity (CESEG) initiative can yield similar results in unlocking the regional potential if 'hardware' support and 'software' conditionalities are linked as closely as in electricity.

In defiance of all stalemate, crisis and occasional reverse developments, the Energy Community can close this reporting period on a high note. Ten years after its creation, the founding principles – clear legal commitments, multilateral decision-making and independent coordination, monitoring and enforcement – matter more than ever. The Energy Community is coming off age and undergoing a 'rejuvenating treatment' in the form of Third Package implementation at the same time. With some adaptations to be made in the course of the reform process, the Energy Community will be able to deliver on its promises and change the sectors' realities for the better.



Albanian Prime Minister Edi Rama delivers keynote speech at 10th anniversary celebration





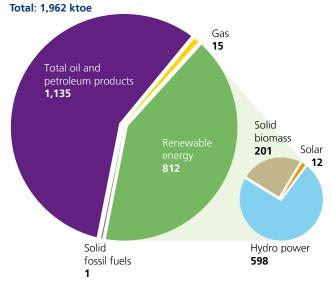
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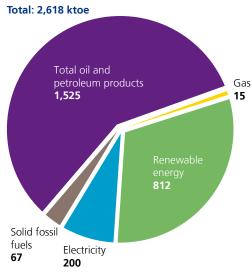
Since the electricity sector in Albania all but collapsed two years ago, Albania has made great progress in reforming both the legal framework and improving the liquidity of the sector. It is now important to continue with the reforms, especially with regard to devising an appropriate support scheme for

renewable energy. Albania's energy regulatory authority ERE has to live up to the challenge of certifying two transmission system operators in the near future and prove its independence at the same time.

Energy mix in primary production 2013 in ktoe



Gross inland consumption 2013 in ktoe



Source: EUROSTAT



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|---|

4.1 Electricity

| | , | | | |
|---|-------------------|--|-----------|-----------|
| Description of data [unit] | | | 2013 | 2014 |
| Electricity production [GWh] | | | 6,957 | 4,726 |
| Net imports [GWh] | | | 2,322 | 3,356 |
| Net exports [GWh] | | | 1,425 | 288 |
| Total electricity supplied [GWh] | | | 7,854 | 7,794 |
| Gross electricity consumption [GWh] | | | 7,986 | 7,815 |
| Losses in transmission [GWh] | | | 210 | 161 |
| Losses in transmission [%] | | | 2.3% | 2.1% |
| Losses in distribution [GWh] | | | 3,096 | 2,622 |
| Losses in distribution [%] | | | 45.0% | 37.8% |
| Consumption of energy sector [GWh] | | | 28 | 21 |
| Final consumption of electricity [GWh] | | | 4,530 | 5,011 |
| | Industrial, trans | port, services and other non-residential sectors | 2,268 | 2,509 |
| Consumption structure [GWh] | Households (re | sidential customers) | 2,262 | 2,502 |
| Net maximum electrical capacity of power plan | ts [MW] | | 1,786 | 1,824 |
| | Coal-fired | | 0 | 0 |
| | out of which: | multi-fired | 0 | 0 |
| | Gas-fired | | 0 | 0 |
| | out of which: | multi-fired | 0 | 0 |
| | Oil-fired | Oil-fired | | 98 |
| | Nuclear | | 0 | 0 |
| Net maximum electrical capacity | Hydro | Hydro | | 1,726 |
| of power plants [MW] | . 6 111 | small hydro | 110 | 134 |
| | out of which: | pumped storage | 0 | 0 |
| | Other renewab | Other renewables | | 0 |
| | | wind | 0 | 0 |
| | | solar | 0 | 0 |
| | out of which: | biomass | 0 | 0 |
| | | biogas | 0 | 0 |
| | 380 kV or more | 380 kV or more [km] | | 395 |
| | 220 kV [km] | 220 kV [km] | | 1,180 |
| | 110 kV [km] | | 1,343 | 1,344 |
| Horizontal transmission network [km] | HVDC [km] | | 0 | 0 |
| | Substation cap | Substation capacity [MVA] | | 3,846 |
| | Number of inte | Number of interconnectors | | 5 |
| Interconnecting capacities [MVA] | | g capacities [MVA] | 1,100 | 1,100 |
| | Total | | 1,162,000 | 1,218,000 |
| Electricity customers | out of which: | non-households | 397,000 | 400,000 |
| Electricity customers | Eligible custom | ers under national legislation | 7 | 7 |
| | Active eligible | customers | 7 | 7 |
| Internal market | Electricity supp | lied to active eligible customers [MWh] | 602,972 | 697,000 |
| Internal market | Share of final o | onsumption [%] | 13.31% | 13.91% |
| | | | | |

Source: Energy Regulatory Entity of Albania (ERE)

a. Sector Overview

Albania is among the first Contracting Parties with tangible progress in transposition of the Third Energy Package. A draft

of the new Power Sector Law was proposed by the Secretariat in the beginning of 2014 and later developed by the Albanian authorities. The Law was adopted by the Parliament on 30 April 2015. The new Law transposes the principle provisions of Directive 2009/72/EC and addresses the liberalization of the electricity market, treatment of public service obligations, unbundling of the transmission system operation, powers of the national regulatory authority, supply of electricity and customer protection.

The Energy Regulatory Entity (ERE) is responsible for regulation of the electricity industry and setting the tariffs and regulated prices of electricity. Following the adoption of the Power Sector Law, ERE and the Ministry will have to harmonize the secondary legislation and further elaborate and implement the new market structure with the support of the Secretariat.

The currently applied market model is obsolete as it is based on an overregulated market without any liquid trading platforms. The Albanian authorities and the Secretariat are working on an initiative for the establishment of a power exchange in Albania.

In practice, the electricity sector of Albania still operates mainly under regulated conditions. The wholesale market is dominated by the state-owned, regulated electricity production company *Korporata Elektroenergjitike Shquiptare (KESh)*. It operates the three state-owned large hydro generation plants and the (currently non-functional) thermal power plant Vlora. *KESh* provides the electricity for the captive customers, including required imports and balancing, under regulated wholesale prices. *KESh* acts as supplier of last resort and exporter. The competitive part of wholesale involves trading and supply through bilateral contracts between independent producers and large eligible customers and covers no more than 12% of the overall supply.

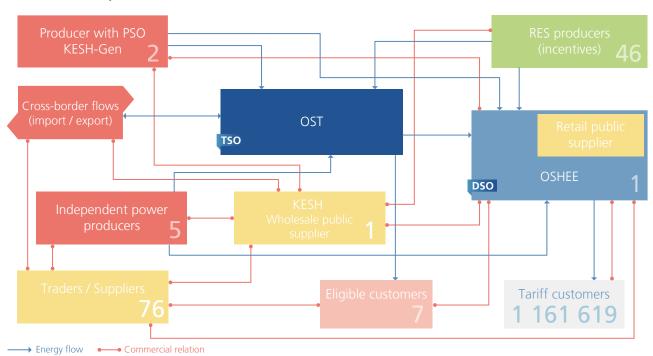
The retail supply is dominated by *Operatori i Shperndarjes se Energjise Elektrike (OShEE)*. After the unsuccessful privatization episode and a settlement agreement with the Czech company *CEZ*, it is now a state-owned company. In October 2014, ERE re-issued its license for distribution and retail public supply. *OShEE* supplies electricity to all categories of captive customers under regulated prices. The new Law includes a schedule for gradual liberalization of the retail segment.

Measures for financial consolidation of *OShEE* and control of the revenue, imposed by the Government since 2014, provided significant results in 2014. Losses were reduced by 7% and the collection rate increased by almost 10% compared to 2013. The figures further improved in 2015. Increased liquidity created the possibility for the payment of the independent producers' arrears, reducing the existing debt in the sector and contributing to investment security. New supply prices were approved by ERE and applied since January 2015. They include reasonable costs, remove cross-subsidies, block tariffs and non-technical losses, and allocate budget sources for part of the supply to vulnerable customers.

The state-owned, legally unbundled company *Operatori i Sistemit te Transmetimit (OST)* operates the transmission system of Albania and performs central dispatching of the electricity loads.

The electricity system of Albania is interconnected with the neighbouring systems of Greece, Montenegro and Kosovo* (on 220 kV). In April 2014 European Network of Transmission System Operators for Electricity (ENTSO-E) decided for permanent

Albania's Electricity Market Scheme



Source: Complied by the Energy Community Secretariat Refer to the market schemes legends on page 248 for a more detailed description.

synchronous operation of the Albanian electricity transmission system with the continental European system.

In 2014 OST signed the agreement for participation in the Coordinated Auction Office in Southeast Europe (SEE CAO). On 1 May 2015 monthly and daily auctions commenced within the CAO platform on the border with Montenegro. OST will join the annual auctions with this border in 2016. Participation of Albania in the SEE CAO with the border with Greece is pending.

b. State of Compliance

1. Authorisation

The criteria for authorisation of new generation capacity without concessions are duly transposed by the Power Sector Law. In practice, the authorization request is processed by the Ministry and granted according to the previous procedure adopted by the Government. Authorization of projects involving concessions is governed by the Law on Licenses, Authorizations and Permits. Both acts need to be harmonized.

Tendering for new capacity is not treated in the Power Sector Law but indirectly governed by the Law on Concessions. There is no conditionality on the lack of interest for authorizations, and no designation of an independent authority as required by Article 8 of Directive 2009/72/EC.

2. Unbundling

The rules for unbundling of the transmission and distribution operators are transposed by the Power Sector Law including those for certification of *OST* as transmission system operator. The criteria for the compliance programme and appointment of compliance officer according to Articles 21 and 26 of Directive 2009/72/EC need to be implemented for the vertically integrated distribution system operator *OShEE*.

In practice *OST* is legally unbundled, unlike the distribution system operator *OShEE*. According to Article 72 of the Law, *OST* will be ownership-unbundled before the end of 2017. This is in breach of the Directive.

OShEE is not yet a functionally unbundled distribution system operator and has not unbundled its accounts as required by Articles 26 and 31 of Directive 2009/72/EC and Article 35 of the Law. Legal unbundling was supposed to be accomplished by 1 January 2015. Albania is not compliant in this respect.

3. Third Party Access

Provisions such as mandatory third party access and treatment of exemptions are fully transposed by the Power Sector Law. Network tariffs are set and published by ERE. The Law also transposes the requirements on congestion management and provision of information as required by Regulation (EC) 714/2009 and it's Annex. Implementation depends on secondary legislation.

Rules for Allocation of Interconnection Capacity were adopted by ERE and applied on the border with Greece, where no joint auctioning takes place. Since May 2015 *OST* participates in the monthly and daily auctions in the *SEE CAO* for the border with Montenegro. It is expected to include the Greek border as well.

4. Eligibility

Eligibility is ensured by the Power Sector Law which explicitly grants rights for switching the supplier to all customers, in particular to low-voltage customers including households. The development of switching rules is envisaged.

The new Law is still not applied in practice mainly due to the missing secondary legislation which is foreseen to be adopted in the transitional period of 12 months. Currently the eligibility status is formally granted to all customers, including those connected to the low voltage (0.4 kV) network, but in practice switching of a supplier is yet to come.

5. Market Opening and Price Regulation

Article 109 of the Power Sector Law opens the retail market in a gradual manner according to the voltage level, starting with 110 kV customers and ending with 10 kV customers which will have to buy electricity on the market by the end of 2017. Low-voltage level (0.4 kV) customers may stil benefit from universal service.

Currently only a small number of large customers contract their electricity supply outside the regulated system of the "public supplier" OShEE. They are supplied by small domestic generators licensed as "qualified suppliers of eligible customers", or by traders. For the remaining customers, the market is practically foreclosed for the period of transition. The market is dominated both on the wholesale level by the legal monopoly granted to KESh as wholesale supplier and on the retail level by the monopoly of OShEE in retail supply of the captive customers. The new market structure needs to be developed and implemented.

Principles of public service and price regulation conditions still need to be implemented by ERE. Regulation of the generation prices of *KESh* need to be abandoned, as they are breaching the *acquis*.

6. Balancing

The requirements of Article 15 of Directive 2009/72/EC are fully transposed by the Power Sector Law, including as regards cross-border balancing.

Balancing groups, balance responsibility and balancing rules of *OST* are to be included in a Transmission Operation Code and based on objectivity, transparency and non-discrimination (Article 56 of the Law). The Transmission Operation Code will be developed by *OST* and approved by ERE. The Law's provisions are compliant with Article 37 of Directive 2009/72/EC, but need to be implemented.

In practice, *KESh* is balancing the entire system. The cost for positive imbalances corresponds to its (regulated) price, whereas the price for negative imbalances is calculated by adding a surcharge on the import price of *KESh*. The principle of cost-reflectivity applies only for traders and eligible customers, outside of the "public supply". The large HPPs connected to the transmission network do not bear balance responsibility nor are they subject to individual costs of imbalance.

7. Customer Protection and Protection of Vulnerable Customers

The Power Sector Law transposes the basic requirements for contractual obligations and rights and obligations of the customers. In Articles 95 and 96, the Law addresses vulnerable customers and imposes obligation on the Government to adopt a definition of vulnerable customers as required by Article 3 of the Directive.

ERE already took steps in this direction by abolishing the block tariff and cross subsidies. The identification of the vulnerable customers is in the domain of the Ministry for Social Affairs. The vulnerable customers are partially supported through a mechanism financed from the state budget.

c. Conclusions and Priorities

Following the adoption of the Power Sector Law, the development of secondary legislation needs to commence and be implemented as a matter of priority.

The electricity market structure is not defined in every detail. All aspects and elements of the market (including day-ahead, intra-day, balancing and ancillary services markets and a financial settlement mechanism), need to be defined and transposed in the set of market rules.

Switching Rules need to be developed and applied along with support mechanisms for switching. Unbundling of distribution in *OShEE* needs to take place as a priority. Deregulation of the *KESh* generation is also a precondition for competition.





4.2 Gas

a Sector Overview

Albania has undergone a very intensive period of legislative drafting and preparation of amendments to the 2008 Law on Natural Gas Sector in order to transpose the Third Energy Package. These activities were conducted in close cooperation with the Secretariat. At the time of publication of this Report, the text of the new draft Law on Natural Gas Sector amending the existing Law was aligned with the *acquis*. The draft was approved on 22 July 2015 by the Government and transmitted to the Parliament for adoption.

On 17 April 2015, ERE, Albania's regulatory authority, adopted a Decision to prolong the exemption granted to the *Trans Adriatic Pipeline (TAP)* project from certain requirements of the gas *acquis*, such as unbundling, third party access and tariff regulation. The Decision was developed jointly with the regulators of Italy and Greece. The *TAP* is part of the *Southern Corridor* which will link Albania with the European gas market. *TAP AG* had requested a postponement of the date by which the commercial operation would take place, namely until 31 December 2020. The Secretariat issued its Opinion on ERE's Decision on 17 March 2015.

The adoption of the Third Package compliant Law would provide a legal basis for certification of *TAP* in Albania, which is a precondition for its construction on the Albanian territory.

Albania also focused on the development of the Gas Master Plan of Albania, financed by the *Western Balkans Investment Framework (WBIF)*. It aims at investigating the potential for the diversification of energy resources, connection to regional and European gas networks and the establishment of the gas sector and market in Albania. Albania also signed a Memorandum of Understanding with Azerbaijan with similar scope, namely the development of the Albanian gas market. The process of alignment of these two projects with basically the same goals is on-going. In parallel, Albania is strengthening its administrative capacities related to the gas sector.

During the reporting period, Albania did not complete the unbundling of *Albpetrol*, a licensed gas transmission system operator, from activities related to production and supply of natural gas.

h State of Compliance

The current Law on Natural Gas Sector fails to transpose the Third Package's requirements.

1. Authorisation

The Law requires all natural gas undertakings to have obtained a license by ERE before starting activities in the gas sector, except for the operation of direct pipelines. The detailed procedure is specified in the Licensing Rules adopted by ERE in compliance with Directive 2009/73/EC. The only exception is that they lack a provision stipulating that a refusal to grant a license should be notified to the Secretariat.

The construction and use of natural gas infrastructure, including direct lines, requires a permit by the Government. The new draft Law requires that the Secretariat is notified in case of refusal. *Albpetrol*, a vertically integrated oil and gas company, is licensed as a natural gas transmission and distribution system operator.

2. Unbundling

The Law is not compliant with the Third Energy Package unbundling and certification requirements for transmission. *Albpetrol* is not unbundled from natural gas production and supply activities in accordance with either Directive 2003/55/ EC (legal, functional and accounting) or with the Third Package requirements.

Additional requirements for unbundling of the distribution and storage system operators will also have to be introduced in line with Directive 2009/73/EC.

TAP will have to be certified based on an independent transmission operator model before the start of its construction scheduled for 16 May 2016.

3. Third Party Access

The requirements for non-discriminatory access to the transmission and distribution networks, as well as storage and liquified natural gas (LNG) facilities, are established by the Law on Natural Gas Sector. The conditions for refusal of access are aligned with the gas *acquis*. Access is granted pursuant to the rules and tariffs approved by ERE.

The tariff setting principles transpose Directive 2009/73/EC only partially as ERE's competences are not compliant with the *acquis*. There are no obligatory provisions to establish a separate tariff for each entry and exit point to/from the transmission grid, as required by Regulation (EC) 715/2009. In addition, neither of the tariff systems was adopted.

The rules applicable to an exemption from third party access are

not transposed in line with the Third Package. Nevertheless, *TAP* was already granted a prolongation of the original exemption from regulated tariffs for initial and expansion capacity in forward flow for 25 years following the Third Package procedure.

The most serious shortcoming of the existing Law, however, is the different treatment of national and cross-border (transit) gas transmission, which runs counter to the gas *acquis*.

The Law requires a transmission system operator (TSO) to adopt a Grid Code which would transpose third party access services, capacity allocation, congestion management and, partly, transparency obligations of Regulation (EC) 715/2009. *Albpetrol* has failed to adopt such a Code.

4. Eligibility

The eligibility provisions in the existing Law are not compliant with the Treaty, because they are linked to the level of consumption. All customers should have been eligible by 1 January 2015. Albania thus breaches the gas *acquis* provisions.

5. Market Opening and Price Regulation

Market opening deadlines, as required by the Treaty, have not been set by the Law on Natural Gas Sector. This constitutes a case of non-compliance with the *acquis*.

The Law allows eligible customers to be supplied by the distribution system operator under regulated tariffs. This is contrary to market opening principles and also goes against the unbundling requirements for distribution networks.

6. Balancing

The Law requires that ERE approves the balancing rules adopted by the transmission system operator. The Law does not envisage that such balancing rules must be market based as required by Regulation (EC) 715/2009. To date, *Albpetrol* has failed to adopt the balancing rules and imbalance charges.

7. Security of Supply

The Law transposes the general provisions of Directive 2004/67/ EC and Directive 2009/73/EC on reporting in relation to security

of supply. It requires that the Government adopts secondary legislation which will define supply standards and a list of instruments for security of gas supply. However, such legislation has never been adopted.

The Law also defines safeguard measures and mechanisms in case of a major disruption of supplies.

8. Customer Protection and Protection of Vulnerable Customers

The Law does not envisage the right of customers to receive all the relevant data. The Law also lacks provisions on single points of contact, which should provide customers with the necessary information concerning their rights.

The provisions of Directive 2009/73/EC dealing with customer protection measures are not transposed by the Law. The Law envisages public supply (the public supplier is at the same time supplier of vulnerable customers) and supply of last resort.

The Law on Natural Gas Sector defines a vulnerable customer as a customer who, based on his income, cannot afford the price of gas and thus benefits from Government subsidies. This definition needs to be refined. Furthermore, the Ministry in charge of the energy sector is obliged to develop programmes for protection of vulnerable customers in cooperation with other authorities.

c. Conclusions and Priorities

Albania has missed the deadline for implementation of the Third Package of 1 January 2015. The country fails to comply with numerous provisions related to the powers and duties of the regulatory authority, access to networks, unbundling and certification. In addition, Albania has to develop numerous secondary legal acts, some of which were required already by the existing Law.

The draft Gas Law transmitted to Parliament is to a large extent aligned with the gas *acquis*. It is of utmost importance that Albania adopts this Law as soon as possible. Without its adoption, certification of *TAP* is risk. This will frustrate Albania's efforts of introducing a gas market on its territory and jeopardises the opening of the *Southern Corridor*.



4.3 Regulatory Authority

a. Organisation, Competences and Assessment of Independence

The Energy Regulatory Entity (ERE) is the single authority for regulating the energy sector of Albania equipped with country-wide regulatory competences in the gas and electricity sector as required by the Third Energy Package. ERE is headed by a Board of five Commissioners. The term of Board members is limited to five years, renewable once. Appointment requirements for Board members are in detail prescribed by law. A Selection Committee composed of the Chair of the Parliamentary Commission on Energy, the Chair of the Parliamentary Commission on Economy and the Minister responsible for energy is in charge of pre-selecting two candidates for final appointment by the Parliament. Vacancies for Board members are by law subject to public announcement. A rotation scheme as required by the Third Package is formally not in place. However, a rotation scheme was implemented to the first term of Board members. The current ERE Board was elected on different dates, namely February 2012, December 2012, April 2013, and February 2014.

Dismissal of Commissioners is by law limited to cases of conflict of interest or carrying out of a criminal act, and thereby uncritical in terms of potential political intervention. Also, an explicit legal provision exists, which entitles Board members to reason against the claimed dismissal case in front of the Parliamentary Commission. Finally, dismissal requires discharge by the Selection Committee.

In the electricity sector, the new Power Sector Law equips ERE with the competences foreseen by the Third Package, albeit with a few exemptions. The obligation of ERE to comply with legally binding Energy Community Regulatory Board decisions, to publish recommendations in relation to compliance of supply prices with public service obligations limits, to impose measures to promote competition and, most importantly, to require transmission and distribution system operators to change their terms and conditions have not been transposed explicitly as required by the Third Energy Package. Also, the level of penalties that ERE can impose is lower than the Third Package requires. This constitutes a breach of the Electricity Directive.

In the gas sector, ERE's competences still need to be extended to the complete set of regulatory powers and objectives foreseen under the Third Energy Package.

The independence criteria stipulated by Articles 35(4-5) and 37(16) of Directive 2009/72/EC and Articles 39(4-5) and 41(16) of Directive 2009/73/EC are met. ERE is by law set up as an in-

stitution, legally distinct and functionally independent from any other public entity. The establishment of ERE is solely based on legislation, which means that the regulatory authority cannot be liquidated by act of another public institution.

ERE takes binding decisions autonomously and independently. This is supported by a legal prohibition for top management to execute political functions, to have interest in regulated utilities or to have an employment relationship with the energy sector, triggering dismissal in case of non-compliance. At the same time, ERE's decisions are open to judicial review including a legal requirement for ERE to duly substantiate its decisions. Also, ERE ensures impartiality and transparency of its decision-making by keeping board meetings open to the public and publishing Board decisions. However, transparency and stakeholder involvement should be further improved by conducting public consultations and reflecting stakeholders' views in Board decisions.

ERE has autonomy in defining its Annual Work Programme as well as setting up and using its Annual Budget. ERE is held accountable for its activities by being obliged to present its Annual Report to Parliament, but it does not face the need for approval of its Annual Report or sanctions in case of dissenting opinions.

Management is independent in relation to staff appointments and the organisation of the regulatory authority's internal structure, including autonomy in setting of staff and Board member salaries. There is an explicit legal requirement for the Board to orientate salaries towards those of the regulated business.

On the regional level, ERE is relatively active in the ECRB. On a national level, ERE is yet to demonstrate the ability to live up to its independence and regulatory powers.

b. Conclusions and Priorities

ERE's competences need to be expanded to the complete set of regulatory powers and objectives foreseen under the Third Energy Package for the gas sector. The Power Sector Law needs to be amended to rectify existing breaches.

Transparency and stakeholder involvement in the decision-making process should be further improved through public consultations and information on stakeholders' views in Board decisions.

ERE must still prove its ability to live up to the independence and powers granted to it by law.



4.4 Oil

a. Sector Overview

Albania is the largest exporter of crude oil in the Energy Community. However, in 2014 exports decreased by 9.37% compared to 2013 (1.06 mt compared to 1.12 mt).

The state-owned *Albpetrol* is active in the development, production and trade of crude oil. The Albanian Government is planning to privatize *Albpetrol* in 2016. *Bankers Petroleum* is the biggest investor in the Albanian oil sector. It achieved a record level of average oil production of 20,690 barrels of oil per day (bopd) in 2014, 14% higher than the 2013 average production. A total of 160 wells were drilled, including 149 horizontal production wells. The companies *Petromanas Energy* and *Royal Dutch Shell* continue exploring areas throughout the blocks 2 and 3 for the identification of potential reserves of hydrocarbons in the Shpirag area.

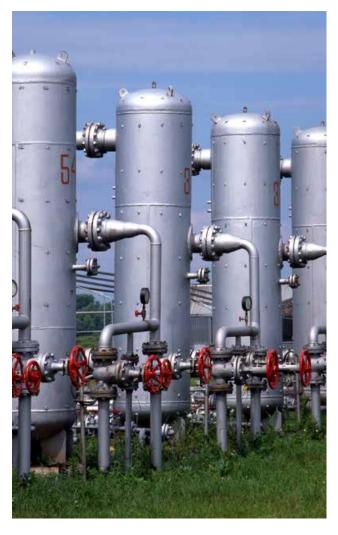
As regards the production of refined petroleum products, the volume of 286.2 kt processed in 2014 constitutes an increase by over 350% compared to 2013. The same goes for the volume of exported petroleum products, which increased by 570% to 134.5 kt. At the same time, the import of petroleum products also increased by 15.4% to a level of around 1.16 mt in 2014. The overall consumption of petroleum products in 2014 is estimated at 1.308 mt (an increase of 19.6% compared to 2013).

Albania's current emergency oil stockholding system is based on legislation from 1999 (amended in 2004) and governmental decrees from 2004 and 2007, where the entire emergency stockholding obligation is assigned to the oil industry. Monitoring and control mechanisms for assuring that the industry meets emergency stockholding requirements are formally in place, and efforts have been made to strengthen their enforcement. However, the current system is not compliant with Directive 2009/119/EC. Albania is currently focused on exploring various possibilities of how the structure could be changed to an effective system in compliance with the Directive. An initial draft Law on Emergency Oil Stocks was prepared. The Secretariat will continue to provide technical assistance during 2015.

b.Conclusions and Priorities

Albania's main priorities should be the strengthening of the technical and enforcement capacity for the establishment of emergency oil stocks. In particular, the following actions should be taken:

- Decision on emergency stockholding system based on the public stock model;
- Adoption of an action plan for building up emergency oil stocks to 90/61 days;
- Adoption of the draft Law on Emergency Oil Stocks, relevant secondary legislation and necessary amendments to existing laws;
- Establishment of a central stockholding entity;
- Establishment of a monthly data collection process necessary for operating the emergency oil stockholding system and meeting the reporting requirements under the Directive.





4.5 Renewable Energy

a. Sector Overview

1. State of Play, Legislation and Promotion of Renewable Energy

Albania has committed to a binding 38% target of energy from renewable sources in gross final energy consumption in 2020, starting with 31.2% in 2009.

The Law on Renewable Energy was adopted in May 2013. However, since March 2014 key articles of the Law, namely the adoption of a *National Renewable Energy Action Plan (NREAP)* and support schemes, have been suspended with the intention to be harmonised with the Law on Power Sector. The adoption of the Power Sector Law in April 2015 opened the way for the revision of the Law on Renewable Energy and the adoption of implementing measures.

A *NREAP* required for setting out the measures necessary to reach the target of 38% has not been adopted yet. The draft is currently being revised by the Ministry of Energy and Industry, the institution also in charge of monitoring the Plan's implementation. Due to the failure to submit the *NREAP* by the deadline of 30 June 2013, the Secretariat has referred the pending infringement case against Albania to the Ministerial Council.

2. Electricity from Renewable Sources

Support schemes for new and existing small hydropower plants with a capacity of up to 15 MW are in force since 2007. No support schemes have been adopted for renewable sources other than hydro. The amount of support for new small hydropower plants is calculated every year by ERE based on a methodology which was included in the now suspended Law on Renewable Energy. In February 2015, a Government Decree on the Methodology for the Fixed Tariff for Electricity Purchased by Small Hydropower Producers for 2015 was adopted. The Decree changes the base for calculation of the support from the average import electricity price of the previous year adjusted with an inflation index to the electricity price on the Hungarian Power Exchange. Investors have complained against the new Methodology as the support price for the electricity produced by hydropower plants up to 15 MW has decreased. The appointment of a renewable energy operator to manage the incentive system for new renewable energy producers has not been decided yet. This role had been previously assigned to the wholesale public supplier, a function which is now removed by the Power Sector Law adopted in 2015.

Other support for renewable energy producers with an installed capacity higher than 5 MW consists of tax incentives,

customs duty exemptions for machinery and equipment used for the construction of new capacities and an exemption from excise tax.

Authorisations for new hydropower plants are granted based on the Concession Law and a competitive bidding process. According to the 2015 Power Sector Law, authorisations for power plants larger than 2 MW not subject to concessions are granted by the Government upon proposal of the Ministry in charge of energy. Power plants below 2 MW which are not subject to the Concession Law are granted an authorization by the Ministry in charge of energy. The Renewable Energy Law provides that the Government shall approve simplified procedures on issuing the necessary authorisations for producers of renewable energy. However, these procedures have not been established yet.

The National Licensing Centre (NLC) has been designated by the Licensing Law to act as a one-stop shop for all investors who won a tender for a concession or have been awarded an authorization for construction. Its role is to streamline and simplify the procedures for energy projects, including renewable energy.

The 2015 Power Sector Law provides for priority and guaranteed access of renewable energy producers to the electricity networks and also priority dispatch of electricity produced from renewable sources. All market participants including renewable energy producers are required to take balance responsibility. The Power Sector Law tasks ERE to take measures to facilitate the integration of new capacities to the network, in particular removing barriers that may hinder the entry of new participants and producers of electricity from renewable sources. These measures are still pending. The Renewable Energy Law also obliges the network operators to connect with priority all renewable energy producers to the closest point of the grid. As regards connection costs, the Renewable Energy Law provides that these shall be borne by the producer, except for the cases when the connection cost is borne by the grid operator or through private investments, pursuant to the provisions of the Power Sector Law.

Under the current legal framework, renewable energy producers may claim compensation in case of lack of grid capacity.

ERE is tasked to approve the necessary procedures and documentation for the connection of generation facilities to the grids. Alignment of the existing procedures for connection of renewable producers to the transmission and distribution networks and methodologies for establishing the cost of connection in order to comply with the requirements of the Power Sector Law adopted

in 2015 is pending. ERE adopted simplified procedures for the licensing of renewable energy producers which are connected to the distribution grids.

3. Renewable Energy in Heating and Cooling

Firewood is the main source of renewable energy used for heating. The registered biomass consumption was 206 ktoe and 201 ktoe in 2012 and 2013 respectively. Solar thermal was contributing barely to the renewable energy share with only 12 ktoe in 2013.

The Renewable Energy Law only marginally addresses the promotion of energy from renewable sources used for heating and cooling, through tax exemptions for installation of solar thermal systems for water heating. The Renewable Energy Law requires the Government to set minimum requirements for producing sanitary and technological hot water with solar energy in buildings and mandatory installation of solar water heating systems for a certain category of buildings. In setting out obligations for minimum levels of renewable energy in public buildings, the Government is expected to take an exemplary role after the adoption of the new Law on Energy Performance of Buildings.

4. Renewable Energy in Transport

The Law on Biofuels of 2008 introduced some measures required under the Directive but was never implemented. It is about to be revised with a view to transpose the requirements of Directive 2009/28/EC on sustainability criteria and introducing more adequate incentive measures.

The actual share of biofuels is not known, even though the legislation in place requires monitoring and reporting. The draft *NREAP* shows a share 0.11% for 2012. In any event, assessing Albania's progress in real terms is very difficult. An Italian-Albanian joint venture produces biodiesel in Porto Romano since 2011, with a production capacity of 100,000 t/year. However, all raw materials are imported and all produced biodiesel is exported, so it cannot count towards Albania's target.

Other than setting a 10% target by 2020, the Law on Renewable Energy of 2013 does not apply to renewable energy in transport. The Law for the Production, Transport and Trade of Biofuels and other Renewable Fuels in Transport of 2008 deals with functional and organizational aspects of production, transportation and trade in biofuels. The Law also sets annual targets which are now outdated (an indicative target of 15% for 2015) and imposes blending obligations on traders. However, the secondary legislation needed for the implementation of the Law has not even been drafted since its entry into force. The Law is currently under review by a working group with a view to transpose the requirements of Directive 2009/28/EC with regard to sustainability criteria and the certification system and to introduce more adequate incentive measures.

b. State of Compliance

The Renewable Energy Law only partially transposes the Directive. The Biofuels Law of 2008 is in line only with Directive 2003/30/EC, but not with Directive 2009/28/EC. Albania remained non-compliant with the *acquis* on renewable energy despite progress in increasing the uptake of energy from renewable sources and the newly added generation capacities in the last years.

1. National Renewable Energy Action Plan

Albania did not adopt the *National Renewable Energy Action Plan* by 30 June 2013 under Directive 2009/28/EC. The *Progress Report on the Promotion of Renewable Energy* for the years 2012 - 2013 has been submitted.

2. Support Schemes

Albania applies operational support only to electricity from hydropower. Energy from renewable sources other than hydropower is currently not supported. Adequate support mechanisms for energy from renewable sources like wind, biomass, solar PV as well as for energy from renewable sources used for heating and cooling and transport should be adopted by ERE within the implementation process of the revised Law on Renewable Energy.

3. Cooperation Mechanisms

The provisions related to possible cooperation mechanisms between Albania and Contracting Parties or EU Member States to reach the 2020 targets have not been transposed.

4. Administrative Procedures

The existing procedures for authorizations of new power plants included in the Decree of the Council of Ministers adopted in 2008 have to be amended to comply with the requirements of the 2015 Power Sector Law.

The timeframe for applications and the coordination between different institutions was affected positively by the designation of the National Centre for Energy Applications as a one-stop shop for renewable energy projects. The future handling of applications will show whether its establishment will really benefit investors. Albania has to improve on compliance with the requirements of Article 13 of the Renewable Energy Directive for streamlined and simplified procedures among the institutions.

5. Access to the Grid

The Power Sector Law provides for priority and guaranteed access of renewables to the network and priority dispatch of the electricity from renewable sources. Secondary legislation is

not complete. In practical terms, transmission and distribution system operators have to improve the methodology determining the costs of connection to the grid or grid reinforcements and the transparency towards investors. Currently, Albania fails to implement in practice the requirements related to grid access detailed in Article 16 of the Renewable Energy Directive.

6. Guarantees of Origin

Legislation related to the issue, transfer and cancellation of guarantees of origin remains to be adopted by ERE as the designated body. Currently, there is no compliance with this requirement.

7. Renewable Energy in Transport

The 2013 Law on Renewable Energy transposes the 10% renewables target by 2020 in the transport sector from Directive 2009/28/EC. Beyond target transposition, other requirements with regard to biofuels have not been complied with and the actual share is not monitored.

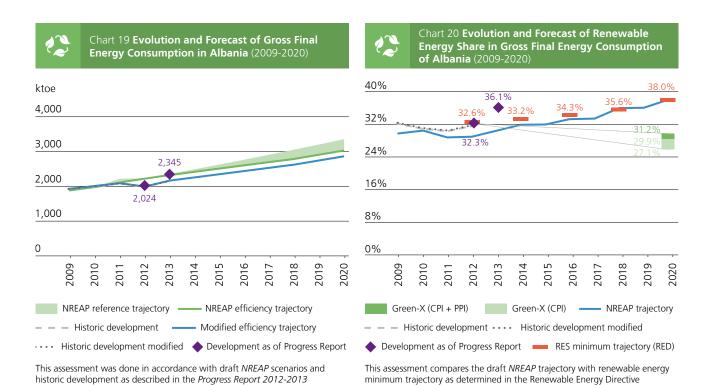
The existing Law on the Production, Transport and Trade of Biofuels and other Renewable Fuels in Transport of 2008 is not compliant with Directive 2009/28/EC. It has to be amended to transpose the requirements for the sustainability regime and to establish a certification scheme and the relevant verification body as required by Article 18 of Directive 2009/28/EC. Without a certification scheme in place and regardless of the actual biofuels production and consumption, uncertified quantities cannot be counted towards meeting the renewables energy targets or be exported to the EU market.



c. Quantitative Assessment of the Progress towards National Renewable Energy Trajectory

Chart 19 compares the historic development of the gross final energy consumption (GFEC) with the planned trajectory for the GFEC under the draft *NREAP* of Albania. Until 2010 they were nearly concurrent, but since 2011 a gap between the actual and the planned development occurred. In 2012 the actual demand was 9% below the planned trajectory.

Chart 20 shows the historic renewable energy share in GFEC and the projection for 2020. Since 2010 the actual renewable energy share was constantly above the *NREAP* trajectory. The gap between the draft *NREAP* trajectory and the actual renewables share has constantly widened until 2013, when the actual renewables share as of the *Progress Report on the Promotion of Renewable Energy* was 5.1% above the draft *NREAP* target. Nevertheless, according to the modelling results with current policy initiatives (CPI) and planned policy initiatives (CPI+PPI), Albania will not meet the renewable energy target for 2020 by *approx*. 8% if the measures described in the draft *NREAP* will not be revised.



Source Study on the Assessment of the National Renewable Energy Action Plans and the Progress in Promotion of Renewable Energy in the Energy Community, by ECN et all, 2015

d. Conclusions and Priorities

Immediate adoption of the *NREAP* should be the first priority of the Ministry of Energy and Industry. A new Renewable Energy Law needs to improve compliance with the renewable energy *acquis*.

Support schemes for renewable technologies other than hydropower have to be adopted to tap the renewable energy potential in the country. The network operators have to increase transparency regarding connection and access to the grids. ERE must also implement the system for certifying energy

produced from renewable sources based on guarantees of origin and remove the confusion between guarantees of origin certificates and "green tradable certificates" that currently exist in the regulation.

A full review of the Law for the Production, Transport and Trade of Biofuels and other Renewable Fuels in Transport and its implementation is now pending for a year and a half. Since blending obligations and some incentives have been defined already, focus should be on the certification system, as biodiesel production seems to take place already in the country.



4.6 Energy Efficiency

| | 4.6 Energy | / Efficiency | | | | | |
|--|---------------------------------------|------------------------|--|---|----------|-------|--|
| Energy Efficiency Act | Energy Efficiency Action Plan (EEAP)* | | | | | | |
| Period covered by EEA | P | | 2010 – 2018 | | | | |
| Overall energy savings | target - Directive 2006/3 | 2/EC (ktoe / % / year) | 168/9/2018 | | | | |
| EEAP status | | | First (rough) draft 2nd EEAP submitted on 24 November 2013 | | | | |
| Achieved energy saving | gs 2010 – 2012 | | Not calculated | | | | |
| Key institution(s) in cha | arge | | Ministry of Energy and | Ministry of Energy and Industry (MEI), Albanian National Agency of Natural Resources (AKBN) | | | |
| Main data and energy efficiency indicators** | | 2010 | 2011 | 2012 | 2013 *** | | |
| Total primary energy | supply (TPES) | ktoe | 2,111 | 2,238 | 2,075 | 2,618 | |
| Energy Intensity (TPES/GDP) toe / 1,000 USD | | 0.20 | 0.20 | 0.18 | 0.23 | | |
| TPES/Population toe/capita | | 0.67 | 0.71 | 0.66 | 0.90 | | |
| Total final energy consumption (TFEC) ktoe | | 1,989 | 1,992 | 1,905 | 2,092 | | |
| | Residential | | 24% | 25% | 27% | 30% | |
| | Services | | 8% | 8% | 8% | 10% | |
| Share of TFEC by | Industry | % | 17% | 19% | 19% | 14% | |
| sector Transport | Transport | 70 | 37% | 38% | 38% | 40% | |
| | Others | | 8% | 7% | 6% | 6% | |
| | Non-energy use | | 6% | 2% | 2% | 1% | |

^{*} Source: Energy Community website / 1st EEAP of Albania

a. Sector Overview

The final energy consumption of Albania picked up again in 2013, after having contracted in 2012 due to the economic crisis. Transport and residential sectors recorded the highest shares of total final energy consumption (40% and 30% respectively). While Albania's energy intensity is still lower than the Contracting Parties' average (mainly due to its predominant share of efficient hydro power generation and low share of energy intensive industry in the overall economy, the trend in 2013 was upwards instead of downwards. This is an indication that measures should be taken to improve the overall energy efficiency and decouple energy consumption from economic growth.

The Law on Energy Efficiency from 2005 still applies. At the time of its adoption, Directive 2006/32/EC was not yet in force in the EU or the Energy Community, hence the Law is not in line with the requirements of Directive 2006/32/EC. Yet, even the non-compliant existing Law was not properly implemented due to lack of implementing regulations and norms as well as financing mechanisms. A new Law on Energy Efficiency was prepared in close cooperation with the Secretariat, but its adoption was delayed. The draft provides for an indicative energy savings target, the *Energy Efficiency Action Plan (EEAP)* and its monitoring, the exemplary role of the public sector, energy audits and promotion of the market for energy services. It also envisages institutional strengthening, *i.e.* the establishment of an energy efficiency fund and an energy efficiency agency. The

draft was approved by the Government on 22 July 2015, but final adoption by the Parliament is still pending. The Ministry is working in parallel on drafting of secondary legislation on energy audits promotion of the market for energy services and the establishment of the energy efficiency fund and the energy efficiency agency.

Albania adopted the first *EEAP* in 2011. However, it has not adopted the second *EEAP* within the deadline of 30 June 2013 or later, nor reported on energy savings achieved as required by Directive 2006/32/EC. A draft submitted to the Secretariat in November 2013 did not contain a satisfactory description of energy efficiency improvement measures planned to reach the targets, nor did it include a thorough analysis and evaluation of the first *EEAP* and the fulfilment of intermediate energy savings targets.

The Law on Information of the Consumption of Energy and Other Resources by Energy-Related Products of January 2013 transposed Energy Labelling Directive 2010/30/EU. However, the adoption of secondary legislation for energy labelling of specific products is still pending.

As regards the transposition of Directive 2010/31/EU, *EBRD* and the Secretariat assisted the Ministry of Energy and Industry in drafting the Energy Performance of Buildings Law. The Ministry is expected to submit it to the Government in the 3rd quarter of 2015 and have it adopted by the Parliament in October 2015.

^{**} Source: International Energy Agency

^{***} Indicators calculated by the Energy Community Secretariat based on preliminary energy balances for 2013

The Ministry of Energy and Industry and the Albanian National Agency of Natural Resources are currently the key bodies responsible for the development of energy efficiency policy and the overall control and monitoring of *EEAP* implementation. In September 2013, a Directorate for Renewable Energy Sources and Energy Efficiency was established within the Ministry of Energy and Industry. There are no clear-cut roles and responsibilities of the Directorate for Renewable Energy Sources and Energy Efficiency and the Albanian National Agency of Natural Resources when it comes to the development and implementation of the *Energy Efficiency Action Plans*, preparation of secondary legislation, *etc.* This also leads to delays and bottlenecks in preparing and discussing any legal documents related to the energy efficiency *acquis* obligations.

b. State of Compliance

1. Energy Services Directive 2006/32/EC

To date, Albania has not adopted the Law on Energy Efficiency, replacing the outdated Law on Energy Efficiency of 2005. Albania also did not adopt the second *EEAP* within the set deadline. The country thus fails to fulfil its obligations under Directive 2006/32/EC. As a consequence, the Secretariat initiated infringement action against Albania in November 2013 for the lack of transposition and implementation of this Directive. The Secretariat is currently preparing a Reasoned Opinion.

2. Energy Labelling Directive 2010/30/EU

The Law on Information of the Consumption of Energy and Other Resources by Energy-Related Products transposed the recast framework Directive 2010/30/EU. However, the adoption of relevant secondary legislation for energy labelling of specific

appliances is still pending. Therefore Albania is still not fully in compliance with the Labelling Delegated Acts.

3. Energy Performance of Buildings Directive 2010/31/EU

With regard to energy efficiency in buildings, the adoption of the Law on the Energy Performance of Buildings is still pending, and thus compliance with Directive 2010/31/EU still needs to be achieved.

c. Conclusions and Priorities

Despite the recent progress in drafting energy efficiency legislation, Albania remains non-compliant. The adoption of the Law on Energy Efficiency and the Law on Energy Performance of Buildings is essential for Albania's compliance with the energy efficiency *acquis*. Furthermore, Albania needs to improve and adopt immediately the second *EEAP*, following the requirements of Directive 2006/32/EC and the template developed by the Energy Community Energy Efficiency Coordination Group.

Furthermore, the implementation of energy efficiency policy in Albania will require a strong institutional and financial framework for energy efficiency. The Secretariat supports the setting up of a dedicated Energy Efficiency Agency and an Energy Efficiency Fund, which will enable the effective implementation and financing of measures and projects in the field of energy efficiency in Albania.

Another priority should be the further development of technical regulation dealing with labelling of energy-related products in line with the Ministerial Council Decision of September 2014.





4.7 Fnvironment

a. Sector Overview

1. Environmental Impact Assessment Directive

The Law on Environmental Protection of 2011 lays down the basic principles of the procedure. The Laws on Environmental Impact Assessment and on Environmental Permits are in force since February 2013. In terms of secondary legislation, environmental impact assessment is regulated by the Decision Laying Down Rules, Procedures and Deadlines for Environmental Impact Assessment (2013), the Decision on the Determination of Rules for the Organization and Functioning of the National Environmental Agency of the Regional Environment Agencies (2014) and the Decision on the Approval of Rules, Requirements and Procedures for Informing and Involving the Public in Environmental Decision-Making (2014). The latter Decision contains important provisions on public participation in the environmental impact assessment procedure, in particular by specifying the responsibilities of the National Environmental Agency, the project developer and the local Government related to public participation.

No information on environmental impact assessments related to energy projects during this reporting period was provided to the Secretariat. In total, the environmental impact assessments for six Projects of Energy Community Interest (PECIs) (Wind Park Dajc-Velipoje, 400 kV OHL SS Bitola (MAC) – SS Elbasan (ALB), 400 kV OHL Tirana (ALB) – Pristina (KOS), the Ionian Adriatic Pipeline, the Trans-Adriatic Pipeline and the EAGLE LNG Terminal were concluded so far in Albania.

2. Sulphur in Fuels Directive

As regards the Sulphur in Fuels Directive, the Decision on the Quality of some Liquid Fuels for Civil and Industrial Thermal Usage and for the Use in Water Transportation Vehicles (sea, river and lakes) transposed the requirements of the Directive into national law.

3. Large Combustion Plants Directive

Albania has one combustion plant that falls under the scope of the Large Combustion Plants Directive, the currently non-operational thermal power plant Vlora. The plant is capable of meeting the requirements of the Industrial Emissions Directive.

The Law on Environmental Permits adopted in 2011 transposes the requirements of the Large Combustion Plants Directive into national law and the emission limit values are fully aligned with those of the Directive. The Law requires continuous monitoring for plants with a rated thermal input of 100 MW or more, which is also in line with the Directive's requirements. Amendments to this Law were adopted in June 2014. According to these amendments, a three-level environmental permitting system (type A, B and C) is established based on the size of the installation, its activity and its potential to cause environmental pollution and to threaten human health. All activities referred to in Annex I to the Industrial Emissions Directive, including large combustion plants, belong to type A activities (with the highest potential to cause harm to human health or the environment).

b. State of Compliance

1. Environmental Impact Assessment Directive

During the last reporting period, Albania made significant improvements and reached a high level of transposition of the Environmental Impact Assessment Directive with the adoption and the recent entry into force of the Law on Environmental Impact Assessment and the related secondary legislation. The list of projects subject to environmental impact assessment is aligned with Annexes I and II of the Directive.

With the establishment and empowerment of the National Environmental Agency and its local offices, Albania has also taken significant steps towards capacity building related to environmental impact assessment.

2. Sulphur in Fuels Directive

Albania has not taken all the necessary steps by the deadline of end 2011 to ensure that within its territory heavy fuel oils are not used if their sulphur content exceeds 1.00 % by mass and gas oils are not used if their sulphur content exceeds 0.1 % by mass. The Secretariat addressed this breach by way of a dispute settlement procedure. As a result of this procedure, the requirements for the maximum sulphur content of heavy fuel oil and gas oil are compliant to the Directive's provisions as of 1 January 2015. The Secretariat will follow up with the Albanian authorities on the implementation of the provisions of the Decision.

3. Large Combustion Plants Directive

With regard to the Large Combustion Plants and Industrial Emissions Directives, Albania is already in the position to fully implement the provisions of both Directives.

c. Conclusions and Priorities

Except for the Sulphur in Fuels Directive, Albania has reached a high level of transposition of the Energy Community environ-

mental *acquis* into national law. Therefore, efforts should be focused on the practical implementation of the provisions of the Directives as well as on capacity building for the authorities responsible for their implementation.



Albania

4.8 Competition

a. Sector Overview

1. Competition Law

Competition law in Albania is governed by the Law on Competition Protection adopted in 2003 and amended in 2010. The Law contains a prohibition of cartels and abuse of dominant position in accordance with Articles 101 and 102 of the Treaty on the Functioning of the European Union (TFEU). Public undertakings which were granted exclusive or special rights and undertakings entrusted with the operation of services of general economic interest are covered by the Law. The body in charge of enforcing competition law is the Albanian Competition Authority (ACA), which is composed of a Commission and a Secretariat.

In October 2014, the Commission approved Guidance on Abuses of a Dominant Position. The Guidance sets the general principles that ACA should follow when evaluating abuse of dominant position on the market by one or more undertakings. The definition of dominance in the Guidance corresponds to the one provided in EU legislation.

In the reporting period, ACA has repeatedly received complaints regarding the tender procedure for purchase of electricity for covering distribution system losses organised by Operatori i Shpërndarjes së Energjisë Elektrike sh.a. (OSHEE). The complaints alleged that there had been a prohibited agreement between OSHEE and two tender participants whose purpose was to manipulate prices and quantities by sharing confidential information about the best final bid. In its preliminary investigation report, ACA concluded that the regulatory framework for conducting the tendering process organised by OSHEE had not been transparent and that the bilateral negotiations between OSHEE and the tender participants had been suspicious. ACA recommended to the Albanian Energy Regulatory Authority (ERE) to draft a special regulation on procedures for electric energy purchase for covering losses based on the principles of transparency and non-discrimination. ACA also recommended that an open auction round be conducted after negotiations, where the final bids would be read in the presence of all participants. Despite this recommendation, the same rules continued to apply until March 2015. Moreover, ACA noted signs of

potential bid rigging related to two other tender participants which, according to ACA, coordinated their behaviour as part of the same company. In March 2015, ACA took a decision on opening an in-depth investigation on the purchase of energy for covering the losses in the distribution system.

In March 2015, ERE approved an agreement between *OSHEE* and *KESH* by which *OSHEE* would buy energy for covering losses in the distribution system primarily from *KESH* without conducting a tendering procedure. This agreement resulted in a decision by *OSHEE* to cancel the tendering procedure for March and buy the entire quantity of electricity for covering losses in the distribution network entirely from *KESH*, without any competitive procedure. In April 2015, ACA was approached with a complaint and, as a result, initiated a review of the agreement between *OSHEE* and *KESH*.

In the reporting period, ACA adopted a decision on closing the in-depth investigation into the market of production, import and wholesale of fuel. The investigation, which covered nine undertakings in the period from January 2010 to May 2014, was aimed at determining whether joint purchases of fuel constituted concerted practices and enabled collective dominance of these undertakings. After conducting several dawn raids, ACA found no evidence of communication among the undertakings. ACA however identified signs of vertical restraints of competition where wholesalers set the prices for retailers ('resale price maintenance'). ACA also concluded that competition was not effective due to the market structure and the legal framework in place. It issued a decision recommending a revision of Law on Processing, Transportation and Trading of Oil, Gas and Their By-products, so that excessive links in the market chain would be removed and competitors would be allowed to use their logo and maintain their product identity. It also ordered that undertakings operating on the market submit their agreements on joint imports to ACA in order to obtain an individual exemption.

2. State Aid Law

The Law on State Aid was adopted in 2006 and amended in 2009. The Law stipulates a prohibition of State aid in line with Article 107(1) TFEU. It applies to aid granted to both

private and public undertakings. The State Aid Enforcement Authority in Albania consists of the State Aid Commission (SAC) and the State Aid Control Unit (SACU). SAC is responsible for decision-making, while SACU provides technical and administrative support to SAC. The chairman of SAC is the Minister of Economy, Trade and Energy, while the other members are appointed by the Government. The SAC functions as a State Aid Department of the Ministry of Economy. In the reporting period, there were no changes of the legislative framework in the area of State aid.

In September 2014, the SAC authorised support for the implementation of the Trans Adriatic Pipeline (TAP) project. The support is meant to be granted in several forms, mainly through the exemption of TAP from VAT and from any other tax on the compensation received in relation to the pipeline. The SAC found that the tax exemption constituted State aid as it conferred an economic advantage to the beneficiary, included a transfer of State resources, affected trade of gas between the Parties to the Treaty and was selective. However, the SAC declared the State aid compatible based on the fact that it promotes the execution of an important Project of Common Interest (PCI). The SAC concluded that the TAP project would develop energy infrastructure, help Albania with its integration into Europe and support it in meeting its energy needs in the future. The SAC also confirmed that the State aid pursues such objectives in a necessary and proportionate way.

b. State of Compliance

Articles 18 and 19 of the Energy Community Treaty have been properly transposed into Albanian legislation.

1. Competition Law

The Law on Competition Protection contains provisions corresponding to Articles 101, 102 and 106 TFEU. It is commendable that ACA has conducted investigations into the structure of the energy markets and suggested changes of the legal framework. The Secretariat welcomes ACA's decision for opening an in-depth investigation into the possible cartel in the market for purchase of electricity for covering losses in the distribution system since the preliminary investigation results show that there have been signs of competition restrictions. In its preliminary investigation report, ACA properly concluded that the tendering procedure for purchase of electricity for covering of losses was making the process less competitive and transparent as it limited the number of tender participants and enabled suspicious negotiations between the participants. Its recommendations for the review of the regulatory framework, such as those on open auction rounds, are suitable to bring more competition to the market. They should be ceomplemented by binding decisions that would punish the infringers of competition rules and thus contribute to the prevention of competition rules infringements in the future.

It is also to be welcomed that ACA will carry out an assessment of the agreement between *OSHEE* and *KESH* as it is likely that this agreement could completely foreclose the market of trade in electricity for covering distribution system losses to competition.

Moreover, the methodology for assessing potential competition restrictions based on raids and economic analyses is in line with the practice at EU level. However, in order to improve the effectiveness of competition law enforcement, ACA should issue binding decisions that would not only oblige undertakings in the future, but also punish them for their anticompetitive behaviour in the past. The practice of 'resale price maintenance' identified by ACA in the market of production, import and wholesale of fuel constitutes a hardcore restriction of competition as identified by EU competition law. Therefore, the failure of ACA to punish undertakings for their anticompetitive practices on the market does not ensure the complete respect of competition rules.

2. State Aid Law

The State aid acquis has been properly transposed into Albanian legislation. The institutional structure and the enforcement mechanism, however, continue to be a cause of concern. The independence of SAC and SACU is questionable as they are both strongly connected to the Ministry of Economy, Trade and Energy. SAC is chaired by the Ministry, which is the largest grantor of State aid. The rest of the members of SAC are appointed by a decision of the Government. SACU is established within the Ministry and is not adequately equipped with staff as it has only two employees. Since SACU is responsible for assessing State aid, drafting decisions and recommending them to SAC, its lack of human resources and independence prevents it from performing the tasks entrusted to it in an effective and efficient manner. In addition, the fact that the decisions of the State Aid Enforcement Authority are not publically available contributes to its potential partiality. Albania's State Aid Enforcement Authority still has no functioning webpage where its decisions could be published.

Taking into consideration that *TAP* was granted a status of a Project of Common Interest by the EU, it fulfils the conditions for being assessed as an important project of common European interest pursuant to Article 107(3)b TFEU. The SAC performed a correct step-by-step analysis of the measure starting from the examination of State aid elements to looking at possible justifications provided by Article 107(3) TFEU, which is in line with the practice at EU level. It is also in accordance with the EU *acquis* on State aid that the SAC assessed the measure's proportionality and necessity before declaring the State aid compatible. The SAC's evaluation of State aid for *TAP* in a systematic manner in accordance with the practice of the European Commission is an improvement in the assessment of State aid measures.

c. Conclusions and Priorities

ACA was the most active national enforcement authority in the reporting period which investigated competition concerns in the structure of the energy markets in the country. It should, however, strengthen its enforcement by issuing binding decisions on the violations of competition law and demanding that anticompetitive practices are brought to an end. Since ACA is already well established in Albania and enjoys credibility as an independent institution, the competence to decide on

State aid should be transferred to it. This would ensure that the decision-making body in the area of State aid is separated from the granting institutions. If the competence to decide on State aid is not transferred to ACA, then the SAC should not be chaired by the Minister of Economy. Also, both SAC and SACU should not be completely dependent on the Ministry of Economy with regard to their budget and appointment of their members. SACU should employ additional employees in order to improve their competence and practical possibilities for timely and correct decision-making.



Albania

4.9 Statistics

a. Sector Overview

The Law on Statistics of 2004 defines the Institute of Statistics (INSTAT) as the national body responsible for official statistics. INSTAT is responsible for the publication of statistical data and for the collection of price data. At the same time, a decision of the Government from April 2007 authorized the National Agency of Natural Resources (AKBN) to collect information about the use of natural resources, including annual and monthly data on energy products. An agreement between AKBN and INSTAT is required to clearly separate the tasks and responsibilities related to energy data collection.

Moreover, the Ministry of Energy and Industry (MEI) is mandated by several sector laws to monitor security of supply (including collection of short-term data), emissions of pollutants, energy efficiency and other indicators and provide inputs for projections and modelling of energy supply and demand. According to the Law on Refining, Transportation and Trading of Oil, Gas and their By-Products, importers of oil products are obliged to report to MEI. ERE is responsible for monitoring of energy markets and prices in the regulated electricity and gas sectors, generation of energy from renewable sources and cogeneration under sector-specific laws.

b. State of Compliance

1. Annual Energy Statistics

AKBN compiles an annual energy balance and questionnaires as defined by Regulation (EC) 1099/2008. After submission to the *IEA* for several years, Albania has for the first time submitted annual questionnaires to *EUROSTAT*, which published the Albanian energy data in 2015. As regards quality, AKBN

is working on improving its methodologies and procedures, primarily on surveying consumption and renewable energy.

2. Monthly Energy Statistics

The obligations related to the preparation and dissemination of monthly statistics are assigned to AKBN. Implementation started in March 2014 through a pilot survey, but currently only monthly electricity data are available. Questionnaires and methodologies for oil are currently being developed and are not sufficiently advanced to be disseminated in the prescribed formats.

The acquis is currently not adequately implemented by Albania. This is largely due to the lack of human and financial resources.

3. Price Statistics

Price statistics fall under the responsibility of INSTAT in principle. In the absence of a clear separation of duties between AKBN and INSTAT, the former began collecting data in cooperation with ERE. In particular, AKBN collected data on electricity tariffs for 2012 - 2014 from ERE and compiled a first set of electricity prices charged to end-users in Albania applying the *EUROSTAT* methodology. With the collection and compilation of price statistics and its publication by *EUROSTAT*, Albania made a significant step towards implementing Directive 2008/92/EC.

However, the set of compiled data is still incomplete. Reporting is still limited to households. Prices charged to industrial end-users, price systems reporting, breakdown of prices and quality reporting have not been established yet to the extent required by the *acquis*.

c. Conclusions and Priorities

Albania has to be given credit for an outstanding improvement of its energy statistics, having provided a sufficient level of data in annual statistics and having taken the first steps towards complying with provisions on price statistics defined by the *acquis*.

In order to strengthen the basis for energy statistics, MEI should prepare secondary legislation to define a clear institutional framework and the content, frequency and deadlines for data management.

Furthermore, the current lack of a clear separation of duties and responsibilities between INSTAT and AKBN and the lack of resources for the responsible institutions are key obstacles to improving the quality of statistics. The responsible authority for collecting and submitting *Joint Organisations Data Initiative (JODI)* monthly data to *United Nations Statistics Division (UNSD)* should be designated without delay.

Since the questionnaires and methodologies for price reporting are in place, regular and systematic data collection is being held up only by the lack of an administrative framework with a clear allocation of tasks.



Albania

4.10 Open Infringement Cases

a. Non-Compliance with the Sulphur in Fuels Directive

On 11 February 2013, the Secretariat sent an Opening Letter to, *inter alia*, Albania. In the Opening Letter in Case ECS-1/13, the Secretariat comes to the preliminary conclusion that Albania has not yet transposed and implemented the requirements of Directive 1999/32/EC as required by Article 16 and Annex II of the Treaty. Directive 1999/32/EC aims to reduce emissions of SO₂ resulting from combustion of heavy fuel oils and gas oils. As of 1 January 2015, the Albanian legislation complies with the requirements of the Directive. The Secretariat will follow up with the Albanian authorities on the practical implementation of the decision transposing the Directive's provision into national law.

b. Non-Transposition of the Energy Efficiency Directive

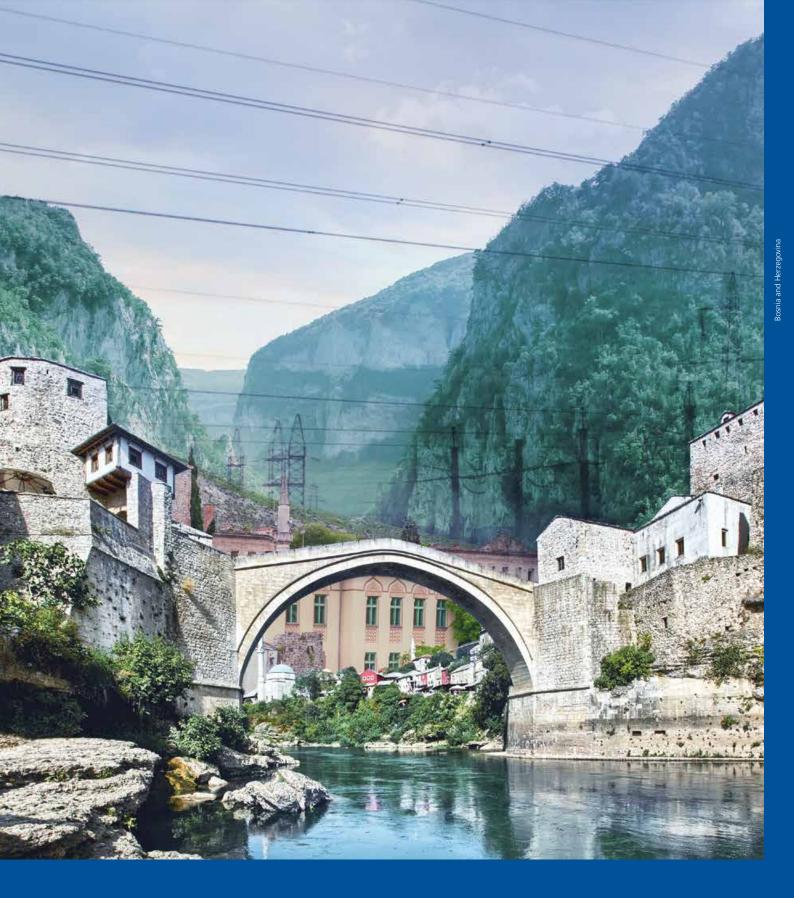
In Case ECS-10/13 initiated on 25 November 2013, the Secretariat identified the lack of transposition of Directive 2006/32/EC on Energy End-use Efficiency and Energy Services in Albania. Currently, new draft legislation is pending adoption. If progress is not achieved, the Secretariat will proceed with the case.

c. Lack of Adoption of a National Renewable Energy Action Plan

On 11 February 2014, the Secretariat sent an Opening Letter to, *inter alia*, Albania, for failure to comply with Energy Community law related to renewable energy. In the Opening Letter in Case ECS-3/14, the Secretariat addresses the failure by the country to adopt and submit to the Secretariat a *National Renewable Energy Action Plan*, the deadline for which expired on 30 June 2013. Following the lack of adoption of a *National Renewable Energy Action Plan*, a Reasoned Opinion was sent to Albania on 24 February 2015. On 12 May 2015 the Secretariat submit-

ted a Reasoned Request to the Ministerial Council seeking a Decision establishing that Albania failed to fulfil its obligations to adopt and notify to the Secretariat a *National Renewable Energy Action Plan* within the prescribed time limit as requested by Directive 2009/28/EC.





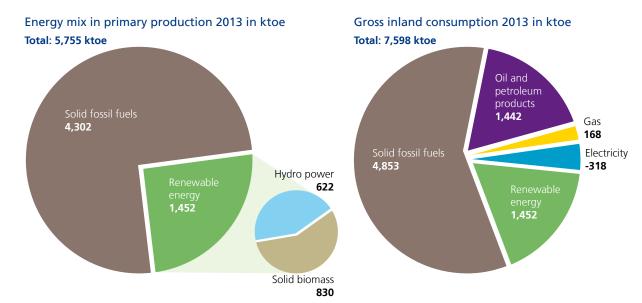


5 BOSNIA AND HERZEGOVINA

5 Bosnia and Herzegovina

Bosnia and Herzegovina's stagnation in further reforming its energy sectors, an issue of the Secretariat's concern for several years already, continues also this year. The transposition of the Third Package, in which all other Contracting Parties are actively engaging, constitutes a litmus test for the country's capability to keep its commitment made as a member of the

Energy Community. The absence of serious efforts during the reporting period does not bode well: the people of Bosnia and Herzegovina are once again deprived of the benefits of reform on account of the dysfunctional structures and the political interests of a few. So far, the Energy Community has not found an adequate response to this failure.



Source: Agency for Statistics of Bosnia and Herzegovina (BHAS) and estimates of the Energy Community Secretariat



4

Bosnia and Herzegovina

5.1 Electricity

| Description of data [unit] | | | 2013 | 2014 |
|--|-------------------|---|----------------------|-----------|
| Electricity production [GWh] | | | 16,303 | 15,030 |
| Net imports [GWh] | | | 3,167 | 3,178 |
| Net exports [GWh] | | | 6,911 | 5,998 |
| Total electricity supplied [GWh] | | | 12,559 | 12,210 |
| Gross electricity consumption [GWh] | | | 12,559 | 12,210 |
| Losses in transmission [GWh] | | | 343 | 304 |
| Losses in transmission [%] | | | 1.8% | 1.7% |
| Losses in distribution [GWh] | | | 1,105 | 1,018 |
| Losses in distribution [%] | | | 11.6% | 10.7% |
| Consumption of energy sector [GWh] | | | 22.00 | 14.12 |
| Final consumption of electricity [GWh] | | | 11,088 | 10,873 |
| Concumption structure [GWh] | Industrial, trans | sport, services and other non-residential sectors | 6,464 | 6,268 |
| Consumption structure [GWh] | Households (re | sidential customers) | 4,624 | 4,605 |
| Net maximum electrical capacity of power plant | s [MW] | | 3,979 | 3,989 |
| | Coal-fired | | 1,856 | 1,856 |
| | out of which: | multi-fired | 36 | 36 |
| | Gas-fired | | 0 | 0 |
| | out of which: | multi-fired | 0 | 0 |
| | Oil-fired | Oil-fired | | 0 |
| | Nuclear | Nuclear | | 0 |
| Net maximum electrical capacity | Hydro | | 2,120 | 2,128 |
| of power plants [MW] | | small hydro | 72.18 | 78.96 |
| | out of which: | pumped storage | 420 | 420 |
| | Other renewab | Other renewables | | 4.79 |
| | | wind | 0.3 | 0.3 |
| | | solar | 0 | 0 |
| | out of which: | biomass | 0 | 0 |
| | | biogas | 0 | 0 |
| | 380 kV or more | e [km] | 865 | 865 |
| | 220 kV [km] | 220 kV [km] | | 1,525 |
| | 110 kV [km] | 110 kV [km] | | 3,920 |
| Horizontal transmission network [km] | HVDC [km] | | | 0 |
| | Substation cap | Substation capacity [MVA] | | 12,369 |
| | Number of inte | Number of interconnectors | | 28 |
| | Interconnecting | Interconnecting capacities [MVA] | | 10,020 |
| | Total | | | 1,505,015 |
| | out of which: | non-households | 1,492,214 122,662 | 122,641 |
| Electricity customers | Eligible custom | Eligible customers under national legislation | | 122,641 |
| | | Active eligible customers | | 2 |
| | | Electricity supplied to active eligible customers [MWh] | | 755,930 |
| Internal market | | consumption [%] | 884,940 7.98% | 6.95% |
| | | | | |

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

a. Sector Overview

The Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina (MoFTER) is responsible for the laws govern-

ing electricity transmission, system operation and cross-border trade. The legal acts currently in force are the Law on Electricity Transmission, Regulator and System Operator of 2002, as well as the Law Establishing an Electricity Transmission Company

and the Law Establishing an Independent System Operator for the Transmission System, both dating back to 2004. The Laws have been amended several times introducing minor adjustments. The State Electricity Regulatory Commission (SERC) is the regulatory authority responsible for the state level.

The two entities - Federation of Bosnia and Herzegovina and Republika Srpska and the Brčko District are each responsible for defining the legal and regulatory conditions for electricity production, distribution system operation and supply of electricity in their respective jurisdiction. The Ministry of Energy, Mining and Industry and the Regulatory Commission for Energy in the Federation of Bosnia and Herzegovina (FERC) are the responsible institutions in the Federation of Bosnia and Herzegovina under the Law on Electricity of 2013. In Republika Srpska, the corresponding institutions are the Ministry of Industry, Energy and Mining and the Regulatory Commission for Energy of Republika Srpska (RERS) in the framework of the Law on Electricity of 2002, as amended, and the Energy Law of 2009. The local Government of Brčko District is responsible under the Electricity Law of 2004, as amended. Since 2010 SERC is empowered as the regulatory authority for the District.

The legal framework on state level is far behind compliance with even the Second Package, and MoFTER is responsible to take the initiative for coordinated legal reforms.

The Law on Electricity of 2013 does not fully transpose the Third Package in the Federation of Bosnia and Herzegovina, and the Ministry is challenged both with its implementation and with the required amendments. The investment framework in the Federation has been improved through the adoption of Energy Policy Guidelines. The programme for restructuring of the electricity sector is developed by the Federation Government but awaits its approval in a parliamentary procedure. The two integrated utilities responsible for generation, distribution and supply of electricity are not legally unbundled.

Activities on amending the Electricity Law in Republika Srpska aimed to comply with the Third Package are in progress under the responsibility of the Ministry. However no draft has been made available in the reporting period.

In 2014 SERC approved amendments to the General Conditions for Electricity Supply in Brčko District. In November 2014 SERC amended the Rules on Supply of Customers in Brčko District and adopted methodologies for setting distribution tariffs and prices of electricity supply within the public service.

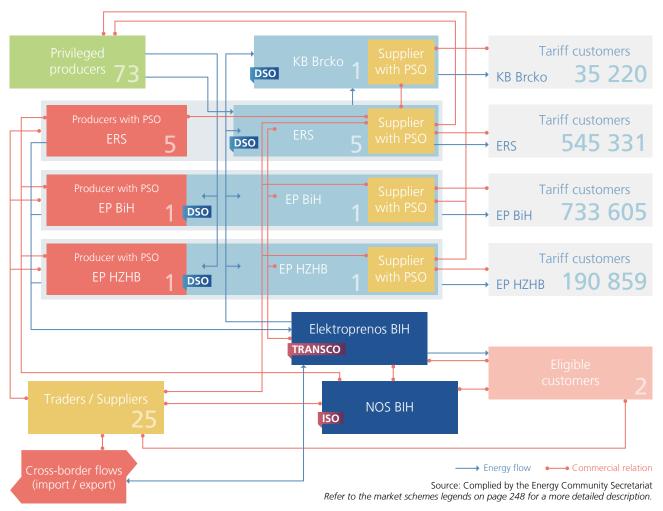
The transmission network in the country is owned by the transmission company *Elektroprenos Bosne i Hercegovine* (*Elektroprenos BiH*) in charge of connection, transmission of electricity, metering, maintenance and development. It is operated by the state enterprise *Nezavisni Operator Sistema Bosne i Hercegovine* (*NOS BiH*) responsible for dispatching the loads, balancing the system and allocating the interconnection capacities. After years of non-functional management of *Elektroprenos BiH*, in March 2014 a new management was appointed and the regular operation commenced allowing increased maintenance activities and investments in the transmission infrastructure.

In April 2015 SERC approved the Indicative Generation Development Plan for Bosnia and Herzegovina for the period 2016 - 2025 which also serves as basis for planning the development of the transmission network. In 2014 SERC approved the Long-Term Transmission Network Development Plan for the period 2014 - 2023 with foreseen investments amounting to EUR 400 million. A three-year Investment Plan (2014 - 2016) and the Annual Investment Plan for 2015 were adopted by *Elektroprenos BiH* and approved by SERC as well. The price list of services for connection to the transmission network was updated and approved by SERC, along with the tariffs for transmission and system operation services.

The transmission network of Bosnia and Herzegovina is interconnected with the systems of Croatia, Montenegro and Serbia. In September 2014 SERC adopted a Decision on Approval of the Auction Rules for Capacity Allocation in the Coordinated Auction Office in South East Europe (SEE CAO) to be applied on the borders with Croatia and Montenegro, which put the transmission capacities on these borders in the auction mechanism of the CAO. The newly approved Rules were first applied on 27 November in the first annual auction. The monthly auctions commenced on 15 December, and the daily auctions on 31 December 2014.

In the Federation of Bosnia and Herzegovina, the electricity distribution, as well as dominant parts of the generation and supply, is performed by two vertically integrated enterprises *Elektroprivreda Bosne i Hercegovine (EP BiH)* and *Elektroprivreda Hrvatske zajednice Herceg Bosne (EP HZHB)*, each active in its service area. In Republika Srpska the holding *Elektroprivreda Republike Srpske (EP RS)* owns five legally unbundled subsidiaries for electricity generation and five companies for distribution and supply. The enterprise *Komunalno Brčko (KB)* is a horizontally integrated utility which operates the distribution network and provides electricity to all customers in Brčko District. In the past year *KB* purchased all electricity needed for its customers from *EP RS*.

Bosnia and Herzegovina's Electricity Market Scheme



The main forms of wholesale transactions in Bosnia and Herzegovina are bilateral agreements between the incumbent utilities and registered traders. There is no organized market or power exchange. As many as 25 companies are registered for electricity trade out of which 21 are licensed for cross-border trade. There are 22 registered suppliers on the territory of Bosnia and Herzegovina of which seven are active on the market. There are only two final customers supplied under market conditions. In 2014 the four incumbent utilities covered 93% of the electricity supplied.

Balancing energy is provided by the incumbent generators under prices regulated by SERC – there is no market-based mechanism applied. Balance responsible parties in Bosnia and Herzegovina are only the three power utilities, each responsible for the imbalances of its own dominion. The ancillary services are regulated and included in the transmission tariff.

In the course of 2014 SERC and NOS BiH developed a concept for balancing and ancillary services introducing market-based mechanisms for assessment and acquisition of required reserve capacity in secondary and tertiary control, nominations for balancing energy, setting of prices, assessment of imbalance quantities and costs of imbalance, and financial settlement.

The concept is introduced in the new Market Rules approved by SERC in April 2015, which will be applied from 1 January 2016. In the meantime *NOS BiH* is tasked to adjust and dry-run the new Rules.

b. State of Compliance

So far neither of the jurisdictions has managed to harmonize its legal framework with the *acquis*. Legal compliance on state level is particularly important for the required structural reforms and liberalization of the electricity market in Bosnia and Herzegovina. It is completely missing. The two entities and Brčko District currently do not comply with the Third Package.

1. Authorisation

Authorization of new generation capacity and tendering procedures are in the competence of the two entities and Brčko District. In all, there are still shortcomings with respect to full compliance with Directive 2009/72/EC. Generally, there is no sufficient obligation how to treat the refusal and no reference to the target for renewable share in 2020 and emission reduction, as required by Article 7.

In Republika Srpska the Licensing Rules applied by RERS include construction permits and cover the authorization procedure in administrative and technical aspects, while tendering of new capacity is covered by the Concession Law of 2013. In the Federation of Bosnia and Herzegovina, the Law on Electricity empowers the Government to issue permits and tender with no reference to an independent body. In Brčko District there are no provisions for authorization or tendering for new capacity.

2. Unbundling

The transmission system operation in Bosnia and Herzegovina is legally and functionally unbundled from generation and supply activities governed by the entities. The current system does not comply with the independent system operator model or indeed any of the three unbundling models laid down in Directive 2009/72/EC. The existing Laws are silent on ownership unbundling or any of the alternative models. There is no transposition of the obligation or enforcement of the certification procedure.

Unbundling of distribution system operators in the Federation of Bosnia and Herzegovina is not completed. The Law on Electricity does not transpose the obligation for legal unbundling and the distribution system operators *EP BiH* and *EP HZHB* are unbundled from supply only in terms of accounts. In practice functional and legal unbundling does not exist. In Republika Srpska, distribution system operators are legally and functionally bundled with the supply in all five distribution subsidiaries of *EP RS*. Only accounting unbundling is applied in all jurisdictions. The horizontally and vertically integrated power utility *Komunalno Brčko* performs electricity distribution and supply in Brčko District. Compliance programmes and officers do not exist in any distribution system operator.

3. Third Party Access

Third party access to transmission is only partially transposed. The Law does not fully transpose the provisions related to refusal as required by Article 32 of Directive 2009/72/EC and appeal procedures do not exist. The primary legislation still fails to transpose the provisions stipulated in Annex 1 of Regulation (EC) 714/2009.

The Rules for Capacity Allocation and Congestion Management recently adopted by SERC cover all borders of Bosnia and Herzegovina and ensure full compliance by allowing participation in the SEE CAO or bilaterally coordinated auctions for those borders and/or time horizons where SEE CAO is not in charge. Due to non-participation of neighbouring Serbia in the SEE CAO with its border to Bosnia and Herzegovina, in November 2014 SERC approved Rules for Annual and Monthly (Joint) Auctions on the border with Serbia for 2015 applied by the operator of Serbia (EMS), as well as Rules for Daily (Joint) Auctions for Allocation of Transmission Capacity for 2015 applied by NOS BiH. By the same Decision SERC approved Rules for Intraday Allocation of Transmission Capacity for each of its borders.

Both entities and Brčko District transpose and apply third party access to distribution grids in their respective jurisdictions. The responsible regulatory authorities have approved and published distribution tariffs.

4. Eligibility

The Federation Law on Electricity of 2013 correctly transposes the concept of eligibility. The new Rulebook for Supply of Electricity to Qualified Customers and Switching of the Supplier (applicable in the Federation of Bosnia and Herzegovina) was adopted in October 2014. In Republika Srpska, the Law on Electricity grants RERS the right to define the eligibility threshold. In November 2014 SERC amended the Rules for Electricity Supply to Customers in Brčko District. Starting from 1 January 2015 there is no legal or regulatory non-compliance in Bosnia and Herzegovina with Directive 2009/72/EC in terms of eligibility.

In late 2014 both RERS and FERC adopted new Rulebooks for Supply of Electricity to Eligible Customers and Procedure for Switching of the Supplier, each for its jurisdiction, applicable from 1 January 2015. During the same period SERC adjusted the corresponding Rules and Methodologies for Setting Tariffs for Distribution and Electricity supply in Brčko District.

5. Market Opening and Price Regulation

The primary legal framework for the electricity market defined on state level provides no support for the establishment of a compliant structure of the market, for operation of organized trading platforms or for access to a power exchange.

The new Market Rules adopted by SERC in 2015 (to be applied in 2016), ensure compliance only for balancing but fail to support organized market platforms. Trading still takes place through bilateral contracts between the dominant utilities and registered traders including exports, imports and transits.

The retail electricity market in Bosnia and Herzegovina is divided along the borders of the four incumbent utilities. All consumers in Bosnia and Herzegovina (save two large companies) remained captive. The incumbent local suppliers are formally appointed as 'reserve suppliers' and 'suppliers of last resort'. The lack of effective unbundling of the utilities further discourages change in the behaviour of the customers.

In terms of price regulation, the Law on Electricity in the Federation of Bosnia and Herzegovina allows for access to regulated supply for all eligible customers, including large ones and without limitations. Even worse, the price of generation for the supply of customers supplied at regulated prices (*i.e.* the wholesale price) is also regulated. The Law on Electricity in Republika Srpska makes electricity supply at regulated prices by subsidiaries of *EP RS* available to all customers. The Law similarly supports price regulation for production in *EP RS* sold to local utilities and *Komunalno Brčko*. The Electricity Law in Brčko District also

misinterprets the concept of public service in providing regulated supply to all captive customers. This violates Articles 3 and 33 of Directive 2009/72/EC and effectively prevents supplier switching.

6. Balancing

The legal framework for balancing, defined on state level, basically transposes Article 15 of Directive 2009/72/EC. Market-based procedures for covering losses and cost-reflective imbalance charges, however, are still missing. The new Market Rules approved by SERC in May 2015 will ensure a compliant procedure for balancing and ancillary services as from 1 January 2016.

7. Customer Protection and Protection of Vulnerable Customers

The Electricity Laws in the Federation of Bosnia and Herzegovina and Republika Srpska fail to fully transpose the customer protection provisions of Article 3 and Annex 1 of Directive 2009/72/EC, in particular on universal service, contractual data and customer information. The Brčko District legal framework does enforce protection of customers save those under general public service.

The regulatory acts such as general conditions for electricity supply and the rules for supply of eligible the customers in all three jurisdictions promote customers' protection in terms of conditions for disconnection, complaints and information rights. Transposition remains fragmented and asymmetrical.

The aspects of vulnerability in the context of electricity supply will have to be dealt with in the process of transposition of the Third Package.

c. Conclusions and Priorities

Transposition of the Third Package is the first priority. Currently, there are no activities which could achieve this. The required reforms of the electricity sector are stalled.

Balancing reforms are expected to take effect soon. However the market structure needs to be completed with organized market platforms such as day-ahead and intra-day trading and availability of power exchange services. Wholesale market reforms need to take place urgently.

Real unbundling (functional and legal) of the distribution system operators in the integrated supply utilities must be implemented. The regulatory environment for switching is developed and compliant, and it seems that efficient unbundling is the major missing step for opening of the supply to competition. Effective deregulation of prices (generation, supply) is equally important.

Protection of socially vulnerable customers is another missing link in the chain leading to market opening. The public service obligations are not socially sensitive and cannot alone provide complete release from the social pressure to keep prices regulated. Targeted measures outside the market need to be introduced to support the objective of price formation and competition.





Bosnia and Herzegovina

5.2 Gas

| | | | 2013 | 2014 |
|--|---|---|-----------------------------------|-----------------------------------|
| Natural gas production [Bcm] | | | 0 | 0 |
| Imports flows [Bcm] | | | 0.187 | 0.176 |
| , | | | 0.187 | 0.176 |
| Exports flows [Bcm] | | | | |
| Stock changes [Bcm] | | | 0 | 0 |
| Total supply [Bcm] | | | 0.187 | 0.176 |
| Gross consumption of natural gas [Bcm] | | | 0.187 | 0.176 |
| Consumption in energy sector [Bcm] | | | 0 | 0 |
| Available for final consumption of natural gas [Bcm] | | | 0.187 | 0.183 |
| Interconnectors' capacity [Bcm] | Total | | 0.75 | 0.75 |
| | | out of which bidirectional | 0 | 0 |
| Storage working capacity [Bcm] | | | 0 | 0 |
| Length of transmission network [km] | | | 202.2 fBiH 138 / RS 64.2 | 234.2 |
| Length of distribution network [km] | | | 1,504 fBiH 1,400 / RS 104 | 1,507 |
| | Total | | 69,980 fBiH 65,400 RS 4,580 | 67,536 fBiH 62,823 RS 4,713 |
| | out of which: | Non-households | fBiH n/a RS 407 | fBiH 4,570 RS 392 |
| Natural gas customers | | Eligible customers under national legislation | fBiH n/a RS 407 | fBiH n/a RS 392 |
| | | Active eligible customers | fBiH n/a RS 0 | fBiH n/a RS 1 |
| | | Households | fBiH n/k RS 4,173 | fBiH 58,253 RS 4,321 |
| Internal market | Gas supplied to active eligible customers [Bcm] | | 0 | fBiH n/a RS 0.019 |
| | Share of total consumption [%] | | 0 | RS 79.1% |
| Final consumption of natural gas per sector [Bcm] | | | 0.187 fBiH 0.137 RS 0.050 | 0.183 |
| Consumption structure [Bcm] | Energy transformation | | fBiH 0.029 RS 0.016 | 0.055 |
| | Industry and co | Industry and commercial customers | | 0.07 |
| | Households | | fBiH 0.035 RS 0.019 | 0.058 |
| | | | | |

Source: Ministry of Foreign Trade and Economic Relations, compiled by the Energy Community Secretariat

a. Sector Overview

The Ministerial Council on 23 September 2014, in accordance with Article 92 of the Treaty, declared the first-ever existence of a "serious and persistent breach" in the Energy Community by Bosnia and Herzegovina. The breach concerns the failure to implement the Second Energy Package, in particular the lack of a regulatory authority to cover the entire gas market in Bosnia and Herzegovina, unbundling of transmission system operators, adequate network tariffs and market opening.

Bosnia and Herzegovina has no domestic sources of natural gas.

Supplies are exclusively based on imports from a single source (Russia) passing through Ukraine, Hungary and Serbia. The existing transmission pipeline connects the sole cross-border entry point in Zvornik with the cities of Sarajevo and Zenica. The gas market in Bosnia and Herzegovina is dominated by a few incumbent companies, all of which still remain fully bundled and active in, or at least licensed for, both network operation and supply activities in the sector.

In the Federation of Bosnia and Herzegovina both transmission and supply of natural gas are exclusively performed by the vertically integrated undertaking *BH Gas*, which operates

the largest part of the transmission pipeline in the country within the territory of the Federation, and remains the dominant wholesale supplier of natural gas in both entities. *BH Gas* is a party, together with *Energoinvest*, in an import contract with *Gazprom* and transit contract via Hungary, while transit via Serbia is contracted between *BH Gas* and *Srbijagas*. At the retail level, supply is exercised by *Sarajevogas* and *Visoko Ekoenergija*, companies performing also the operation of distribution networks.

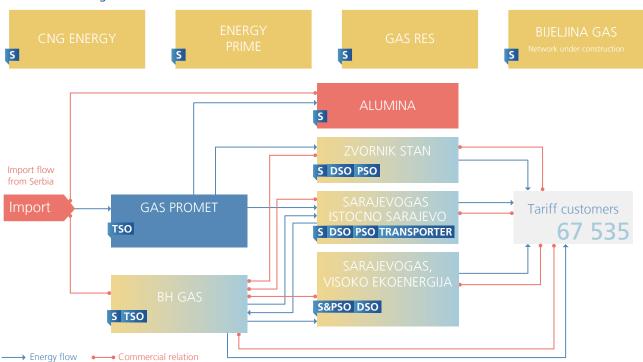
In Republika Srpska, two companies are authorised for transmission activities, *Gas Promet a.d. Istocno Sarajevo-Pale* and *Sarajevo-gas a.d. Istocno Sarajevo*, which also share the ownership of the existing transmission network within Republika Srpska. *Gas Promet* is licensed for the transmission of natural gas and operation of the transmission system. *Sarajevogas Istocno Sarajevo* is licensed also for distribution of natural gas, and trade in and supply of natural gas, including to tariff customers. Gas supply at retail level in Republika Srpska is carried out by *Sarajevogas Istocno Sarajevo* and *A.d. Zvornik Stan Zvornik*. The latter is also licensed for distribution of natural gas. Trade and supply licenses were recently issued to *Bijelina-gas* for supplies and trade of natural gas to be delivered through a newly built

pipeline from Sepak to Bijeljina, to *Alumina Zvornik*, which is a major gas consumer, and to *GAS RES* and *Energy Prime RS*.

With regards to system development, construction of a transmission pipeline from Zenica to Travnik was completed in December 2013, but the pipeline is still not in operation due to a dispute with a construction contractor. Further, the Federation of Bosnia and Herzegovina participates in the *Ionian Adriatic Pipeline (IAP)* project and intends to develop an interconnection with the Croatian gas system.

The natural gas sector in Bosnia and Herzegovina is regulated at the level of the entities. In the Federation of Bosnia and Herzegovina, a Government Decree of 31 October 2007 applies. The adoption of a new draft Gas Law has been pending in the Parliament for more than two years. Although aiming to transpose the Third Package, the draft Law is not compliant with the *acquis* in its present form. In Republika Srpska, the natural gas sector is regulated by the Law on Gas adopted in 2007 and further amended in late 2012. This Law, however, fails to transpose the Third Package provisions. No steps were taken to develop state-level legislation for natural gas. Overall, no actual progress was made since the beginning of 2013.

Bosnia and Herzegovina's Gas Market Scheme



Source: Complied by the Energy Community Secretariat Refer to the market schemes legends on page 248 for a more detailed description.

b. State of Compliance

The 2014 Ministerial Council requested that Bosnia and Herzegovina presents gas legislation in compliance with the Third Package to the Ministerial Council in 2015. Acting upon the Council's conclusions, the Secretariat delivered a Third Package

complaint draft Law to the authorities of Bosnia and Herzegovina in October 2014. This draft was conceived as a (state) Law which would remedy the breach. However, Bosnia and Herzegovina has taken no concrete action since and is now facing sanctions by the 2015 Ministerial Council.

1. Authorisation

Bosnia and Herzegovina is not in compliance with Directive 2009/73/EC with regard to authorisation. The Government Decree on Gas of the Federation of Bosnia and Herzegovina fails to define authorisation criteria and procedures.

In Republika Srpska, licenses for natural gas activities are issued by the Regulatory Commission for Energy of Republika Srpska (RERS) under the terms and conditions stipulated in the Law on Gas and in the Licensing Rules. The conditions and procedure for licensing are defined in compliance with Directive 2009/73/EC, except that they do not envisage that refusals of licenses must be notified to the Secretariat.

2. Unbundling

The Law is not compliant with the Third Energy Package unbundling and certification requirements. Certification procedures do not exist in the legislation of either entity.

None of the natural gas undertakings engaged in transmission system operation is unbundled, not even in line with the Second Package. This includes *BH Gas*, the transmission system operator in the Federation of Bosnia and Herzegovina, and *Sarajevo-gas*, authorised both for the transmission and supply of natural gas in Republika Srpska, which remain fully bundled with supply or trade activities. The other transmission operator in Republika Srpska, *Gas Promet*, did not implement functional unbundling.

Compliance programmes are not in place in any of these companies. In both entities, distribution activities are performed by the same companies engaged in the supply of and trade in natural gas, although the Gas Law in Republika Srpska allows for the exemption of unbundling distribution system operators with less than 100,000 customers connected to the grid. Additional requirements for unbundling of the distribution system operators will also have to be introduced in line with Directive 2009/73/EC.

3. Third Party Access

Bosnia and Herzegovina is not compliant with the third party access provisions of the gas *acquis* on many accounts.

In the Federation of Bosnia and Herzegovina, access is regulated or negotiated upon an *ad hoc* decision of the Government executive body, the Ministry in charge of energy. The gas transmission and distribution tariffs in the Federation were never adopted, published or applied let alone separated from the bundled prices which include supply.

Although the regulatory authority in Republika Srpska (RERS) developed methodologies for calculation of grid tariffs, so far only a Distribution Tariff and Prices for Supply of Tariff Customers were put into force, whereas a Transmission Tar-

iff was adopted only for a spur of the transmission pipeline Karakaj-Zvornik. In Republika Srpska, the regulator's overall competences are not compliant with the *acquis*. Neither entity implemented obligatory provisions to establish a separate tariff for each entry and exit point to/from the transmission grid, as required by Regulation (EC) 715/2009. Similarly, no third party access services are defined or offered by any of the transmission system operators.

The exemption procedures are not compliant with the Third Package. The Federation's Government Decree provides that any third party access exemption decision shall be issued by the responsible Ministry, thus failing to involve a regulatory authority and the Energy Community institutions. While the Law in Republika Srpska involves the regulator in such a procedure, it fails to involve the Energy Community Secretariat as required by the Ministerial Council Decision on Third Package implementation.

4. Eligibility

The eligibility provisions stipulated in the Government Decree of the Federation of Bosnia and Herzegovina violate the Treaty. They define the eligibility status by reference to the level of consumption (150 mcm of gas in the previous calendar year, which is more than the total consumption of Bosnia and Herzegovina) or limit it to customers that use gas for generation of electricity.

Republika Srpska correctly transposed the eligibility criteria of the Directive.

Due to the failure of the Federation, Bosnia and Herzegovina breaches the gas *acquis* according to which all customers should have been eligible by 1 January 2015.

5. Market Opening and Price Regulation

The market is highly foreclosed and completely not in line with the model supplied by the *acquis*. All natural gas consumers in Bosnia and Herzegovina are supplied by their respective incumbent at regulated prices. Switching Rules are not in place.

6. Balancing

Balancing rules from the Third Package are not implemented, thus Bosnia and Herzegovina is not compliant with the gas *acquis* in this respect.

None of the legislative provisions in the Federation of Bosnia and Herzegovina refer to the balancing provisions of Regulation (EC) 715/2009.

In Republika Srpska, only one of the transmission system operators, *Gas Promet*, adopted a Rulebook on the Operation of Natural Gas Transmission after it was approved by RERS. However, the balancing rules stipulated therein are not market based and thus are not compliant.

7. Security of Supply

Bosnia and Herzegovina's compliance with Directive 2004/67/ EC is only partial and not equal among across the entities.

In Republika Srpska, key elements of Directive 2004/67/EC were transposed by the Decree on Security of Supply and Delivery of Natural Gas adopted in 2011. Protected customers, roles and responsibilities of different market players were defined in line with the Directive, as well as a list of measures and responsibilities in case of emergency, scope of reporting and cooperation with neighbouring countries. However, supply standards are not defined.

The Government Decree of the Federation of Bosnia and Herzegovina transposes only a few elements of Directive 2004/67/ EC, such as a definition of protected customers and the roles and responsibilities of different gas market players. However, a list of measures and responsibilities in case of emergency, the scope of reporting and cooperation with the neighbouring countries and definitions of supply standards and a major supply disruption are missing.

8. Customer Protection and Protection of Vulnerable Customers

Bosnia and Herzegovina has not transposed provisions related to customer protection and vulnerable customers as required by Directive 2009/73/EC at both the national and entity level.

Only few provisions related to the protection of customers, as defined by Directive 2003/55/EC, can be found within the entities' gas sector legislation. In Republika Srpska, the Gas

Law only refers to protection of customers as defined by the "Energy Sector Development Strategy". The existing legislation of the Federation of Bosnia and Herzegovina introduces certain elements of the socially vulnerable status of customers by the definition of protected customers. It provides obligations for the supplier of tariff customers (although tariff customers should have ceased to exist by 1 January 2015) as a manner of customer protection, but allows discrimination between customers by price regulation.

c. Conclusions and Priorities

In the absence of any progress during the reporting year, the conclusions and priorities proposed in 2014 have been amplified to a critical point. There is a long-standing infringement procedure on the matter. The commitments and assurances given by the country were not kept.

Reaching an agreement for a state law, which would set the conditions to implement the Third Package provisions in the whole territory of Bosnia and Herzegovina, is an utmost priority. Such a Law could be based on the draft provided by the Secretariat. The Secretariat has remained on hand to assist Bosnia and Herzegovina in proceeding with reforms, including the necessary legal, regulatory, political and cross-border arrangements. However, no such efforts had taken place at the time of publication of this Report.

It is also very important that any further infrastructure developments in the country proceed in line with the *acquis* requirements.





Bosnia and Herzegovina

5.3 Regulatory Authority

a. Organisation, Competences and Assessment of Independence

The State Electricity Regulatory Commission (SERC) is the only Energy Community regulatory authority whose legal set up does not comply with the requirements of Article 35(1) of Directive 2009/72/EC and Article 39(1) of Directive 2009/73/EC for a single regulatory authority for electricity and gas at national level. SERC is exclusively in charge only of electricity transmission on state level and does not have any jurisdiction over the gas sector. The legislator has so far not taken measures to introduce gas market related regulatory competences as tasked by the Ministerial Council Decisions of 2013 and 2014 following an infringement action of the Secretariat.

SERC is headed by three Commissioners. Their term is limited to a period of five years, renewable once. A rotation scheme as required under the Third Energy Package is in place. The appointment of Commissioners follows public announcement of vacancies, definition of selection criteria by law and is based on the proposal of a Selection Committee. Appointment involves a complex mixture of various political bodies and reflects strict ethnicity rules: two Commissioners are nominated by the Parliament of the Federation of Bosnia and Herzegovina and one Commissioner by the Parliament of Republika Srpska. The Selection Committee's short list is submitted to the entity Governments whose proposal requires confirmation by the relevant entity Parliament. The final entity candidates are submitted to the Council of Ministers of Bosnia and Herzegovina which finally proposes appointment to the Parliamentary Assembly. The multiplicity of involved institutions is meant to decouple political influence from the decision-making. However, the strict ethnicity requirements for appointment of the Commissioners, as prescribed by law, are likely to increase political influence, which is reinforced by the need for unanimous decision-making of the three Commissioners. Such an approach curtails the independence of SERC and effectively blocks the execution of its duties.

Dismissal of a Commissioner is by law limited to cases of conflict of interest or the carrying out of a criminal act and thereby in principal uncritical in terms of potential political intervention and complies with the Third Package. Still, dismissal of a Commissioner due to failure to participate in SERC's proceedings for a period longer than six weeks has to be considered overly restrictive. Another threat to independence is the practice of extreme delays in the appointment of Commissioners which results in them overstaying their terms in office (without a renewed mandate) for a significant period of time.

Bosnia and Herzegovina has not yet transposed the Third Package. In the light of this and beyond the principle need for extending SERC's powers to the country's gas sector and the entire electricity sector, competences also have to be expanded to the complete set of regulatory powers and objectives foreseen under the Third Package. In this respect, no progress has been made compared to 2014.

The independence criteria stipulated in Articles 35(4-5) and 37(16) of Directive 2009/72/EC and Articles 39(4-5) and 41(16) of Directive 2009/73/EC are met to a certain extent. SERC is by law set up as an institution legally distinct and functionally independent from any other public entity. Establishment of SERC is solely based on legislation, meaning that it cannot be liquidated by act of another public institution.

SERC takes binding decisions autonomously. This is supported by SERC's Code of Ethics prohibiting top management and staff to execute political functions, have interest in regulated utilities or have an employment relationship with the energy sector including sanctions (dismissal) in case of non-compliance. SERC's decisions are open to judicial review and are required to be duly substantiated and justified for this purpose. Also, SERC ensures transparency of its decision-making stakeholder involvement and publication of decision-making rules and procedures. However, improvements should be made by publishing information on the reflection of stakeholders' views in Board decisions.

SERC has autonomy in defining its Annual Work Programme as well as in setting up and use of its Annual Budget with certain limitations concerning salaries. Financial independence is foreseen in legislation by granting SERC the right to autonomously set regulatory fees for licensees, which form the regulator's budget. The requirement for the regulator's Annual Budget to be sent to the Parliamentary Assembly cannot be considered an undue intervention in SERC's independence since this, by law, does not entail parliamentary approval nor involves intervention on the detailed use of the budget. SERC is held accountable for its activities by having to present its Annual Report to the Parliament and the Ministry but does not face the need for approval of its Annual Report or any sanctions in case of dissenting opinions.

Management is independent in relation to staff appointment and organisation of the internal structure including principle autonomy in setting of salaries. In defining salaries SERC has to ensure that salaries of Commissioners and other employees are in line with general principles of the Law on Salaries and Allowances in the Institutions of Bosnia and Herzegovina and the Decision of the Council of Ministers of Bosnia and Herzegovina determining the base for salary calculation. Salary levels are comparable with the public sector for SERC Commissioners and with the salary levels of the regulated sector for SERC staff.

SERC is active in the regulatory discussions in the Energy Community Regulatory Board (ECRB), including chairmanship of the ECRB Customer and Retail Markets Working Group. Further to this, the cooperation between SERC and the competition authority of Bosnia and Herzegovina – manifested via a Memorandum of Understanding – has to be considered positively in terms of the regulator's readiness to take an active role in promoting competitive market structures.

b. Conclusions and Priorities

The following changes in law and regulatory practice are key priorities for SERC in order to comply with the Third Package:

1. SERC needs to be established as a single regulatory authority with country-wide competences for the gas and electricity sector to rectify the serious and persistent breach. In this context SERC's competences need to be expanded to the complete set of regulatory powers and objectives foreseen under the Third Energy Package.

- 2. The unanimity rule regarding the Commissioners' decision-making should be replaced by majority voting and a larger number of Commissioners.
- 3. The strict ethnicity requirements for appointment of the Commissioners, as prescribed by law, should be abolished since it increases political influence.
- 4. The Selection Committee for short-listing Commissioners should be composed of neutral experts and civil servants with a view to better decouple the appointment procedure from political influence.
- 5. Dismissal for Commissioner's failure to participate in SERC proceedings for a period longer than six weeks should be abolished or the absence period should be lengthened.
- 6. Commissioners' terms in office should be renewed promptly after the expiry of their mandate (or they should be replaced by other candidates). Commissioners in office should not be without a mandate.



Bosnia and Herzegovina

5.4 Oil

a. Sector Overview

In Bosnia and Herzegovina there is no domestic production of crude oil. Crude oil is imported mainly from Russia. Imports in 2014 were above 953.5 kt, around 6.2% lower than in 2013. In 2014, Bosnia and Herzegovina processed around 899 kt of oil, an increase by around 5% compared to 2013. The export of petroleum products has increased by 7.4% to 174 kt. The import of petroleum products has increased by around 3.6% to a level of around 771 kt in 2014. The overall consumption of petroleum products in 2014 was 1,496 kt, an increase by 4% compared to 2013.

Bosnia and Herzegovina has around 800,000 cm of storage capacity, out of which 532,707 cm is located in the *Oil Refinery j.s.c. Brod.* Bosnia and Herzegovina also owns a terminal in the Port of Ploče with a storage capacity of 84,000 cm.

There are some concrete efforts to sign a concession agreement for the exploration and exploitation of oil in the territory of Bosnia and Herzegovina by the end of 2015. Bosnia and Herzegovina currently has no legislation on compulsory stocks of oil and petroleum products on the state level and there is no national strategy to meet the Directive's obligations. Therefore, no emergency oil stocks are currently held in the country. In addition, both entities have adopted Laws which are not in compliance with Directive 2009/119/EC. Statistics on annual oil data started to be collected in 2012, but there is no monthly oil data collection.

b. Conclusions and Priorities

On the level of the entities, there is awareness of Bosnia and Herzegovina's vulnerability in case of an oil supply disruption and how relevant oil stocks in such a crisis are. But there appears to be no desire by the entities to transfer sovereignty on oil stocks to the state level, which makes coordination of a national emergency oil stockholding system challenging. Given the dynamics and particular interests of the two entities, it will be important to explore various options, including industry based models, in order to design a system which is best able to adapt to Bosnia and Herzegovina's case. At the same time, Bosnia and Herzegovina will need to establish a monthly oil

data reporting system, which is entirely lacking at the moment and which will require substantial efforts.

The Secretariat considers the transposition of Directive 2009/119/EC on the state level as a priority. Bosnia and Herzegovina should establish a working group for this purpose.

Once formed, this group would begin considering the potential stockholding models which could be adopted taking into account the two entities and the roles of their corresponding designated stockholding bodies. The Secretariat is ready to provide the necessary technical assistance.



Bosnia and Herzegovina

5.5 Renewable Energy

a. Sector Overview

1. State of Play, Legislation and Promotion of Renewable Energy

Bosnia and Herzegovina committed to a 40% renewables target for 2020, starting from 34% in 2009. Currently, renewable energy falls within the competence of the entities. There is no strategy, legislation or framework at state level developed for renewable energy. There are also no institutions or procedures at state level to deal with the development of renewable energy projects.

There is still no *NREAP* at state level. However the two entities have adopted *Renewable Energy Action Plans* in 2014 and have developed legal and regulatory frameworks for renewable energy. The Ministry of Foreign Trade and Economic Relations is currently preparing the *NREAP* which should include the *REAPs* of both entities and of Brčko District. It is envisaged to be adopted by October 2015 and to bring to an end the infringement case initiated against the country in February 2014.

2. Electricity from Renewable Sources

Transmission grid operation is regulated by the state Law on Transmission, Regulator and Operator of the System adopted in 2002. The electricity system is operated by the independent system operator *NOS BiH* established at state level. Therefore connection of renewable energy producers and their access to the transmission grid needs to be regulated at state level as well. *NOS BiH* is in charge of the adoption of an indicative Ten Years Network Development Plan to be approved by the state-level regulatory authority, DERK. However, the legislation is silent about the development of the network to integrate more renewable energy into the transmission grid. There is also no guaranteed or priority access to the transmission network for renewable energy producers.

An administrative tax (composed of a fixed and variable part) is covering the expenses for connection to the grid or capacity increase and it is paid by the user (including producers) to the network owner *Elektroprenos*. Small hydropower producers (below 10 MW) pay 50% of the fixed part of the tax. The time

for connection is up to 60 days upon receipt of all necessary documents. *NOS BiH* capped the capacity of wind farms to be connected to the grid for reasons of operational security of the system. Capacity is currently limited at a rather conservative level of 350 MW. The applications for connection of wind farms exceed the capacity cap by far.

Two separate Renewable Energy Laws were adopted by the two Parliaments of Republika Srpska and Federation of Bosnia and Herzegovina in May 2013 and August 2013 respectively. In 2014, *Renewable Energy Action Plans* were adopted by both entities.

In Republika Srpska, a Government Decree sets an indicative target of 35.98% of energy generated from renewable energy sources by 2020, starting from a share of 29.1% in 2005. The Decree also sets a 10% renewable energy target in transport and a target of 33.73% of electricity from highly efficient cogeneration by 2020. The *Renewable Energy Action Plan* however set an entity target of 48%, starting from a share of 42% in 2009.

The Renewable Energy Action Plan of the Federation of Bosnia and Herzegovina sets an entity target of 41%, starting from a 36% share in 2009. The Renewable Energy Law of the Federation of Bosnia and Herzegovina provides that the methodology for calculation of the renewable energy share in the total final consumption of energy is adopted by the competent Ministry within 60 days from entering into force. It has not been issued yet.

Both entities promote electricity generated from renewable sources through feed-in tariffs or feed-in premiums.

In Republika Srpska, the regulatory authority adopted Rules on the Certification of Renewable Energy or Cogeneration Facilities and Rules on Support Schemes. Support is granted for 15 years. It can take the form of feed-in tariffs or premiums offered on top of an administratively set electricity price and financed through an uplift charged on all final customers in Republika Srpska. A unit created within *Elektroprivreda Republika Srspka* functions as a single buyer for incentivized renewable electricity.

The deadline for the establishment of a separate legal company fulfilling this function expired in December 2014. Producers that opt for selling the electricity on the market to other suppliers receive feed-in premiums and have to take balance responsibility. There are three model agreements which may be concluded with *Elektroprivreda*: the agreement on the preliminary right to support, the agreement on compulsory purchase of renewable electricity at feed-in tariffs and the agreement on payment of feed-in premium for renewable electricity.

The entity energy regulatory authority REERS adopted a Rulebook on Certification of Energy Produced from Renewable Sources. Certification of energy production from renewable sources is one of the conditions for receiving support.

REERS issues energy permits for plants above 1 MW within 60 days. REERS is also the issuing body for the guarantees of origin. The administrative procedures are regulated in numerous legal acts and there is significant overlapping between the Energy Law, the Electricity Law and the Renewable Energy Law. Construction licenses for renewable plants are granted either by the Ministry for Spatial Planning, Construction and Environment or by local government units within 15 days although in practice this might take longer. There is no one-stop shop for licensing or even for information and there is no guidance for investors on administrative procedures of the local and regional administrative authorities involved in the process. The three institutions dealing with renewable energy, the Ministry, REERS and the distribution network operator should publish comprehensive and up-to-date guidance and information for potential investors also in English.

There is no priority or guaranteed access for producers of renewable energy in the Renewable Energy Law of Republika Srpska. However priority dispatch of electricity from renewable sources is granted. The Renewable Energy Law provides that the distribution system operator ensures conditions for connecting renewable power plants based on a Methodology for Determining the Tariff for Connection to the Distribution Grid approved by REERS. A Rulebook on Connection to the Distribution Network provides for technical conditions for connection of small renewable electricity producers up to 16 MW to the distribution network.

In the Federation of Bosnia and Herzegovina, all incentivized renewable energy is bought by a newly established institution, the "renewable energy operator" as a single buyer. The same body also issues guarantees of origin and sets up a registry of producers of renewable energy. The feed-in tariff is paid for energy from small hydro, wind and solar and financed through an uplift charge applied to end-customers. The renewable energy operator drafted two model power purchase agreements for renewable energy investors. The agreements do not regulate the issue of balancing costs.

In the Federation of Bosnia and Herzegovina, authorisation procedures are very lengthy, confusing and lack coordination.

The complexity of the procedure is partly due to the complex structure of this entity with several layers of administration and unclear competences. The renewable energy operator came on top of the already complex structure. There is no one-stop shop procedure in place. A comprehensive description of the whole licensing procedure or updated regularly guidance for investors in local language and English is recommended.

There is no priority or guaranteed access for producers of renewable energy in the Renewable Energy Law of the Federation of Bosnia and Herzegovina, however priority dispatch of electricity from renewable sources is granted. The Renewable Energy Law also envisages producers of renewable energy to enjoy priority connection to the distribution network in the Federation of Bosnia and Herzegovina. Whereas all producers are required to submit generation forecasts, only producers with installed capacities above 150 kW are required to take balance responsibility. There are no provisions regarding measures to minimize curtailment of electricity from renewable sources.

A Methodology for Calculation of Connection Costs regulates the connection costs depending on the voltage level. At the low voltage level, renewable energy producers pay the connection costs of the requested capacity proportionally with the installed capacity in the connection point. At the medium voltage level, the renewable energy producers pay the costs for their share of the maximum allowed capacity for connection. For connections at the low voltage grid, the connections are made within 30 days from the moment the investor fulfils his obligations from the agreement on connection. A model connection agreement is available on the public utilities' website as they are not yet legally unbundled from distribution.

3. Renewable Energy in Heating and Cooling

Biomass is widely used for heating. It is not properly accounted for in official energy statistics at state or at entity level. There is an ongoing energy consumption survey that would presumably lead to a revision of consumption for biomass used for heating mainly by the households. This would be instrumental in putting the country on the renewable energy trajectory to 2020.

The Renewable Energy Laws in the Federation of Bosnia and Herzegovina and Republika Srpska provide that the respective Governments may adopt support measures for domestic production and supply of equipment to be used for heating and cooling form renewable sources, create a local market of heating from renewable sources by establishing a register of guarantees of origin, and impose a quota for intensive consumers of heating (industrial and city heating plants). Currently, there is no support scheme for heating and cooling from renewable sources in both the Federation of Bosnia and Herzegovina and Republika Srpska.

4. Renewable Energy in Transport

As regards biofuels, both entities introduced blending obliga-

tions on traders and set up the targets in line with Directive 2003/30/EC, *i.e.* 5.75% by 2010. Republika Srpska also commits to a yearly increase of 0,5% until reaching the share of 10% by 2020. No information exists on whether these targets have been achieved. According to *IEA*, the share of renewable energy in transport in Bosnia and Herzegovina was 0% in 2012.

Republika Srpska is more active in terms of biofuels. In 2011, the Government adopted a Decree on Generation and Consumption of Energy from Renewable Energy Sources which defines incentive measures and targets. A decree on types, contents, quality and share of biofuels in transport is being drafted but was not reviewed by the Secretariat. Two companies producing biodiesel from pure vegetable oils and used oil are located in Republika Srpska, but their actual production and contribution to domestic market is not monitored.

There were no activities to introduce sustainable criteria or a relevant certification scheme at state or entity level.

b. State of Compliance

Despite the progress in the recent years in adoption of Renewable Energy Laws and Renewable Energy Action Plans at entity level, Bosnia and Herzegovina still has to create a state framework for the promotion of renewable energy. This includes the adoption of a *NREAP* which will describe the policy measures

to achieve the national 40% renewable energy target by 2020.

1. National Renewable Energy Action Plan

Both entities of Bosnia and Herzegovina have adopted *Renewable Energy Action Plans*, but a state *NREAP* is missing. The binding targets for 2020 are not stipulated by any legal act. Therefore Bosnia and Herzegovina fails to comply with Directive 2009/28/EC. The failure is subject to a Reasoned Request by the Secretariat. The *Report on the Progress in Promotion of Renewable Energy* for the years 2012 - 2013 was not submitted to the Secretariat.

2. Support Schemes

Support schemes for various renewable energy technologies are adopted by both entities. It remains to be seen if these measures are sufficient to put the country on the trajectory in the coming years. A mechanism to transfer the costs of incentivising the renewable energy on all customers in a fully liberalised market is missing.

3. Cooperation Mechanisms

No legislation regarding cooperation mechanisms exists. Currently the country does not comply with the requirements from the Directive.



4. Administrative Procedures

The administrative procedures for permitting, authorization and licensing are better coordinated and streamlined in Republika Srpska. The complexity of the administrative set-up for authorization and permitting in the Federation of Bosnia and Herzegovina is a cumbersome barrier in unlocking the great potential. Both entities have to simplify the procedures and provide clarity, predictability and transparency for applicants. Currently, Bosnia and Herzegovina does not comply with Article 13 of Directive 2009/28/EC.

5. Access to and Operation of the Grids

The Renewable Energy Laws do not include priority or guaranteed access to the grids but include priority dispatch and guaranteed priority of connection. However, it is often not applied in practice, particularly in case the plant is not near to the existing network in the Federation. The duration of the connection procedure can take up to 1.5 years.

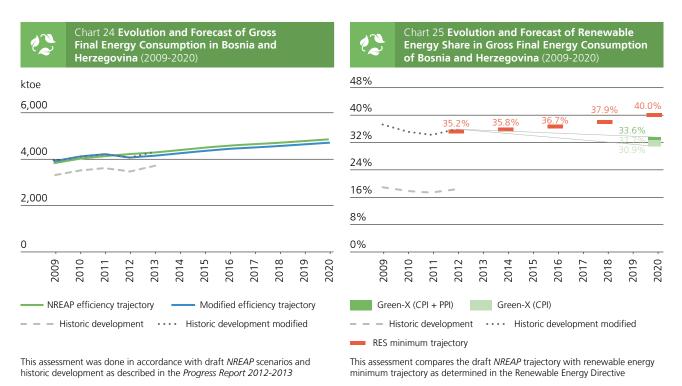
A state-level law that imposes priority or guaranteed access for energy from renewable sources to the transmission network and priority dispatch is not in place. Moreover, requirements for the development of the transmission network to integrate more renewable energy and market integration of energy from renewable sources at state level are not transposed. Bosnia and Herzegovina fails to comply with provisions of Article 16 of Directive 2009/28/EC.

6. Guarantees of Origin

Legislation for guarantees of origin exists in both entities and the bodies in charge of issuing, transferring and cancelling guarantees of origin for energy from renewable sources have been appointed. The two registries at entity level and a reliable, accurate and fraud-resistant system of issuing, transferring and cancelling guarantees of origin at state level have yet to be put in place. The measures in the Federation of Bosnia and Herzegovina are not in compliance with regard to their aim, recognition, content and supervision of guarantees of origin as stipulated in Article 15 of Directive 2009/28/EC. In Republika Srpska, the system for guarantees of origin has not been implemented yet and no guarantee of origin has been issued so far. The content of the guarantees of origin specified in the Regulation is compliant with the Renewable Energy Directive's requirements, however it is issued only in the case no support is given to the renewable energy producer. Currently, there is no compliance with Article 15 of Directive 2009/28/EC.

7. Renewable Energy in Transport

Articles 17-21 of Directive 2009/28/EC related to sustainability criteria for biofuels and bioliquids have not been transposed at all. No certification scheme has been defined or relevant body for certification established. Bosnia and Herzegovina is non-compliant with Directive 2009/28/EC.



Source Study on the Assessment of the National Renewable Energy Action Plans and the Progress in Promotion of Renewable Energy in the Energy Community, by ECN et all, 2015

c. Quantitative Assessment of the Progress Towards National Renewable Energy Trajectory

The data for Bosnia and Herzegovina is preliminary based on the combined *Renewable Energy Action Plans* developed by the Federation of Bosnia and Herzegovina and Republika Srpska. The solid biomass use of Bosnia and Herzegovina was corrected by 606 ktoe to take into account the 2009 revised biomass consumption. The evolution of gross final energy consumption in Bosnia and Herzegovina was negative between 2011 and 2012 and this trend is included in the updated demand trajectories to 2020.

Due to the missing NREAP of Bosnia and Herzegovina it is not possible to compare the historic development and the modelling projection for 2020 with a target trajectory. Nevertheless, chart 25 shows that the renewable energy share in Bosnia and Herzegovina was stagnating or rather declining since 2009, regardless of which data is used for the calculation, either with or without revised biomass. The projections from the modelling show that a further decline of the renewable energy share is expected until 2020 even in the case of current and planned policy initiatives.

d. Conclusions and Priorities

The existing framework for the promotion of energy from renewable sources is non-compliant. Legislation and regulations on renewable energy remain split between entities without any state legislation that would satisfy the obligations to adopt a *NREAP* or the possibility to enter into cooperation mechanisms to reach the targets in the most cost-effective way. The transmission system operator's role and responsibilities in connecting new renewable energy producers to the network and the principles of operation of the transmission network for electricity from renewable sources have to be included in state legislation.

It is of utmost importance to adopt a *National Renewable Energy Action Plan* and to close the open infringement case. The simplification of the procedures and the reduction of the number of regional and local/cantonal institutions as well as improving transparency of the processes would be instrumental in attracting investments in renewable energy projects. The finalisation of the energy consumption surveys targeting revision of the biomass data at household level should be made a top priority.

In the area of biofuels, sustainability criteria need to be implemented and an adequate certification system needs to be set up. Both requirements are pending for more than one and a half years.





Bosnia and Herzegovina

5.6 Energy Efficiency

| Energy Efficiency Action Plan (EEAP)* | | | | | | | |
|--|---|-------|-------|----------|--|--|--|
| Period covered by EEAP | 2010 – 2018 | | | | | | |
| Overall energy savings target - Directive 2006/32/EC (ktoe / % / year) | 298 / 9 / 2018 | | | | | | |
| EEAP status | EEAP not adopted at state level Draft 1st EEAP prepared but not adopted in Federation of Bosnia and Herzegovina 1st EEAP adopted in Republika Srpska in December 2013 | | | | | | |
| Achieved energy savings 2010 – 2012 | Not reported | | | | | | |
| Key institution(s) in charge | State Ministry of Foreign Trade and Economic Relations, entity ministries in charge of energy and buildings and energy efficiency funds | | | | | | |
| Main data and energy efficiency indicators** | 2010 | 2011 | 2012 | 2013 *** | | | |
| Total primary energy supply (TPES) ktoe | 7,012 | 7,086 | 7,311 | 7,598 | | | |
| • | 2010 | 2011 | | | | | |

| Main data and energy efficiency indicators** | | 2010 | 2011 | 2012 | 2013 *** | |
|--|----------------|-----------------|-------|-------|----------|-------|
| Total primary energy supply (TPES) | | ktoe | 7,012 | 7,086 | 7,311 | 7,598 |
| Energy intensity (TPES/GDP) | | toe / 1,000 USD | 0.50 | 0.55 | 0.52 | 0.58 |
| TPES/Population | | toe/capita | 1.68 | 1.85 | 1.74 | 1.99 |
| Total final energy consumption (TFEC) | | ktoe | 3,837 | 3,960 | 3,852 | 3,534 |
| Share of TFEC by sector | Residential | | 37% | 36% | 37% | 42% |
| | Services | | 0% | 0% | 0% | 8% |
| | Industry | % | 16% | 17% | 18% | 19% |
| | Transport | 70 | 29% | 28% | 27% | 27% |
| | Others | | 13% | 13% | 13% | 3% |
| | Non-energy use | | 5% | 5% | 5% | 2% |
| | | | | | | |

^{*} Source: draft 1st EEAP of Bosnia and Herzegovina, 1st EEAP of Entity Republika Srpska

a. Sector Overview

Although the final energy consumption of Bosnia and Herzegovina decreased in 2013 compared to 2012, the energy intensity increased to 0.58 in 2013 from 0.52 in 2012. This suggests that Bosnia and Herzegovina's economy is becoming even less competitive, and hence stronger energy efficiency measures should be implemented.

In Bosnia and Herzegovina, the entity ministries are in charge of developing energy efficiency legislation, while the State Ministry of Foreign Trade and Economic Relations (MoFTER) participates, coordinates and reports about activities within the Energy Community. Each entity established an Energy Efficiency and Environmental Fund, which also finances energy efficiency projects.

By the end of 2012, energy efficiency primary and secondary legislation (Energy Efficiency Laws, Energy Efficiency Action Plans and by-laws) was drafted in both entities (Federation of Bosnia and Herzegovina and Republika Srpska).

In Republika Srpska, the Law on Energy Efficiency transposing Directive 2006/32/EC was adopted in May 2013. It includes provisions on the *Energy Efficiency Action Plan (EEAP)*, energy efficiency in public procurement, energy efficiency obligations of energy distributors, distribution system operators and energy suppliers, the development of a market for energy services and provisions related to metering and informative billing of energy

consumption. A rulebook describing the implementation of Article 19 of the Law regarding energy efficiency obligations of energy distributors and supply companies was adopted in February 2014. The *EEAP* was adopted by the Government of Republika Srpska in December 2013, but it did not include reporting on the implementation of measures taken in the previous period (2010 - 2012), as required by the Directive. However, an Operational Plan to Improve Energy Efficiency in central entity authorities (with a reporting obligation) was adopted in May 2014 and the development of energy efficiency action plans of the local self-governing units and reporting are ongoing, based on an instruction adopted in December 2013.

The Federation of Bosnia and Herzegovina drafted an Energy Efficiency Law and the *EEAP*, but did not adopt either of these. The draft Energy Efficiency Law was adopted by the House of Representatives in September 2014. The final adoption by the House of People was delayed due to elections. This Law should be adopted urgently.

In Brčko District, there is no legislation in force to transpose Directive 2006/32/EC according to the available reports.

As regards the transposition of Labelling Directive 2010/30/ EU, Laws on Energy Efficiency and the corresponding technical regulations were drafted for both entities in 2012. However, the adoption of this package is still pending in the Federation. In Republika Srpska, provisions of the framework Directive are

^{**} Source: International Energy Agency, with Secretariat's corrections for renewables

^{***} Indicators calculated by the Energy Community Secretariat based on preliminary energy balances for 2013

now part of the Energy Efficiency Law, while the Rulebook adopted in August 2014 transposed six Delegated Regulations.

With regards to the transposition of Directive 2010/31/EU, Republika Srpska adopted in May 2013 the Law on Physical Planning and Construction. This Law includes the main requirements of the Directive (definitions, setting of minimum energy performance requirements for new and existing buildings, certification and audit of buildings, etc.) and created the basis for further transposition of Directive 2010/31/EU through secondary legislation. In the Federation of Bosnia and Herzegovina, the Law on Physical Planning and Land Utilization was adopted in 2010. Under this general framework, a Methodology for Calculation of Energy Performance of Buildings, Energy Audits of Buildings and Energy Certification of Buildings was adopted. The implementation is ongoing. The draft Law on Energy Efficiency is expected to take over some of the main provisions from the current Law on Physical Planning related to the requirements of Directive 2010/31/EU, while the remaining ones will be transposed by amending the secondary legislation.

European Bank for Reconstruction and Development (EBRD) and the Secretariat are currently supporting Bosnia and Herzegovina under the Regional Energy Efficiency Programme (REEP) for the development of secondary legislation compliant with Directive 2010/31/EU, including national calculation methodology and software for calculating energy performance of buildings, registry of energy performance certificates, regulation on inspection of heating and air conditioning systems and ESCO enabling regulation.

b. State of Compliance

The transposition of the energy efficiency *acquis* in Bosnia and Herzegovina is still not sufficient, especially in the Federation of Bosnia and Herzegovina. Republika Srpska is more advanced.

1. Energy Services Directive 2006/32/EC

Republika Srpska adopted the Law on Energy Efficiency and the *EEAP*, while in the Federation of Bosnia and Herzegovina the Law is still awaiting adoption since September 2014. In the absence of a full package of primary and secondary legislation transposing Directive 2006/32/EC in each entity and the Brčko District, as well as the adoption of a state-level *EEAP* and changes in the state-level Law on Public Procurement to include energy efficiency criteria, Bosnia and Herzegovina still fails to comply with this Directive. The Secretariat initiated an infringement action in March 2014 and will follow up in 2015.

2. Energy Labelling Directive 2010/30/EU

Republika Srpska adopted the Energy Efficiency Law and Rulebook which transposed Directive 2010/30/EU and six Delegated

Regulations. The Federation of Bosnia and Herzegovina still fails to comply with Directive 2010/30/EU.

3. Energy Performance of Buildings Directive 2010/31/EU

The degree of compliance with the Directive on the Energy Performance of Buildings also differs between the entities.

In the Federation of Bosnia and Herzegovina, the Directive's requirements related to the calculation methodology for minimum energy performance of buildings, energy audits and energy certification of buildings are already transposed through the existing Law on Physical Planning and Land Utilization, as well as several by-laws. However, as certain provisions of the Directive still need to be completed, relating to cost-optimal calculations, definition and plans for realization of nearly zero-energy buildings, this remains a matter of non-compliance with Directive 2010/31/EU.

In Republika Srpska, the key requirements of Directive 2010/31/ EU were transposed through the new Law on Physical Planning and Construction of May 2013 (energy performance of new and existing buildings, certification of buildings, energy audits of buildings and public sector exemplary role), but the remaining provisions still need to be developed further through secondary legislation.

Despite some progress in this area, Bosnia and Herzegovina still fails to fully comply with the requirements of this Directive.

c. Conclusions and Priorities

The reporting period was characterised by certain progress, namely the transposition of the Labelling Directive and Regulation in Republika Srpska and development of secondary legislation under the *Regional Energy Efficiency Programme*. However, the legislative and institutional framework for energy efficiency is still not well developed, especially in the Federation of Bosnia and Herzegovina.

The draft Energy Efficiency Law and the draft *EEAP* in the Federation of Bosnia and Herzegovina need to be adopted without any further delay. The Labelling Directive and the Delegated Regulations remain a priority for transposition by this entity.

Secondary legislation for transposition of Directive 2010/30/EU needs to be updated or adopted in both entities.

Finally, a state-level *EEAP* and amendments to the State Law on Public Procurement in order to include energy efficiency criteria need to be adopted. The coordination between authorities at the entity and state levels needs to be improved as a precondition for further energy efficiency progress. A state-level structure for monitoring and reporting on implementation should be established and adequately sourced with funds and personnel.



Bosnia and Herzegovina

5.7 Fnvironment

a. Sector Overview

1. Environmental Impact Assessment Directive

No legislation exists on environmental impact assessment at state level.

In the Federation of Bosnia and Herzegovina, the Environmental Impact Assessment Directive is transposed through the Law on Environmental Protection and delegated legislation. The existing legal framework was established in 2003 and has reached a generally high degree of transposition, albeit with certain flaws (related mainly to public participation). The competent authority for issuing permits based on environmental impact assessments is the Ministry of Environment and Tourism. A new Law on Environmental Protection has been drafted and submitted to the Parliament. The draft contains effective provisions for public participation in environmental impact assessments and their adoption would rectify the Secretariat's concerns.

A total of 10 requests for environmental impact assessment related to the energy sector were submitted to the authorities of the Federation of Bosnia and Herzegovina between September 2014 and April 2015. These procedures concern one thermal power plant, three changes or extensions to existing projects in the energy sector (namely SSL-Sisecam Soda Lukavac Ltd., Global Ispat Industry Ltd. (Lukavac) and the Banoviči Cement Factory), one installation for the underground storage of combustible gases, two hydropower plants and three wind farms. None of them concerns a Project of Energy Community Interest.

In Republika Srpska, the Law on Environmental Protection was adopted in 2012. This Law regulates, amongst others, environmental impact assessment. According to the Law, the competent Ministry issues an environmental permit – a decision concluding the environmental impact assessment procedure and prescribing measures to be complied with by the developer. Several rulebooks necessary for the proper implementation of the Law were adopted in the course of 2012 - 2013.

A total of two requests for environmental impact assessment were submitted to the authorities of Republika Srpska between September 2014 and April 2015, one concerning the construction of overhead electrical power lines and another an installation for hydropower plants. Both procedures are underway and none of them concerns a Project of Energy Community Interest.

As regards the Brčko District, the Law on Environmental Protection is in force since 2004 regulating, amongst others, environmental impact assessment. No information on develop-

ments during the reporting period has been submitted to the Secretariat, both from legislative and implementation aspects.

In total, the environmental impact assessments for four Projects of Energy Community Interest (Combined Heat and Power Plant Zenica, Hydropower Plant Dabar, the Ionian-Adriatic Pipeline and the 400 kV overhead line SS Bajina Basta (SER) – SS Pljevlja (MNE) – SS Visegrad (BIH)) were concluded so far in Bosnia and Herzegovina. In the case of two projects (Hydro Power Plants Upper Drina and the 400 kV overhead line Banja Luka-Lika), environmental impact assessments are in progress.

2. Sulphur in Fuels Directive

The legal framework aimed to transpose the Sulphur in Fuels Directive includes the entities' Laws on Air Protection adopted in 2002 (Republika Srpska), 2003 (Federation) and 2004 (Brčko). At state level, the Government adopted a Decision on Liquid Fuels Quality in 2002.

3. Large Combustion Plants Directive

Bosnia and Herzegovina has four plants falling within the scope of the Large Combustion Plants Directive with a total of nine units and a total rated thermal input of 5,130 MW. All units use lignite as a fuel.

Bosnia and Herzegovina is planning to adopt and implement a *National Emission Reduction Plan* in line with Decision 2013/05/ MC-EnC of the Ministerial Council. Work is ongoing for the preparation of the plan with the participation of authorities from both the state and entity levels and with the involvement of the operators of the plants.

In the Federation of Bosnia and Herzegovina, the Ordinance on Limit Values of Air Emissions from Combustion Plants adopted in 2013 aims to transpose the provisions of Directive 2001/80/EC. The Ordinance requires operators of large combustion plants to develop emission reduction plans. Amendments to harmonize it with Decisions 2013/05/MC-EnC and 2013/06/MC-EnC of the Ministerial Council were not submitted to the Secretariat for review.

In Republika Srpska a Rulebook on Measures for Preventing and Reducing Air Pollution and Improving Air Quality was adopted in accordance with the Law on Air Protection of 2011 in January 2015 and amended in June 2015. The amended Rulebook transposes most emission limit values of the Large Combustion Plants Directive.

b. State of compliance

1. Environmental Impact Assessment Directive

In the Federation of Bosnia and Herzegovina, the 2003 Law contains most provisions of the Environmental Impact Assessment Directive. However, the provisions on public participation cannot be considered as completely transposed given the wide range of possibilities for refusing access to environmental information and the very flexible possibility to charge applicants for such access. The new Law, which is currently in parliamentary procedure, will address these shortcomings.

Republika Srpska has achieved a high level of transposition of the Environmental Impact Assessment Directive by the Law on Environmental Protection of 2012 and the related Rulebooks. The Secretariat received a complaint against *TPP Stanari*, a large combustion plant currently under construction. The Secretariat found that the authorities of Republika Srpska conducted a proper environmental impact assessment procedure. As a result of the Secretariat's intervention, the environmental permit of *TPP Stanari* was changed in order to reflect the emission limit values of the Large Combustion Plants Directive.

2. Sulphur in Fuels Directive

The Secretariat in 2013 launched infringement action against Bosnia and Herzegovina based on the incorrect transposition of the Directive. The Secretariat concluded that by maintaining and applying a derogation clause in the Government Decision Setting out the Rules Regulating the Sulphur Content of Liquid Fuels, Bosnia and Herzegovina failed to implement the provisions of the Directive related to the maximum sulphur content allowed in heavy fuel oil and gas oil. Furthermore, granting domestically produced petroleum products more favourable treatment with regard to the maximum sulphur content as compared to imported ones constitutes discrimination based on the origin of the fuel in violation of Articles 7 and 41 of the Treaty. The Secretariat also concluded that the legislation in place in Bosnia and Herzegovina related to the sulphur content of gas oil on state and entity level fails to transpose the provisions of the Directive dealing with gas oil because the legislative limit values have not been set at 0.1% by mass.

The Secretariat is currently preparing a Reasoned Opinion against Bosnia and Herzegovina in this case.

3. Large Combustion Plants Directive

As regards the Large Combustion Plants Directive and the Industrial Emissions Directive, significant steps were taken between September 2014 and April 2015 with the adoption of secondary legislation in both entities and the work started on Bosnia and Herzegovina's *National Emission Reduction Plan*.

c Conclusions and Priorities

Bosnia and Herzegovina has made efforts to increase the level of transposition of the environmental *acquis*. However, in several areas the level of transposition and implementation remains inadequate.

In the Federation of Bosnia and Herzegovina, the new Law on Environmental Protection must be adopted within the shortest possible timeframe and must ensure full compliance with the provisions of the Environmental Impact Assessment Directive.

Bosnia and Herzegovina must make sure that the provisions of the Sulphur in Fuels Directive are complied to settle the ongoing dispute settlement case.

Bosnia and Herzegovina should maintain its efforts on the drafting and adoption of the *National Emission Reduction Plan* and ensure that it is submitted to the Secretariat according to the deadline, *i.e.* by 31 December 2015.





Bosnia and Herzegovina

5.8 Competition

a. Sector Overview

1. Competition Law

The Competition Act of Bosnia and Herzegovina was adopted in 2005 and amended in 2007 and 2009. The Act contains provisions corresponding to Articles 101 and 102 TFEU. The Act applies to state and local self-government units directly or indirectly participating in or having influence on the market. The body in charge of enforcing competition law at the state level is the Competition Council established in 2004.

In the reporting period, no new legislative acts were adopted. The Competition Council brought a decision in May 2014 rejecting the claim of the producer of electricity meters *Elektrokontakt* that the public company for production, distribution and supply of electricity *Elektroprivreda BiH* has abused its dominant position on the market. According to the complainant, *Elektroprivreda BiH* organised tenders for the purchase of meters whereby it unjustifiably rejected the lowest price offer of *Elektrokontakt SA* and instead selected an offer of a subsidiary of *Elektroprivreda BiH* as the best one. The Competition Council found that the subsidiary operated as part of the same economic unit, meaning that all agreements between them fell outside of competition rules.

An EU project launched in Bosnia and Herzegovina in March 2014 envisages conducting analyses of five sectors of the economy by the Competition Council. In November 2014, the Competition Council decided that one of the sectors that would undergo an analysis would be the electricity sector of Bosnia and Herzegovina. The competition and regulatory authorities agreed to cooperate with each other and the Secretariat when conducting sector inquiries or market analyses in the energy sectors.

2. State Aid Law

The Law on System of State Aid in Bosnia and Herzegovina came into force in February 2012. The Law prescribes general conditions for granting, monitoring, allocating and use of State aid, as well as for the recovery of illegally granted State aid. The Law on the System of State Aid is enforced by the State Aid Council composed of eight members and assisted by a Secretariat.

In the reporting period, the State Aid Council has not taken any decision on State aid measures in the energy sector. No new legislative acts were adopted in the area of State aid.

b. State of Compliance

Bosnia and Herzegovina has transposed Articles 18 and 19 of the Energy Community Treaty into its legislation, but enforcement of both competition and State aid law remains at an unsatisfactory level.

1. Competition Law

It is a positive development that the Competition Council started applying competition rules to the energy sector, but the Competition Council's assessments need to be improved. In relation to the complaint against *Elektroprivreda BiH*, the Competition Council wrongfully relied on the economic unit doctrine of the EU courts. In addition, a non-compete obligation in the agreement between *Elektroprivreda BiH* and its subsidiary is, likely to be considered anticompetitive, which the Competition Council failed to assess.

2. State Aid Law

Even though the Law on the System of State Aid in Bosnia and Herzegovina is generally in line with the *acquis*, no case in the energy sector has ever been reviewed by the State Aid Council since the Law came into force in 2012. Therefore, full implementation of the State aid law and the enforcement of the State aid prohibition in this sector have still not been achieved. The independence of the State Aid Council remains questionable. The State Aid Council does not publish notifications of State aid measures as required by State aid legislation. The decisions of the State Aid Council are also not yet publicly available which renders close scrutiny by stakeholders and general public impossible.

c. Conclusions and Priorities

Although the formal transposition of EU legislation is satisfactory, Bosnia and Herzegovina must begin with the active enforcement of both competition and State aid law. The activities of the Competition Council are still limited to reviewing mergers and issuing opinions on the compliance of draft normative acts with competition law. It is advisable that the Competition Council starts issuing binding decisions on the restrictions of competition on the energy markets and sanctions for breaches of competition law. Conducting a market analysis of the energy sector that would bring cases of infringement to the knowledge of the Competition Council should be the priority for the coming months. The independence of the State Aid

Council must be strengthened through both amendments to State aid legislation and commitments to active decision-making. The Secretariat will continue monitoring the enforcement of State aid law and will not close the open dispute settlement procedure in Case ECS-1/10 before State aid rules are actually applied to the energy sectors.



Bosnia and Herzegovina

5.9 Statistics

a. Sector Overview

The legal framework for the organization of statistics is regulated by the Law on Statistics of Bosnia and Herzegovina. The Agency for Statistics of Bosnia and Herzegovina (BHAS) is responsible for organizing, compiling, producing, and disseminating statistical data.

The Federation of Bosnia and Herzegovina and Republika Srpska established legal frameworks to collect the relevant data for planned energy balances and to design the energy policies and measures in accordance with their competences. The entities established their own authorities for collecting, compiling and disseminating statistical data, namely the Institute for Statistics of the Federation of Bosnia and Herzegovina (FZS) and the Institute of Statistics of Republika Srpska (RZS RS). They are obliged to deliver statistical data to BHAS. In order to ensure uniform quality of statistical data, all three authorities have signed an agreement on implementation of harmonized methodologies and standards in producing the statistical data of Bosnia and Herzegovina. By a Memorandum of Understanding signed by BHAS with the State Electricity Regulatory Commission (SERC), the latter collects and compiles information on electricity prices.

Under the Secretariat's project of technical assistance, a survey on energy consumption in households with the focus on renewable energy consumption is being carried out, following test research from 2013. The implementation of the project was delayed due to activities related to the census in 2013. The field work was completed in June 2015 and data processing is underway. The publication of the final results of the survey is expected in time to be incorporated in the annual statistics for 2014.

b. State of Compliance

1. Annual Energy Statistics

Although still not in compliance with the *acquis*, energy statistics of Bosnia and Herzegovina have slowly improved. The annual data collection now includes balances for oil and petroleum products, in addition to the already existing electricity and heat balance, the coal and coke balance and the natural gas balance. The annual questionnaires, except for the renewable

energy questionnaires, are communicated to *IEA*, although with considerable delay.

The current survey of energy consumption in households could become a milestone in the process towards completing the annual energy statistics in Bosnia and Herzegovina.

2. Monthly energy statistics

BHAS compiles monthly reports for electricity, gas and, from 2014 on, coal. Methodologies and questionnaires for the monthly energy statistics are compliant with the *acquis*. The collection of data on oil and petroleum products still remains a problem. While the legal basis was established, the country will continue to fail to comply until sufficient resources are designated for this task. Currently MoFTER addressed the problem by compiling monthly reports on oil and petroleum products from the information it has been collecting for the sake of security of supply and oil stocks. A communication with the *UN Statistics Division* is established with the aim to start submission of monthly oil and gas data in *JODI* questionnaires by the end of 2015.

3. Price statistics

BHAS regularly reports semi-annual data for electricity and natural gas prices to *EUROSTAT*. The prices charged to industrial and household end-users are compiled and aggregated in the format and tables defined by *EUROSTAT*. The compilation procedure enables regular electricity and gas price reporting in accordance with Directive 2008/92/EC. Electricity prices are collected and compiled by SERC, whereas gas prices are provided by the biggest retail supplier company *Sarajevogas*. As regards the breakdown of prices, a new methodology and questionnaires were developed in 2013 to enable data collection of a more comprehensive system for gas prices.

c. Conclusions and Priorities

The completion of annual datasets and their timely preparation must be addressed urgently.

An adequate data collection system for renewable energy, relying on the assistance of the Secretariat, must be established

without delay. Better cooperation and coordination among stakeholders is vital to ensure cost-effective data collection. It must rely on all available administrative sources in combination with surveying. This is important not only for renewable energy statistics but also for the collection and compilation of monthly data on oil and petroleum products.

In addition to completing the administrative framework for gas prices collection, reporting on price systems and quality report-

ing remains a permanent task. It will be also important to take into account the pending opening of the electricity and gas markets and the impact on the established price reporting systems.

The activities undertaken in the recent years show that Bosnia and Herzegovina possesses the expertise and commitment to comply with its obligations. However, increase of dedicated staff and sufficient financial and technical resources should be the priority to ensure implementation of the Treaty.





Bosnia and Herzegovina

5.10 Open Infringement Cases

a. Lack of Effective State Aid Enforcement

On 21 September 2010, the Secretariat sent an Opening Letter to Bosnia and Herzegovina in Case ECS-1/10. The Secretariat takes the view that the country failed to fulfil its obligations under the Energy Community Treaty by not adopting legislation prohibiting State aid and enforcing that prohibition, as required by Articles 6 and 18 of the Treaty. In February 2012, Bosnia and Herzegovina adopted the Law on System of State Aid in Bosnia and Herzegovina which follows the principles of the *acquis* on State aid and transposes Article 18(c) of the Treaty. However, the procedure for notifications and decision-making is very burdensome and the effective implementation in practice is still pending. Even though the institutions have been established, no case in the energy sector has been notified or reviewed *ex officio*. The system of State aid enforcement in Bosnia and Herzegovina is largely non-functional.

b. Non-Implementation of the Acquis on Gas

On 7 October 2011, the Secretariat initiated dispute settlement proceedings against Bosnia and Herzegovina for non-compliance with several provisions of Directive 2003/55/EC and Regulation (EC) No 1775/2005 by an Opening Letter in Case ECS-8/11. Following a Reasoned Opinion in January 2013, the case was submitted to the Ministerial Council by way of a Reasoned Request on 21 May 2013. The Reasoned Request was broadly upheld by the Advisory Committee and in October 2013 the Ministerial Council, by unanimity, adopted a Decision establishing a breach of Energy Community law and requiring Bosnia and Herzegovina to take all appropriate measures to rectify the breaches identified by June 2014. On 23 September 2014, the Ministerial Council decided that the breach was persistent and serious. The infringement has still not been rectified to date.

c. Non-Compliance with the Sulphur in Fuels Directive

On 11 February 2013, the Secretariat sent an Opening Letter to, *inter alia*, Bosnia and Herzegovina in Case ECS-2/13. The Secretariat comes to the preliminary conclusion that Bosnia and Herzegovina has not yet transposed and implemented the requirements of Directive 1999/32/EC as required by Article 16 and Annex II of the Treaty. The Secretariat is currently preparing a Reasoned Opinion against Bosnia and Herzegovina in this case.

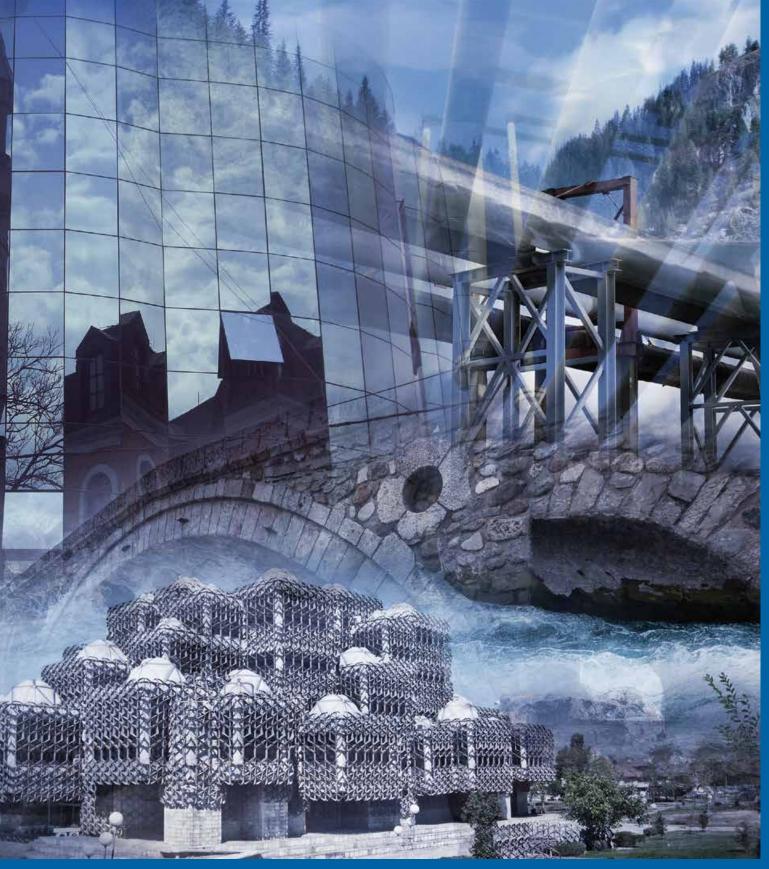
d. Non-Transposition of the Energy Efficiency Directive

In March 2014, the Secretariat opened dispute settlement proceedings in Case ECS-1/14 against Bosnia and Herzegovina for incomplete transposition of Directive 2006/32/EC on Energy End-use Efficiency and Energy Services. While Republika Srpska adopted the Law on Energy Efficiency and the *EEAP*, these documents are still awaiting adoption in the Federation of Bosnia and Herzegovina. The draft Energy Efficiency Law in the Federation of Bosnia and Herzegovina was adopted by the House of Representatives in September 2014, but final adoption by the House of People is lacking.

e. Lack of Adoption of a National Renewable Energy Action Plan

On 11 February 2014, the Secretariat sent an Opening Letter to, *inter alia*, Bosnia and Herzegovina, for failure to comply with Energy Community law related to renewable energy. In the Opening Letter in Case ECS-4/14, the Secretariat addresses the failure by the country to adopt and submit to the Secretariat a *National Renewable Energy Action Plan*, the deadline for which expired on 30 June 2013. Following the lack of adoption of a *National Renewable Energy Action Plan*, a Reasoned Opinion was sent to Bosnia and Herzegovina on 24 February 2015. On 12 May 2015 the Secretariat submitted a Reasoned Request to the Ministerial Council seeking a decision establishing that Bosnia and Herzegovina failed to fulfil its obligations to adopt and notify to the Secretariat a *National Renewable Energy Action Plan* as requested by Directive 2009/28/EC.





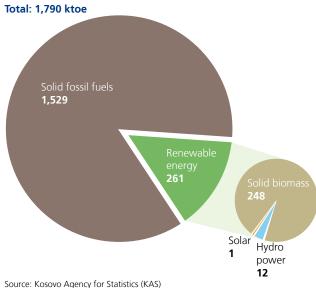


6 KOSOVO*

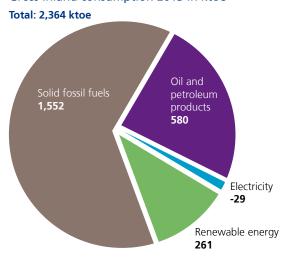
By focusing all the attention on one – admittedly crucial – investment, the new thermal power plant Kosovo e Re, Kosovo* slowed down the pace of market reform to some extent. The Third Package has not been transposed, liberalization of the electricity market is still pending and Kosovo* is lagging far behind the implementation of its target for renewable energy.

The weaknesses of the institutions still remain to be addressed. On the other hand, agreements concluded between the transmission system operators of Kosovo* and Serbia and the start of the connection process with ENTSO-E raise hope for Kosovo*'s full and equal integration in the regional market.

Energy mix in primary production 2013 in ktoe



Gross inland consumption 2013 in ktoe





Kosovo* 6.1 Electricity

| Description of data [unit] | | | 2013 | 2014 |
|---|-------------------|---|---------|---------|
| Electricity production [GWh] | | | 5,862 | 4,894 |
| Net imports [GWh] | | | 522 | 966 |
| Net exports [GWh] | 857 | 475 | | |
| Total electricity supplied [GWh] | | | 5,527 | 5,385 |
| Gross electricity consumption [GWh] | | | 5,519 | 5,399 |
| Losses in transmission [GWh] | | | 110 | 109 |
| Losses in transmission [%] | | | 1.32% | 1.42% |
| Losses in distribution [GWh] | | | 1,704 | 1,526 |
| Losses in distribution [%] | | | 35.5% | 33.5% |
| Consumption of energy sector [GWh] | | | 128 | 112 |
| Final consumption of electricity [GWh] | | | 3,577 | 3,652 |
| C C COMI | Industrial, trans | sport, services and other non-residential sectors | 1,447 | 1,589 |
| Consumption structure [GWh] | Households (re | sidential customers) | 2,130 | 2,063 |
| Net maximum electrical capacity of power plants [| MW] | | 1,215 | 1,217 |
| | Coal-fired | | 1,171 | 1,171 |
| | out of which: | multi-fired | 0 | 0 |
| | Gas-fired | | 0 | 0 |
| | out of which: | multi-fired | 0 | 0 |
| | Oil-fired | | 0 | 0 |
| | Nuclear | | 0 | 0 |
| Net maximum electrical capacity | Hydro | Hydro | | 44.82 |
| of power plants [MW] | | small hydro | 10.58 | 12.82 |
| | out of which: | pumped storage | 0 | 0 |
| | Other renewab | Other renewables | | 1.35 |
| | | wind | 1.35 | 1.35 |
| | | solar | 0 | 0 |
| | out of which: | biomass | 0 | 0 |
| | | biogas | 0 | 0 |
| | 380 kV or more | e [km] | 188 | 188 |
| | 220 kV [km] | 220 kV [km] | | 232 |
| | 110 kV [km] | | 803 | 803 |
| Horizontal transmission network [km] | HVDC [km] | HVDC [km] | | |
| | Substation cap | Substation capacity [MVA] | | 5,579 |
| | Number of inte | Number of interconnectors | | 7 |
| | Interconnecting | g capacities [MVA] | 2,172 | 2,172 |
| Total | | | 468,663 | 490,545 |
| Flactricity systemats | out of which: | out of which: non-households | | 72,344 |
| Electricity customers | Eligible custom | Eligible customers under national legislation | | 72,344 |
| | Active eligible | customers | 0 | 0 |
| | Active eligible (| castomers | | · · |
| Internal market | | lied to active eligible customers [MWh] | 0 | 0 |

Source: Energy Regulatory Office of Kosovo* (ERO)

a. Sector Overview

The primary legislation in the electricity sector of Kosovo* consists of the Law on Energy, the Law on Electricity and the Law

on the Energy Regulator, which are mostly compliant with the Second Package. The Ministry of Economic Development has initiated the process of amending the current laws with the aim to transpose the Third Package. Drafted legislation is expected to

be forwarded to the Government for approval and subsequently to the Assembly for adoption in the second half of 2015.

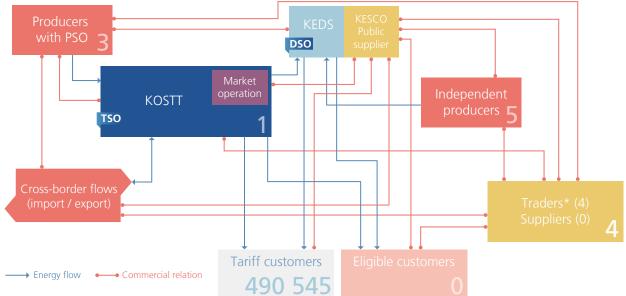
As part of the electricity sector restructuring process, legal unbundling of distribution from supply activity was finalized in 2014. The shareholder of *KEDS*, *Kosovo Calik Limak Energy*, established the joint stock company *Kosovo Electricity Supply Company (KESCO)*. In December 2014, ERO issued a decision on transfer of public electricity supply licence from *KEDS* to *KESCO* with effect from 1 January 2015.

The transmission system operators KOSTT of Kosovo* and EMS of Serbia signed an Inter-TSO Agreement on Network and System Operation Management in September 2014, which was meant to close the long-standing dispute between the two system operators. The Agreement was negotiated under the auspices of the Secretariat and with the support of the European Commission. The Inter-TSO Agreement and its technical annexes implement the operational part of the Framework Agreement signed by both parties in February 2014. However, both agreements are not applied in practice. Subsequently, KOSTT has signed similar Inter-TSO agreements with MEPSO, OST and CGES. As a result, in October 2014 KOSTT officially started negotiations with ENTSO-E on the independent operation as part of the synchronous area continental Europe. The connection agreement, expected to be signed between ENTSO-E and KOSTT will cover, amongst other things, issues related to scheduling, accounting, grid model, congestion management, Inter-TSO Compensation (ITC) mechanism and the application of other European standards for the operation of the transmission network.

Despite the progress made in electricity sector restructuring, the electricity market in Kosovo* is still fully regulated with public service obligations imposed on dominant companies in the wholesale and retail electricity markets, namely the state-owned generation utility *Kosovo Energy Corporation (KEK)* and the public electricity supplier *KESCO. KEK* is selling all generated electricity to *KESCO* at regulated prices. However, as a state-owned company, *KEK* would have to sell electricity on the free market in line with the procedures defined by the Law on Public Procurement. All final customers are still supplied by the public electricity supplier under regulated prices, without the possibility to exercise eligibility due to the absence of alternative suppliers in the retail market. In particular Kosovo* must ensure that alternative suppliers are being granted licenses once they fulfil all conditions, including in the North.

In addition, the full implementation of the Market Rules adopted by *KOSTT* in 2013 is still lacking, in particular switching rules, balancing and imbalance settlement. *KOSTT* is currently undertaking activities on drafting and amending procedures necessary for the functioning of the electricity market. In April 2015, ERO approved tendering documents for procurement of ancillary services developed by *KOSTT*. ERO also approved an amended procedure on interconnection capacity auctions and cross-border capacity nomination for interconnection capacities which will not be subject to allocation by *SEE CAO*.





^{*} Licensed traders are 4, but in Kosovo* electricity market operates many non licensed traders Source: Complied by the Energy Community Secretariat Refer to the market schemes legends on page 248 for a more detailed description.

b. State of Compliance

1. Authorisation

The provisions in the existing energy legislation are in compliance with the acquis. ERO conducts a transparent and non-discriminatory authorisation procedure in accordance with the Rules on Authorisation Procedure for Construction of New Generation Capacities. The Rules were amended in November 2014 for a more efficient authorisation procedure. In the twophase procedure, applicants are being granted first a preliminary authorisation, as a precondition for obtaining all other permits, including a construction permit. A final authorisation is granted once all conditions and criteria set by the Rules are fulfilled. Upon completion of the construction of a new generation plant, the authorisation holder is required to submit to ERO all documents for licensing in accordance with the Rules on Licensing of Energy Activities. So far, ERO has not considered a need to notify the Government of the requirement to launch a tendering procedure in order to ensure security of supply, due to the consideration that authorisation is providing sufficient number of projects for new capacities.

2. Unbundling

Kosovo* does not comply with the requirements for unbundling of the Third Package. However, the transmission system operator *KOSTT* is unbundled in line with the Second Package.

Legal unbundling of the distribution system operator *KEDS* from the supply activity is in effect as of 1 January 2015 when assets and licence for public electricity supply were transferred from *KEDS* to *KESCO*. The requirements on accounting unbundling from the public electricity supply license of *KESCO* are in compliance already with the Third Package requirements. The public electricity supplier *KESCO* has been rebranded in a way that ensures separation of identity in line with the Third Package

as well. Non-discriminatory conduct and adequate monitoring is still to be ensured through a compliance programme in line with the Guidelines on Legal Unbundling of *KEDS* issued by ERO. *KEDS* has developed and submitted a Compliance Programme to ERO for review and approval, but this programme has not been approved yet. *KEDS* has also selected a compliance officer to be appointed upon the approval of the compliance programme. Common services to be shared within the vertically integrated company are identified and invoiced based on the shared service agreement between *KEDS* and *KESCO*. Common services include accounting, human resources, public relations, procurement and vehicles, while customer care and billing is allocated to *KESCO* alone.

3. Third Party Access

The requirement to grant third party access based on published, objective and non-discriminatory tariffs has been transposed in line with the acquis. Transmission and distribution tariffs are based on the maximum allowed revenue set in 2013 for a multi-year regulatory period until 2017. The maximum allowed revenue is set to allow operators to cover reasonable operational and maintenance costs and to earn a reasonable return. It is adjusted each year to reflect changes between the costs which were forecasted and the actual costs incurred by the operators due to reasons outside their control. In the review for 2015. maximum allowed revenue for KOSTT allows for the first time costs for ancillary services of EUR 3.9 million. New transmission and distribution tariffs to be paid by connected generation and supply were approved by ERO in April 2015. The tariff to be paid by transmission connected generation exceeds the maximum value allowed by Regulation (EC) 838/2010.

Following the Inter-TSO agreement between KOSTT and EMS, KOSTT will start performing allocation of cross-border transmission capacities upon signing of connection agreement with ENTSO-E. Until then, in line with the agreement between KO-

4

Normalisation of Inter-TSO Relationship EMS-KOSTT

I N F O C U Significant progress in the normalisation of the relationship between the transmission system operators of Kosovo*, KOSTT, and Serbia, EMS, was made during the year 2014. It led to the finalisation of a Framework Agreement and an operational Inter-TSO Agreement between both entities aimed at governing their bilateral relationship. The Agreements were negotiated under the auspices of the Secretariat and with the support of the European Commission. Unfortunately, the implementation of the agreements reached has slowed down in 2015. Steps towards the conclusion of a connection agreement between KOSTT and ENTSO-E which details the relationships among all transmission system operators in the interconnected synchronous system were made. However, due to a politically motivated blockade from the Serbian side, the assumption of KOSTT's legal responsibility in the spheres of system operation, capacity allocation and inter-TSO compensation have not materialised at the time of publication of this report.



STT and *EMS*, *EMS* continues to perform capacity allocation. In April 2015, ERO approved a procedure on interconnection capacity auctions and capacity nomination for interconnection capacities that will not be allocated by *SEE CAO*. The procedure defines yearly, monthly and daily auctions for the right to access capacity based on the use-it-or-lose-it principle.

4. Eligibility

According to the Law on Electricity, starting from 1 January 2015, all customers are eligible to freely choose a supplier of their choice. This is in compliance with the *acquis*. General principles of the supplier switching are stipulated in the Law on Electricity, according to which ERO shall be the body responsible to ensure that effective arrangements are in place to allow customers to switch supplier. A change of supplier by an eligible customer shall be done following the procedures established in the Market Rules as approved by ERO. Switching rules that will stipulate detailed procedures for switching supplier must be developed by *KOSTT* and published upon ERO's approval.

5. Market Opening and Price Regulation

Due to the excessive price regulation both in generation and supply of electricity, wholesale and retail market opening has not been implemented in practice. The state-owned generation company KEK is under an obligation to provide the public electricity supplier KESCO with the electricity needed to supply all customers under regulated prices. According to the Law on Electricity, all producers with an installed capacity of over 5 MW must provide their entire capacity at regulated prices to the public supplier as well. In practice, KEK sells all the electricity produced at regulated prices to KESCO which acts both as a regulated wholesale buyer and retail public supplier of all customers in Kosovo*. The regulated prices are not cost-reflective and do not provide an incentive for new entrants to the market and for customers to switch their electricity supplier. According to the Law on the Energy Regulator, ERO was supposed to discontinue regulating prices to customers supplied by the public supplier after 1 January 2015, unless it is not satisfied with the level of competition. In January 2015, ERO issued a report assessing competition in the electricity market in Kosovo*. The report concluded that there is still no efficient competition in the electricity market, but failed to provide a concrete action plan for market opening and facilitating competition. In this respect, Kosovo* is in breach of both the Second and the Third Package. In order to achieve competition in the market, ERO must enforce deregulation of prices, while public service obligation must be limited to the scope of Article 3 of Directive 2009/72/EC.

6. Balancing

The Law on Electricity stipulates an obligation of the transmission system operator to procure balancing services in a transparent, market-based and non-discriminatory procedure

in line with the *acquis*. In addition, balancing rules and the imbalance settlement mechanism are defined by the Grid Code and Market Rules, which have still not been implemented in practice. *KOSTT* was granted by ERO a derogation from the provisions related to reserve requirements and balancing arrangements until 31 December 2015. However, ERO included estimated costs of ancillary services provision into the maximum allowed revenue of *KOSTT* for 2015, and in April 2015 approved ancillary services tender documents. Based on this, *KOSTT* has launched the tender for procurement of secondary and tertiary reserve.

Under the licence for electricity generation, Kosovo A and Kosovo B power plants must offer ancillary services from any generation unit, if requested by the transmission system operator in accordance with the Grid Code. In practice, *KEK* would need additional capital investment and upgrading to be able to procure ancillary services and enter into an ancillary services agreement with *KOSTT*. In this respect, the implementation of the Third Package requirements for regional balancing cooperation is not only an obligation, but an indispensable tool for *KOSTT* to provide the reserve level required for ensuring security of the system.

7. Customer Protection and Protection of Vulnerable Customers

The legislation in place does not transpose the Third Package requirements aimed at strengthening protection of customers in the competitive market and ensuring their rights. To ensure the provision of universal service, a supplier of last resort should be appointed in a transparent and non-discriminatory way which may not impede the opening of the market.

c. Conclusions and Priorities

As the highest priority, the process of amending the primary legislation must be finalized in order to ensure an effective transposition and implementation of the Third Package provisions in the electricity sector, since Kosovo* has already missed the deadline of 1 January 2015.

Without any delay, ERO must impose measures aimed at deregulation of prices in the wholesale and retail electricity markets and limit public service obligation to what is necessary to address market failure. Kosovo* is lagging behind other Contracting Parties in that respect. The current cross-subsidization between different categories of customers must be phased out. The necessary preconditions for retail market opening need to be put in place, including development of switching rules, appointing a supplier of last resort and defining load profiles for customers without interval meters. Distribution tariffs must be publicly available in order to allow for non-discriminatory third party access.

KOSTT must also start to procure balancing services and network losses in transparent and market-based procedures.

Balance responsibility and imbalance settlement must be established, as one of the key prerequisites for efficient market opening.

The process of *KEDS* unbundling needs to be finalized and a compliance programme adopted and applied.



Kosovo*

6 2 Gas

a Sector Overview

A gas market in Kosovo* does still not exist. Nonetheless, regional gas studies envisage the possibility for Kosovo* to become interconnected with the emerging market in Albania or with the neighbouring former Yugoslav Republic of Macedonia, which corresponds to Kosovo*'s strategic plans.

The legal and regulatory framework for the natural gas sector of Kosovo* is laid down in the Law on Natural Gas adopted in 2009, the Law on Energy and the Law on the Energy Regulator amended in 2010. The work on a new package of energy laws to transpose the Third Energy Package started in autumn 2013 has continued, although with long periods of inactivity. The latest drafts, submitted to the Secretariat for review in autumn 2014, were to a high extent in compliance with the Third Package. The drafts are expected to be sent to the Government for review and approval in the second half of 2015.

b. State of compliance

1. Authorisation

Natural gas undertakings wanting to perform any activity related to natural gas in Kosovo* - transmission, distribution, supply, market operation or storage - are required to obtain a license issued by the Energy Regulatory Office (ERO). An authorisation by ERO is also required for the construction of new transmission and distribution systems. The Law on Energy Regulator and ERO's Rules on Licensing set conditions and procedures for licensing in the natural gas sector which are in general compliant with Directive 2009/73/EC, except that they do not contain a reference that refusals of licenses should be notified to the Secretariat.

No undertakings were licensed for natural gas activities in Kosovo* to date.

2. Unbundling

The Law on Natural Gas and the Law on the Energy Regulator are not compliant with the Third Energy Package unbundling and certification requirements.

Transposition of the Third Energy Package in Kosovo* will require implementation of only one possible unbundling model -ownership unbundling. Additional requirements for unbundling of the distribution and storage system operators will also have to be introduced in line with Directive 2009/73/EC.

3. Third Party Access

The general requirements for non-discriminatory access to the transmission and distribution networks as well as to storage facilities are stipulated by the Law on Natural Gas.

However, the exemption from third party access is not transposed in line with the Third Package. Full compliance will require involving the Secretariat in the exemption procedure.

The principles related to regulated tariffs and tariff methodologies in the Law on the Energy Regulator are compliant with Directive 2009/73/EC, however the competences of ERO in tariff-setting are not compliant with the Third Package.

Another deficiency of the Laws is the missing obligation to introduce a separate tariff for each entry and exit point to/from the transmission grid, as required by Regulation (EC) 715/2009.

4. Eligibility

The eligibility of natural gas customers in Kosovo* is defined in line with the Treaty. The Law stipulates that all customers, whether household or non-household, are eligible from 1 January 2015.

5. Market Opening and Price Regulation

The Law allows for full, albeit theoretical, opening of the market from 1 January 2015. There are no provisions regulating natural gas supply. However, any practical implications will show only after the gas system becomes operational in Kosovo* and the first participants enter the market.

6. Balancing Rules

The Law on Natural Gas requires the transmission system op-

erator to adopt objective, transparent and non-discriminatory balancing rules for the natural gas transmission system, including rules for charging system users for energy imbalance. Such rules are subject to ERO's approval. However, the Law does not envisage that such balancing rules must be market based as required by Regulation (EC) 715/2009.

Regulation (EC) 715/2009, including *inter alia* provisions related to balancing rules and imbalance charges, has not yet been transposed.

7. Security of Supply

The provisions of Directive 2009/73/EC and Directive 2004/67/ EC relevant for security of supply, *i.e.* for the roles and responsibilities of different market players, monitoring and safeguarding measures, were transposed adequately by the Law on the Energy Regulator and the Ministerial Regulation on Security of Supply in the Natural Gas Sector adopted in 2010. However, concrete measures to comply with the supply standard and the emergency plan, which need to be developed by the transmission system operator, are still pending.

8. Customer Protection and Protection of Vulnerable Customers

The motion of vulnerable customers is defined by the Law on the Energy Regulator. Protection of vulnerable customers is subject to the rules set by ERO on the basis of eligibility rules established by the Ministry in charge of social affairs. Furthermore, the Law foresees the protection of vulnerable customers from disconnection of energy supplies and envisages subsidies to be applied in a targeted and transparent manner and in a way to be least likely to distort competition in the supply of energy.

However, switching rules are not in place, and there are no general rules or conditions of supply which would enable a high degree of customer protection. The legislation does not envisage the establishment of single points of contact to provide customers with information about their rights.

The provisions of Directive 2009/73/EC Annex I on customer protection measures will have to be transposed.

c. Conclusions and Priorities

Kosovo* missed the deadline for transposing the Third Energy Package by 1 January 2015. Therefore its most urgent priority is to adopt the already developed package of energy laws, which will *inter alia* transpose Directive 2009/73/EC and Regulation (EC) 715/2009. The crucial elements which make Kosovo* not compliant are related to independence and competences of the national regulatory authority, designation and certification of the transmission system operator, access to the networks and customer protection. Only after establishing a legal framework compliant with the *acquis*, Kosovo* will be able to engage in future developments of natural gas infrastructure, including participation in regional gas initiatives.





6.3 Regulatory Authority

a. Organisation, Competences and Assessment of Independence

The Energy Regulatory Office (ERO) is the single authority for regulating the energy sector of Kosovo* equipped with country-wide regulatory competences in the gas and electricity sector, as required by the Third Energy Package. ERO is headed by five Board members appointed by the Parliament, including a chairperson. The term of Board members is limited to a period of five years, renewable once. A rotation scheme as required under the Third Energy Package is not in place. Appointment requirements for Commissioners are prescribed in detail by law, including an explicit reference to political independence. The vacancy announcement is publicly advertised.

Dismissal of a Commissioner is by law limited to cases of conflict of interest of conviction for a criminal act and thereby uncritical in terms of potential political intervention.

Kosovo* has not yet transposed the Third Package. It requires ERO's competences to be extended to the complete set of regulatory powers and objectives foreseen by the Third Energy Package. The independence criteria stipulated by Articles 35(4-5) and 37(16) of Directive 2009/72/EC and Articles 39(4-5) and 41(16) of Directive 2009/73/EC are currently met only to a certain extent. ERO is by law set up as an institution legally distinct and functionally independent from any other public entity. It cannot be liquidated by act of another public institution.

ERO takes binding decisions autonomously and independently. The management and staff may not execute political functions, have interest in regulated utilities or have an employment relationship with the energy sector. Non-compliance triggers sanctions (dismissal). ERO's decisions are open to juridical review. Also, ERO ensures transparency of its decision-making in terms of stakeholder involvement and public consultations. Sessions of ERO are normally public.

ERO has autonomy in defining its Annual Work Programme. Its management is autonomous in terms of staff appointment and organisation of the authority's internal structure, including autonomy in setting of salaries. The salary of Board members is set in accordance with those of senior public servants. The Secretariat recommends that the Board members' salaries should be adjusted to those of other independent national bodies, such as the National Bank.

ERO is accountable for its activities by presenting its Annual Report to the Parliament.

Financial independence is, in principle, ensured by autonomous

establishment of the Annual Budget financed from licensing fees, issuing certificates of origin and resolution of administrative disputes. The Law sets an exhaustive list of purposes for which the budget can be used. However, they are kept general and broad and therefore do not unduly intervene in ERO's financial independence. In case collected fees would not be sufficient to cover ERO's costs, the regulator can request a supplementary appropriation from the state budget. On the other hand, the Law on Energy Regulator grants ERO autonomy to stop payments by licensees once its budgetary needs are covered. In praxis, the regulator's budget has been subject to cuts through the Budget Law which clearly interfere in ERO's financial independence. Staff salary levels are already significantly below those of the regulated industry. The Secretariat is of the opinion that staff salaries need to enable ERO to attract and keep sufficient qualified human resources to execute its tasks.

An additional threat to ERO's ability to efficiently cover its duties is the lack of appointment of two out of the five Board members. Having in mind the legally required quorum of three Board members for decision-making, vacancy of two posts in practice leads to the need for unanimous voting and thereby the potential for blocking of decisions.

On the regional level, ERO is relatively active in the Energy Community Regulatory Board (ECRB). Yet domestically ERO is among those regulators of the Energy Community that do not live up to their independence and do not take up the active role necessary for tackling competition barriers in the energy market. ERO has not taken the action necessary to further liberalize the electricity market. The reported lack of sufficient human resources may be a reason for this.

b. Conclusions and Priorities

The following changes in law and regulatory practice are key priorities for ERO in order to comply with the Third Package:

- 1. ERO's competences need to be expanded to the complete set of regulatory powers and tasks foreseen under the Third Energy Package.
- A rotation scheme for Board members needs to be introduced.
- 3.A selection committee of neutral experts for short-listing applicants for Commissioner posts should be introduced in order to better decouple the appointment procedure from politics.

- 4. ERO has to be granted full budgetary autonomy including the right of the management to set staff salaries at a competitive level to avoid brain drain to the (regulated) industry.
- 5. The vacant posts of two Board members should be filled without delay.
- 6. ERO's staff level needs to be increased in order to address the additional duties under the Third Energy Package.
- 7. ERO needs to make more active use of its independence.



6.4 Oil

a. Sector Overview

Kosovo* neither produces nor refines oil. Petroleum products imported in 2014 amounted to some 608.8 kt, an increase of 2.1% compared to 2013. The overall consumption of petroleum products in 2014 was 604.7 kt, an increase of 1.37% compared to 2013.

The main law governing the oil sector is the Oil Market Law of 2005, as amended in 2009. It includes provisions encouraging free and fair competition, defines tax and fiscal duties and aims to ensure quality, safety and security of supply. A revised Oil Market Law, which meant to transpose Directive 2009/119/EC, was drafted and discussed, but ultimately rejected by Parliament in mid-2013. 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. A final version of the draft is ready to be sent by the Ministry of Trade and Industry to the Government and subsequently to the Parliament for adoption, provided the Ministry of Finance gives its approval. The Law is expected to be adopted within the 3rd quarter of 2015. It pursues the objective of achieving a high level of security of supply with petroleum products through the establishment, storage and availability of mandatory reserves of petroleum products and determines the manner and conditions of formation and maintenance of these stocks. Based on this draft Law, the entity (a division for compulsory oil stocks) set up for this purpose will be funded by the state budget, while a dedicated fee, which is to be paid directly into the state budget, is to be established.

Currently, the monthly oil data available in Kosovo* are entirely based on customs information, as companies are not obliged to submit data directly to Government authorities and no information on oil stocks is collected. Hence there is not enough information available on the oil flows on the Kosovo* market. Under the draft Law, companies will be obliged to report stocks to the Ministry of Trade and Industry, as well as information on payments of the established compulsory oil stockholding fee. Such information is necessary for establishing monthly reporting under Directive 2009/119/EC.

A 10% customs duty is levied on imports of all petroleum products, besides gasoline and diesel. During the reporting period, Kosovo* continued charging customs duties on imports from both EU Member States and Contracting Parties. As the breach has not been rectified, the Secretariat issued a Reasoned Opinion on 31 August 2015.

b. Conclusions and Priorities

Kosovo* should prioritize the adoption of the draft Law on Compulsory Oil Stocks and the subsequent secondary legislation still in 2015 and improve data collection. Abandoning the customs duties levied on imports of petroleum products is a precondition for terminating the infringement action in Case ECS-12/14.



6.5 Renewable Energy

a. Sector Overview

1. State of Play, Legislation and Promotion of Renewable Energy

Kosovo* committed to a binding target of 25% of energy from renewable sources in gross final energy consumption by 2020 compared with 18.9% in 2009. This renewable energy share in 2009 consisted of 18.1% biomass and 0.8% share of hydro electricity.

The National Renewable Energy Action Plan (NREAP) has been adopted and submitted to the Secretariat in 2013. Going beyond its mandatory target under Energy Community law, Kosovo* envisages meeting a target of 29.47% in 2020 according to the NREAP.

Policy-making, monitoring and coordination competences for renewable energy are exercised by the Department of Energy within the Ministry of Economic Development. The Energy Regulatory Office (ERO) is the issuing body for authorisations for new renewable energy generation plants. It also determines the feed-in tariffs for renewable energy producers and is responsible for managing the guarantees of origin system.

Kosovo* has only partially adopted the national measures planned in the *NREAP* submitted to the Energy Community. In particular, amendments to the Law on Electricity, although planned for 2014 according to the *NREAP*, have not been passed yet.

2. Electricity from Renewable Sources

The Rules on Support Schemes based on feed-in tariffs were adopted in December 2014. They replaced the previous Rules on the Support of Electricity for which a certificate of origin has been issued and procedures of admission to the support scheme. The aim of the new Rules was to provide better investment conditions. It contains provisions on, *inter alia*, eligibility criteria and procedures for feed-in tariff as well as on the rights and obligations of the renewable energy producers, the public supplier and the transmission system operator.

According to the 2014 Rules, after being admitted to the support scheme, generators enter into a standard power purchase agreement (not yet available) at electricity prices corresponding to the feed-in tariffs approved by ERO. The new Rules set feed-in tariffs also for photovoltaic energy, apart from the already previously existing support for small hydro (up to 10 MW), wind, biogas and biomass energy. They also provide for

longer duration of support for solar photovoltaic (12 years instead of 10 years for the other technologies). Feed-in tariffs will be adjusted annually according to inflation after the first year of operation.

The first wind parks (170 MW) and solar PV (10 MW) installations have been granted to the support in 2015. Several small hydropower plants totalling 133 MW also were granted feed-in tariffs in 2015. A registry of newly authorised renewable energy producers and the status of admission to the support scheme is available on ERO's website.

The Ministry of Environmental and Spatial Planning is responsible for issuing construction permits for facilities exceeding 10 MW of installed capacity. It also issues concessions for water use and manages environmental impact assessments and issuance of environmental permits. Local authorities are responsible for the allocation of land for renewable energy use and for issuing construction permits for energy generation facilities below 10 MW of installed capacity.

In 2014, ERO adopted new Rules on Authorisation Procedures for Construction of New Generating Capacities for the purpose of simplification. Under these Rules, ERO must issue a formal decision on every application within 90 days. This period may be extended for another 30 days at the discretion of ERO.

The network operators *KOSTT* and *KEDS* are required by the Law on Energy to adopt medium and long-term development plans. These documents take into consideration renewable electricity integration into the network. Provisions on the integration of generated electricity from renewable sources in the electricity system are also included in the Rule on Support of Generation of Electricity from Renewable Sources. *KOSTT* has also developed a Code for Wind Powered Generating Stations that describes technical and operational requirements to be met by developers and operators of wind powered generating stations.

The Law on Electricity provides that the system operators shall provide any new electricity producer wishing to be connected to the transmission/distribution network with a comprehensive and detailed estimate of the costs associated with the connection. According to the Laws on Energy and on Electricity, the operators have the obligation to give priority to electricity from renewable sources and give priority to renewable generators when dispatching electricity.

Furthermore, the system operators have been tasked to establish and publish rules on cost-bearing and/or sharing, taking

particular account of the costs and benefits associated with the connection of renewable energy producers to the system. Such rules have to be approved by ERO. In November 2014 ERO adopted the Connection Procedures to Transmission Network proposed by *KOSTT*.

The Laws on Energy and Electricity also designate ERO as the competent authority for issuing guarantees of origin for electricity generated from renewable sources. The Law on Electricity also sets the framework for the content of the guarantees of origin. Rules for the Establishment of a System of Certificates of Origin for Electricity Produced from Renewable Energy Sources, from Waste and Cogeneration, setting out the details concerning the setting up, operation and maintenance of a system for the issuance, transfer, and cancellation of guarantees of origin were adopted. An electronic register of guarantees of origin should be available on ERO's website but does not exist yet.

3. Renewable Energy in Heating and Cooling

Biomass, as the main renewable energy source used for heating, reached 247 ktoe in 2013 increasing from 235 ktoe in 2009, the baseline year for the 2020 renewable energy target.

The Law on Central Heating of 2009 provides that producers of heat from renewable energy or waste or producers that cogenerate heat and electricity are entitled to obtain certificates of origin from ERO. The public supplier shall give purchasing priority to heat for which a guarantee of origin has been issued, provided that the cost of such heat does not increase the price of heat to an unsustainable level in Kosovo*.

An Administrative Instruction of 2013 stipulates that all thermal power plants based on renewable sources connected to the district heating grid are entitled to enter into an agreement with the public supplier for the sale of their heat under the regulated feed-in tariff. However, by its Decision of 2014, ERO adopted feed-in tariffs applicable only for electricity produced from renewable sources, leaving heat generated from renewable sources without support.

4. Renewable Energy in Transport

As regards renewable energy in transport, Kosovo* intends to achieve the 10% target with liquid biofuels exclusively. It envisages to rely fully on biofuel imports until the end of 2017, after which domestic production should contribute to fulfilling the 10% target. The Ministry of Trade and Industry is responsible for the transport sector. Since the beginning of 2014, it is developing an Administrative Instruction with the aim to transpose Articles 17 to 21 of Directive 2009/28/EC. According to the *NREAP* for 2013 and 2014, a draft Law on Petroleum Market and a draft Regulatory Act on Biofuels are still in the process of adoption.

As long as there is no domestic biofuel production, voluntary industrial certification schemes recognized by the European

Commission, as allowed by Directive 2009/28/EC, are planned to be used. An Administrative Instruction has been communicated to the Secretariat. Its approval is still pending, as it is conditioned by the adoption of a Law on Transport Fuels and Petroleum Products.

b. State of Compliance

Kosovo* intends to fully transpose Directive 2009/28/EC through amendments to the existing legal and regulatory framework (*i.e.* its Electricity, Energy and Regulatory Laws) in 2015, along with the transposition of the Third Energy Package. Despite the existing legal framework providing support schemes for energy produced from renewable sources, there is almost no electricity generated from renewable sources based on the feed-in tariff. With the revision and completion of the regulatory framework, it is expected that conditions to attract the needed investments to reach the 2020 targets will be created.

1. National Renewable Energy Action Plan

Kosovo* adopted and submitted the *National Renewable Energy Action Plan* by 30 June 2013. *The Progress Report on the Promotion of Renewable Energy* in 2012 - 2013 has also been submitted.

The overall 25% target and the separate 10% target in transport for 2020 were already transposed through the Ministry of Economic Development's Administrative Instruction of January 2013. The *HPP Zhur* (305 MW) is instrumental in reaching the 2020 target. The fact that there are currently no concrete investment plans for *Zhur* is of concern. Without additional measures, Kosovo* will not reach the binding 2020 target of 25%. Only one hydropower plant (35 MW) with three units is currently under construction. Three final authorisations and six preliminary authorisations for renewable energy projects have been issued in 2014 and 2015 with a total installed capacity of 109.5 MW.

2. Support Schemes

Support schemes exist for various renewable energy technologies like small HPPs, wind, biomass and biogas, and, since 2014, also for solar PV. In 2015, 27 renewable energy producers were admitted to the support scheme which proved that the recent amendments to the system became attractive to promote renewable energy development.

3. Cooperation Mechanisms

Provisions on cooperation mechanisms based on statistical transfer and joint projects between Contracting Parties and joint projects between Kosovo* and EU Member States have been transposed through a Government Administrative Instruction at the end of 2013. The act fails to transpose the possibilities for statistical transfer and joint support schemes between Kosovo* and EU Member States as envisaged by Articles 8, 9

and 11 of Ministerial Council Decision 2012/04/MC-EnC. Furthermore, the provisions related to implementation of external audits need to be transposed. Currently, Kosovo* fails to fully comply with this requirement.

4. Administrative Procedures

Several authorities are involved in the licensing and authorisation procedures required for the realisation of renewable energy projects. Better coordination between institutions of different levels responsible for renewable energy projects should be achieved. There is no one-stop shop already operating or even planned. Compliance is not achieved yet.

5. Access to and Operation of the Grids

The current framework provides for guaranteed transmission and distribution of generated electricity from renewable sources through the grid as well as priority dispatch. It appears that implementation by the competent operators is generally satisfactory. For the priority rights given to electricity from renewable sources to be fully implemented in practice, however, a proper market design is necessary which will enable implementation of such principles when new capacities are integrated in the electricity system of Kosovo*. The requirement for notification of wind schedules 30 hours in advance of real-time poses a

significant burden for producers. It has to become as close as possible to real-time. Currently, there is no full compliance with Article 16 of Directive 2009/28/EC.

A provision in the Law on Electricity allowing the system operators to levy a charge for providing producers with an estimate of the costs associated with the connection is not in compliance with Article 16 (5) of Directive 2009/28/EC, according to which this constitutes an obligation of the system operators.

6. Guarantees of Origin

The procedures for issuance, transfer and cancellation, the form of the guarantees of origin and the information required generally meet the requirements of the Directive. However, ERO must still implement the system in order to be considered compliant. Moreover, the period of use of the guarantee of origin (18 months from production of the energy unit instead of 12 months) is not compliant with Article 15 (3) of the Directive.

7. Renewable Energy in Transport

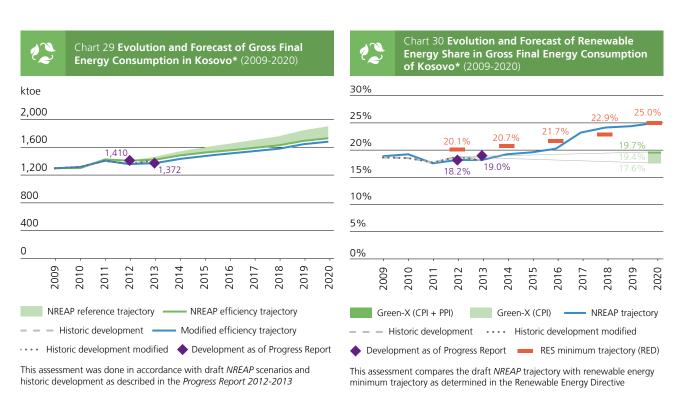
In relation to biofuels, there is no certification scheme defined or relevant body established, thus Kosovo* is non-compliant with Directive 2009/28/EC.



c. Quantitative Assessment of the Progress Towards National Renewable Energy Trajectory

Chart 29 compares the actual development of the gross final energy consumption (GFEC) in Kosovo* with the planned trajectory of the *NREAP*. While in 2010 the actual GFEC was still slightly above the planned consumption (+1.1%), this situation changed by 2013, when the actual consumption was more than 9% below the trajectory. It will be necessary to track the future development to evaluate if this gap stays permanent.

Chart 30 shows that in the past the actual renewable energy share of Kosovo* was very much in line with its renewable energy share trajectory which was stated in its *NREAP*. The latest data from Kosovo*'s *Progress Report on Promotion of Renewable Energy* shows that in 2013 the actual renewable energy share was 19.0% compared to 18.3% as stated in the *NREAP*. According to the modelling results, Kosovo* will miss the renewable energy share target for 2020 by more than 5 percentage points.



Source Study on the Assessment of the National Renewable Energy Action Plans and the Progress in Promotion of Renewable Energy in the Energy Community, by ECN et all, 2015

d. Conclusions and Priorities

The existing legal framework in Kosovo* in itself is not enough for Kosovo* to stay on the trajectory until 2020. A possible revision of the *NREAP* will be needed if the measures envisaged prove to be unrealistic. This includes the questionable contribution of the HPP Zhur to the 2020 renewable energy target of 25% since the investment decision is delayed. Additional support measures, such as tax exemptions, increasing the support for technologies other than hydro or extending the validity period of guaranteed feed-in tariffs for longer than 10 years, or power purchase agreements should be considered.

At the same time, due to the existing electricity mix mostly based on coal, Kosovo* could consider investments in flexible generation capacities and in the transmission and distribution

networks. The new electricity market design must facilitate the integration of new renewable producers into the grids. Monitoring the achievement of the targets needs to be improved and barriers in administrative procedures for authorisation and permitting of renewable energy projects (e.g. rights for the use of land and forests, permits for the use of waters) have to be removed.

The development of an appropriate framework for renewable energy in transport in line with Directive 2009/28/EC becomes a matter of urgency. Biofuel imports are foreseen from 2014, according to the *NREAP* approved in 2013 and uncertified quantities cannot count towards the target, whose achievement in turn depends on sustainability criteria and an adequate certification system in place.



| С | 6.6 Energy | y Efficiency | | | | | | |
|--|---------------------------------------|--|---|-------|----------|-------|--|--|
| Energy Efficiency Ac | Energy Efficiency Action Plan (EEAP)* | | | | | | | |
| Period covered by EEA | Р | | 2010 – 2018 | | | | | |
| Overall energy savings | target - Directive 2006/3 | 32/EC (ktoe / % / year) | 92 / 9 / 2018 | | | | | |
| EEAP status | | | 2 nd EEAP adopted on 3 December 2013 | | | | | |
| Achieved energy savin | gs (ktoe / % / year) | | 32 / 3 / 2012 | | | | | |
| Key institution(s) in charge | | Ministry of Economic Development; Kosovo Energy Efficiency Agency; Ministry of Environment and Spatial Planning; Ministry of Infrastructure | | | | | | |
| Main data and energy efficiency indicators** | | 2010 | 2011 | 2012 | 2013 *** | | | |
| Total primary energy | supply (TPES) | ktoe | 2,496 | 2,528 | 2,368 | 2,364 | | |
| Energy intensity (TP | ES/GDP) | toe / 1,000 USD | 0.52 | 0.50 | 0.46 | 0.46 | | |
| TPES/Population toe/capita | | 1.41 | 1.41 | 1.31 | 1.30 | | | |
| Total final energy co | nsumption (TFEC) | ktoe | 1,190 | 1,317 | 1,258 | 1,277 | | |
| | Residential | | 39% | 37% | 38% | 39% | | |
| | Services | | 9% | 9% | 9% | 9% | | |
| Share of TFEC by | Industry | 0/ | 23% | 23% | 22% | 21% | | |
| sector | Transport | % | 27% | 25% | 26% | 26% | | |
| | Others | | 2% | 1% | 2% | 6% | | |
| | Non-energy use | | 1% | 4% | 3% | 0% | | |

^{*} Source: Energy Community website / 2nd EEAP of Kosovo*

a. Sector Overview

According to the energy efficiency indicators for Kosovo*, there is a clear indication that the final energy consumption was on a downward trend in 2012 and slightly increased in 2013, while the gross domestic product continued to grow both in 2012 and 2013. This suggests a decoupling of economic growth from energy demand growth.

The Ministry of Economic Development is the lead Ministry in the field of energy sector development, energy efficiency policy planning and monitoring of implementation. With the adoption of the Law on Energy Efficiency in 2011, Kosovo* made a significant step towards the creation of an appropriate legislative and institutional framework for energy efficiency.

This Law transposes the key requirements of Directive 2006/32/ EC and sets the legislative and institutional framework for implementing energy efficiency policy in Kosovo*. It stipulates the development of energy efficiency plans, obligatory energy efficiency measures in the public sector, energy management, energy auditing and determines the role of different organisations dealing with energy efficiency. At the date of publication of this Report, the Law was being amended to reflect the provisions of the Energy Efficiency Directive 2012/27/EU.

The Administrative Instruction for the Promotion of Energy

Efficiency for Final Consumers and Energy Services was adopted in October 2012. Another Administrative Instruction for Energy Auditing and a Regulation on the Establishment of the Certification Commission on Energy Auditors and Managers applies since 2012. One of the main barriers for financing is the insufficiently developed framework for market-based and innovative financial mechanisms for energy efficiency. The Energy Efficiency Fund, stipulated in the Law, is still to be established. The market for energy services and operation of Energy Service Companies (ESCOs) remains to be developed.

Based on the Law on Energy Efficiency, the Kosovo Agency for Energy Efficiency (KEEA) was established in April 2012. This was an important step forward for the promotion of energy efficiency in Kosovo*. KEEA is responsible for the implementation of the *Energy Efficiency Action Plan (EEAP)* and monitoring and verification of the achievement of the energy saving targets.

Kosovo* was the first Contracting Party to submit a draft for the second *EEAP*, which was adopted in December 2013. It is of very good quality and proposes an adequate package of energy efficiency measures in all sectors. It includes a thorough analysis and evaluation of the first *EEAP* and a report on the energy savings and fulfilment of the intermediate target (32 ktoe or 3% in 2012). The household and transport sectors, having the largest share in total final energy consumption, are properly treated in the second *EEAP* and tackled by various en-

^{**} Source: International Energy Agency

^{***} Indicators calculated by the Energy Community Secretariat based on preliminary energy balances for 2013

ergy efficiency measures. Energy efficiency policy is also focused on the public sector, including the obligatory development of state and municipal plans, energy management and energy audits, as well as retrofit programmes in central government and municipal buildings.

The transposition of Directive 2010/30/EU on Labelling of Energy-Related Products and the Delegated Regulations was achieved through the adoption of an Administrative Instruction on Labelling of Energy-Related Products in June 2012. The labelling obligation is in effect as from January 2013.

The implementation of Directive 2010/31/EU is still posing challenges, as it is a joint obligation of the Ministry of Economic Development and the Ministry of Environment and Special Planning. The amendments to the Law on Construction adopted in 2012 did not transpose the requirements of the Directive. Together with *EBRD*, the Secretariat assisted both institutions to draft the Energy Efficiency of Buildings Law. A concept document with the approach for the implementation of Directive 2010/31/EU in Kosovo* was adopted by the Government in April 2015, and subsequently the draft Law went into inter-service consultation. In parallel, the *Regional Energy Efficiency Programme* is providing assistance for the development of the entire package of secondary legislation, the calculation software and the registry for energy performance certificates.

b. State of Compliance

1. Energy Services Directive 2006/32/EC

Certain key provisions of Directive 2006/32/EC were already transposed by the Energy Efficiency Law (energy efficiency targets and plans, exemplary role of the public sector, energy management, energy auditing, role of state institutions and different organisations dealing with energy efficiency) and further implemented by secondary legislation and the second *EEAP*.

The second *EEAP* adopted in December 2013, complies with all requirements of Directive 2006/32/EC. The amendments to the Law on Public Procurement of 2011 introduced energy efficiency criteria for procurement. However, energy efficiency procurement procedures are still not developed.

There is no secondary legislation in place. Secondary legislation on financing instruments, metering, informative billing, ESCO's, etc. still needs to be adopted for full compliance.

2. Energy Labelling Directive 2010/30/EU

In the area of labelling, the Administrative Instruction on the Labelling of Energy Related Products transposes Directive 2010/30/EU and the Delegated Regulations, as adapted and adopted by Ministerial Council Decision 2010/02/MC-EnC of 24 September 2010. In this area, Kosovo* complies with the Labelling Directive.

3. Energy Performance of Buildings Directive 2010/31/EU

The amendments to the Law on Construction adopted in 2012 are not sufficient to implement Directive 2010/31/EU. Pending the adoption of a separate Law on the Energy Performance of Buildings and secondary legislation, Kosovo* fails to comply with Directive 2010/31/EU.

c. Conclusions and Priorities

Kosovo* made progress during the reporting period, in particular with the drafting of legislation and regulation to transpose Directive 2010/31/EU.

The priority for Kosovo* remains the adoption of legislation for buildings and missing secondary legislation under the Energy Efficiency Law. This includes establishment of the Energy Efficiency Fund, new financing instruments and a national framework supporting ESCOs.

Another priority must be the finalisation and adoption of primary and secondary legislation on public procurement using energy efficiency criteria, which is important for the implementation of planned measures under the *EEAP*.

Further transposition of the Labelling Delegated Regulation should start timely in 2015, in accordance with the Ministerial Council Decision of September 2014.

KEEA needs to be reinforced, as it is currently understaffed compared to its responsibilities and obligations. Both cooperation and institutional capacity and energy efficiency statistics should be improved to enable successful monitoring, evaluation and verification of the achieved savings.



6.7 Fnvironment

a. Sector Overview

1. Environmental Impact Assessment Directive

Kosovo* has transposed the requirements of the Environmental Impact Assessment Directive into national law by the Law on Environmental Impact Assessment of 2010 and several acts of secondary legislation adopted during 2011. No legislative changes during the reporting period were carried out.

A total of two requests for environmental impact assessment related to the energy sector was submitted to the authorities of Kosovo* during the last reporting period. The first procedure concerns the construction of a 400 kV overhead line between Albania and Kosovo*, a Project of Energy Community Interest, for which the environmental impact assessment was completed in both Contracting Parties.

Furthermore, in the case of the second Project of Energy Community Interest in Kosovo*, the Kosova e Re (New Kosovo)

power plant, the environmental impact assessment is ongoing.

2. Sulphur in Fuels Directive

Kosovo* has already transposed the requirements of the Sulphur in Fuels Directive into national law via the Administrative Instruction on the Quality of Oil Products adopted in 2012.

3. Large Combustion Plants Directive

Kosovo* has two plants falling under the scope of the Large Combustion Plants Directive with a total of five units and a total rated thermal input of 3,350 MW. All units are fired by lignite. An Administrative Instruction on the Rules and Standards of Emissions into the Air by Stationary Sources of Pollution of 2007 obliges the operators of large combustion plants to fulfil EU standards until 31 December 2017 without further details on the nature of the standards. Furthermore, it contains emission limit values and monitoring requirements for a wide range of industries, including large combustion plants, which are,



however, significantly higher on several accounts than those of the Large Combustion Plants Directive. The Administrative Instruction requires the continuous measurement of emissions into the air in the case of large combustion plants.

According to the Administrative Instruction, operators have to prepare a separate emission reduction plan for each plant which could serve as a basis for the national one. Those activities are in the process of being implemented, through the process of giving an Integrated Pollution Prevention and Control (IPPC) permit to *KEK*. During the review of its application, the Ministry of Environment and Spatial Planning has to decide on the timeframe according to which *KEK* must meet all obligations related to the reduction of emissions.

Kosovo* is currently making emission measurements in its two large combustion plants, TPP *Kosovo A* (three units) and TPP *Kosovo B* (two units) as a precondition for preparing a *National Emission Reduction Plan*.

b. State of Compliance

1. Environmental Impact Assessment Directive

Kosovo* has transposed the provisions of the Environmental Impact Assessment Directive into national law.

2. Sulphur in Fuels Directive

Kosovo* transposed the requirements of the Sulphur in Fuels Directive through the Administrative Instruction of 2012.

3. Large Combustion Plants Directive

With the adoption of the Administrative Instruction on the Rules and Standards of Emissions into the Air by Stationary Sources of Pollution and by the introduction of the IPPC permitting procedure, Kosovo* has already started implementing some of the relevant requirements of the Large Combustion Plants Directive. The provisions are, however, still not in line with those of the Large Combustion Plants and Industrial Emissions Directives. The Ministry of Energy and Spatial Planning plans to amend the Administrative Instruction and the Law on IPPC in 2016, with a view to ensuring compliance with the Large Combustion Plants and the Industrial Emissions Directives.

c. Conclusions and Priorities

For the Sulphur in Fuels Directive, efforts should be focused on the Directive's monitoring requirements. The Secretariat received a complaint regarding the improper sampling and analysis in Kosovo*. According to the complainant, the Kosovo* authorities are unable to ensure that it is exclusively those fuels that are compliant with the requirements of the Directive's thresholds that are allowed on the market.

In the case of large combustion plants, Kosovo* should bring the Administrative Instruction on the Rules and Standards of Emissions into the Air by Stationary Sources of Pollution in line with the requirements of the Large Combustion Plants and the Industrial Emissions Directives by the end of 2017. Work on the *National Emission Reduction Plan* must commence immediately in view of the submission deadline of end-2015.



6.8 Competition

a. Sector Overview

1. Competition Law

The Law on Protection of Competition of Kosovo* was adopted in 2010. The provisions of the Law on anticompetitive agreements and practices and the abuse of dominance are generally in line with Articles 101 and 102 TFEU. After the amendments of the Law of 2014, the Law became applicable to all state authorities carrying out economic activities and to public undertakings performing activities of public interest. The authority in charge of the enforcement of the Competition Act is the Kosovo Competition Authority (KCA) composed of the Competition Commission and the Secretariat.

There were no legislative changes in the reporting period. The work of the Competition Commission has been blocked since November 2013 due to a delay in the appointment of its members. Only one Commissioner was in office until the end of April 2015, when his mandate expired. As of 1 May, there has been no Commissioner in office. The institution is not functioning.

2. State Aid Law

State aid is governed by the Law on State Aid adopted in 2011 and entered into force on 1 January 2012. The Law regulates general conditions for granting, monitoring, allocating, using and recovering of State aid. According to the Law, the State Aid Office is the administrative unit established within the KCA responsible for receiving, analysing and monitoring notifications of State aid measures. The KCA is responsible for appointing the members of the State Aid Office. After the KCA appointed the Chief of Office for State Aid and another official, the State Aid Office started working in December 2013. However, as the KCA is not functioning currently, the remaining members of the State Aid Office could not be appointed. In addition, the work of the State Aid Office is constrained by the lack of office space and technical support.

According to the Law on State Aid, the State Aid Office supports the State Aid Commission (SAC), acting as a decision-making body on *ad hoc* basis. Since the State Aid Office is not entirely operational, the SAC has neither assessed any State aid measure nor begun with any activities on the enforcement of

State aid law.

b. State of Compliance

Articles 18 and 19 of the Energy Community Treaty have been transposed into domestic legislation of Kosovo*, but the complete lack of enforcement continues to be a cause of concern.

1. Competition Law

The authority in charge of the enforcement of competition law has not conducted any enforcement activities for over a year and a half as it had only one member in office. Having an enforcement authority that is completely inoperative implies that Kosovo* is not complying with the obligation to ensure the prohibition of certain agreements, practices and abuses as stipulated by the Energy Community Treaty.

2. State Aid Law

The effective implementation of State aid law is also misssing as the State Aid Office is not adequately equipped with staff and technical support. There have still been no enforcement activities since the Law entered into force more than three years ago. The obligation to implement the general prohibition of State aid in its energy sectors includes the establishment of an effective institution responsible for enforcing this prohibition in each individual case, adequately equipped with expert staff and technical support. As Kosovo* still has no authority that is capable of performing the tasks entrusted to it by State aid legislation, Kosovo* is still not complying with the obligations stemming from the Treaty.

c. Conclusions and Priorities

The competition and State aid law enforcement authorities should become operational as early as possible in order to bring Kosovo* into compliance with the Energy Community rules on competition. These authorities must be adequately equipped with infrastructure and expert resources in order to be able to act in an independent and impartial manner. The Secretariat intends to proceed with the infringement proceedings against Kosovo* in Case ECS-7/11.



6.9 Statistics

a. Sector Overview

The Law on Official Statistics determines the fundamental principles for the organization, production and publication of official statistics. In particular, the Law defines the role of producers of official statistics, namely the Kosovo Agency for Statistics (KAS), the Central Bank and the Ministry in charge of finance. KAS is established within the Prime Minister's Office with the task to coordinate the statistical system of Kosovo*.

Reporting requirements for energy data are defined in the Rules on Energy Balances introduced by an Administrative Order of the Ministry of Economic Development (MED). The Administrative Order determines the reporting requirements, units, format and communication lines, as well as all institutions responsible for specific data. Responsibility for the compilation of the energy balance lies with the MED which started to report annual data to *IEA* in 2012. According to the Memorandum of Cooperation between KAS and MED from 2013, the responsibilities for energy statistics were transferred to KAS as from 2015.

Energy price statistics have been established. Following the assistance provided by the Secretariat, KAS conducted its first collection of electricity prices in 2014 and established a reporting system for price statistics.

b. State of Compliance

1. Annual Energy Statistics

Kosovo* produces quarterly and annual energy balances. So far, energy consumption surveys have been conducted for the industry sector, the household sector, the agriculture sector and the services sector, and finally a survey of the transport sector in 2014.

The annual data for renewable energy include firewood, hydro, wind and solar energy and other biofuels. KAS has carried out a municipal waste survey four times, the last one for 2010.

In 2015, the energy balance of Kosovo* for 2013 was submitted and published by *EUROSTAT*. In general, annual energy statistics are collected and disseminated as required by the *acquis*.

2. Monthly Energy Statistics

Monthly statistics in Kosovo* have not been established yet. KAS as the official institution responsible for statistics does not have enough human and financial capacity for monthly reporting as defined in the *acquis*. An EU-financed project provided technical assistance to KAS for monthly statistics, but the reporting system is not operative yet.

3. Price Statistics

After KAS conducted a pilot survey on electricity prices in the household and industry sectors, 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.

Prices per consumption band and breakdown of taxation levels for 2013 and 2014 are submitted and 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 Directive 2008/92/EC.

c. Conclusions and Priorities

The legislative framework needs an upgrade in order to give KAS the competence to request and obtain the necessary information. In parallel, KAS needs administrative and institutional strengthening to become a central office and coordinator of the national statistics system, with full control over implementation of the statistical programme.

The required liberalization of the electricity market will make market-related information, including prices, more complex to collect, which requires even further capacity building. KAS also has to develop and implement a quality policy and a dissemination policy.

Cooperation and coordination between the authorities, including the regulatory authority, is crucial to streamline reporting requirements, to reduce the burden for individual reporting units and to reduce costs and ensure flexibility to adjust reporting requirements to a competitive market.



6.10 Open Infringement Cases

a. Lack of Effective State Aid Enforcement

On 8 February 2011, the Secretariat sent an Opening Letter to Kosovo* in Case ECS-7/11. It takes the preliminary view that Kosovo* failed to fulfil its obligations under the Energy Community Treaty by not adopting legislation prohibiting State aid and enforcing that prohibition, as required by Articles 6 and 18 of the Energy Community Treaty. Following the Opening Letter, Kosovo* adopted a State Aid Law in July 2011 that entered into force on 1 January 2012. The State Aid Law transposes Article 18(c) of the Treaty to a large extent. However, the State Aid Commission and its Secretariat have not been fully established

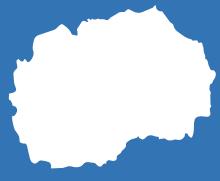
and have not become operational. If no concrete progress is achieved, the Secretariat will proceed with the case.

b. Customs Duties on Petroleum Products

On 18 July 2014, the Secretariat initiated infringement action against Kosovo* because it levies customs duties on imports of certain petroleum products from EU Member States to Kosovo*. Article 41 of the Treaty, prohibiting all customs duties on the import of energy, prevents Kosovo* from maintaining such import duties. As the breach has not been rectified, the Secretariat sent a Reasoned Opinion on 31 August 2015 in that case.







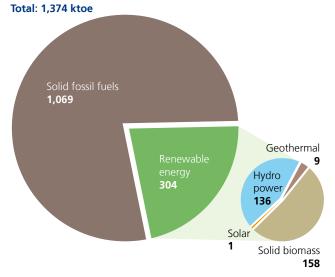
FORMER YUGOSLAV REPUBLIC OF MACEDONIA

7 Former Yugoslav Republic of Macedonia

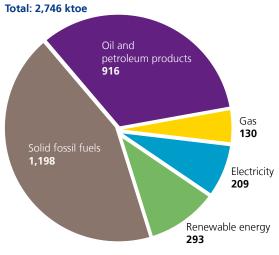
The efforts for energy sector reforms in former Yugoslav Republic of Macedonia have not just been stagnating during the reporting period. Previous achievements have even been reversed, most notably by the amendments to the Energy Law of October 2014. In the electricity sector, the country may now well be the only one in Europe where customers are denied

the right to choose their supplier, a key principle of the *acquis*. Having some sympathy for the country's frustration with its experience in the EU accession process, the Secretariat will try to engage with the Government in a constructive dialogue aimed at overcoming the current situation.

Energy mix in primary production 2013 in ktoe



Gross inland consumption 2013 in ktoe



Source: EUROSTAT



4

Former Yugoslav Republic of Macedonia

7.1 Electricity

| Description of data [unit] | | | 2013 | 2014 |
|--|----------------------------------|---|-----------|-----------|
| Electricity production [GWh] | | | 5,676 | 4,982 |
| Net imports [GWh] | | | 2,491 | 3,073 |
| Net exports [GWh] | 51 | 66 | | |
| Total electricity supplied [GWh] | 8,116 | 7,989 | | |
| Gross electricity consumption [GWh] | | | 8,138 | 8,026 |
| Losses in transmission [GWh] | | | 159 | 152 |
| Losses in transmission [%] | | | 2.0% | 1.9% |
| Losses in distribution [GWh] | | | 990 | 914 |
| Losses in distribution [%] | | | 16.4% | 15.5% |
| Consumption of energy sector [GWh] | | | 187 | 205 |
| Final consumption of electricity [GWh] | | | 6,802 | 6,755 |
| C | Industrial, trans | sport, services and other non-residential sectors | 3,745 | 3,709 |
| Consumption structure [GWh] | Households (re | sidential customers) | 3,057 | 3,046 |
| Net maximum electrical capacity of power plants [N | /W] | | 1,953 | 2,011 |
| Coal-fired | | | 800 | 800 |
| | out of which: | multi-fired | 0 | 0 |
| | Gas-fired | | 287 | 287 |
| | out of which: | multi-fired | 0 | |
| | Oil-fired | | 210 | 210 |
| | Nuclear | | 0 | 0 |
| Net maximum electrical capacity | Hydro | | 649 | 663 |
| of power plants [MW] | | small hydro | 45.8 | 59.5 |
| | out of which: | pumped storage | 0 | 0 |
| | Other renewab | Other renewables | | 51.55 |
| | | wind | 0.0 | 36.8 |
| | . 6 111 | solar | 7.2 | 14.8 |
| | out of which: | biomass | 0 | 0 |
| | | biogas | 0 | 0 |
| | 380 kV or more | 380 kV or more [km] | | 507 |
| | 220 kV [km] | | 0 | 38 |
| | 110 kV [km] | | 1,722 | 1,758 |
| Horizontal transmission network [km] | HVDC [km] | | 0 | 0 |
| | Substation cap | Substation capacity [MVA] | | 2,700 |
| | Number of interconnectors | | 4 | 4 |
| | Interconnecting capacities [MVA] | | 5,424 | 5,424 |
| Total | | | 682,365 | 695,360 |
| Floatricity systemate | out of which: | out of which: non-households | | 253 |
| Electricity customers | Eligible custom | ers under national legislation | 9 | 253 |
| | Active eligible | customers | 9 | 253 |
| | | | | |
| Internal market | Electricity supp | lied to active eligible customers [MWh] | 1,753,000 | 2,433,603 |

Source: Energy Regulatory Commission of FYR of Macedonia (ERC)

a. Sector Overview

Former Yugoslav Republic of Macedonia's electricity sector is governed by the Energy Law of 2011, as amended in 2011,

2013 and 2014. The electricity market was opened on 1 April 2014 for all non-household customers with more than 50 employees and a turnover above EUR 10 million. They were no longer supplied at regulated prices: the customers entitled to

universal service had an option to remain with the incumbent supplier and to be supplied at regulated prices or to switch to competitive supply. An amendment to the Energy Law denied this eligibility right to small customers and households in October 2014. The household customers are forced to remain captive until 2020. The work on drafting a new Energy Law to transpose the Third Energy Package started in late 2013, but no draft has recently been presented to the Secretariat.

Key players in the electricity market are the state-owned utility *Elektrani na Makedonija (ELEM)* and *EVN Makedonija. ELEM* owns the majority of generation plants and operates a small distribution network. *EVN Makedonija*, owned at 90% by the Austrian utility *EVN*, owns most of the distribution assets.

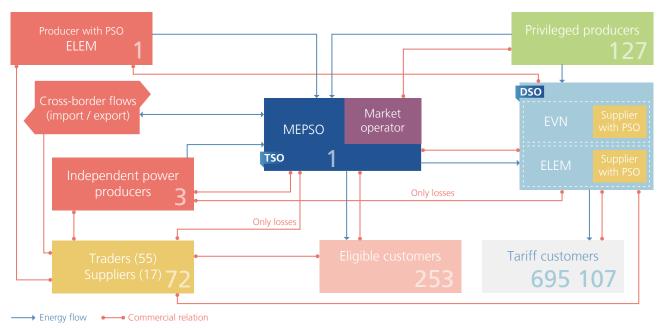
All household customers and more than 99,9% of all non-household customers are connected to the distribution system of *EVN*

Makedonija. The company also supplies 98% of electricity to the customers under regulated prices. EVN's and ELEM's licenses for supplying customers at regulated prices, expired in December 2014. They have subsequently become what the Law wrongly describes as suppliers of last resort for households and small customers.

Altogether, the Energy Regulatory Commission (ERC) has issued 17 licenses for supply of electricity to end-customers and more than 60 licenses for trade on the wholesale market.

The transmission network is operated by *Makedonski Elektro*prenosen Sistem Operator (MEPSO), a state-owned company responsible for electricity transmission, electric power system control and balancing. *MEPSO* also performs the functions of a market operator.

Former Yugoslav Republic of Macedonia's Electricity Market Scheme



Source: Complied by the Energy Community Secretariat Refer to the market schemes legends on page 248 for a more detailed description.

b State of Compliance

1. Authorisation

The procedure for permits for construction and operation of new facilities set by the Energy Law and the secondary legislation is compliant with the Directive. ERC issues licenses for all major energy activities.

2. Unbundling

Unbundling requirements for transmission and distribution system operators are not transposed and where they have not yet been properly implemented.

Legal unbundling of the transmission network operator *MEPSO* has been implemented. *MEPSO* as well as the incumbent generator *ELEM* are fully state-owned. The unbundling requirements of the Third Energy Package have not been transposed and no measures have been taken towards further unbundling.

Whilst the Energy Law of 2011 transposes unbundling requirements on distribution system operation, its implementation is still to follow. The Law does not envisage exemptions for operators with less than 100,000 customers. Also functional unbundling remains to be completed, *ELEM* has not submitted its compliance programme and the compliance programme prepared by *EVN* is still subject to ERC's approval. The appointment of compliance officers is pending. Both distribution system

operators hold a supply license for supply of last resort and supply customers at regulated prices. As they do not publish their financial statements separately for each of their regulated activities, the two distribution system operators are in breach of the accounting unbundling requirements.

3. Third Party Access

The Energy Law and the respective Grid Code provisions on third party access comply with the *acquis*. Implementation needs to be improved, particularly information on the terms and conditions for access.

The Network Tariffs for Transmission and Distribution Network Operators are set by ERC for a three year period and are subject to annual review. In June 2014 ERC adopted new network tariffs providing for cost-reflective allocation of distribution costs and transparency of information on the cost drivers in the tariff structure.

The allocation of cross-border capacity is conducted through yearly, monthly, weekly and intra-day auctions. Capacities are split 50:50 with neighbouring systems. The Allocation Rules approved by ERC comply with Regulation (EC) 1228/2003, but Regulation (EC) 714/2009 has not been transposed. *MEPSO* is not participating in any regional capacity allocation initiatives. Taxation problems allegedly prevent *MEPSO* to join the regional capacity allocation body of *SEE CAO* or to implement joint auctions with *EMS*.

The transparency requirements related to terms and conditions for access to the network and other information from Regulation (EC) 714/2009 are not transposed in primary or secondary legislation.

4. Eligibility

Eligible customers are customers connected to the transmission network and customers connected to the distribution network, with more than 50 employees and annual turnover exceeding EUR 10 million. The amendment of the Energy Law in October 2014 abolished the eligibility status for small customers and households, initially granted as of 1 April 2014 and 1 January 2015 respectively. Small customers and households have to remain captive, until being gradually granted the right to switch supplier according to the following schedule:

- small customers with an annual consumption above 1 GWh in 2015 will be eligible as of 1 July 2016,
- small customers with an annual consumption above 500 MWh in 2016 will be eligible as of July 2017,
- small customers with an annual consumption above 100 MWh in 2017 will be eligible as of 1 July 2018, and,
- small customers with an annual consumption above 25 MWh

in 2018 will be eligible as of 1 July 2019.

Instead of 1 January 2015, the eligibility of the households has been delayed until 1 July 2020. Prohibition for small customers and households to choose their supplier is a breach of the Treaty. In January 2015 the Secretariat opened an infringement procedure against former Yugoslav Republic of Macedonia for its failure to comply with the Energy Community's eligibility rules.

ERC defines the switching rules in the Rules for the Supply of Electricity. In forbidding final customers with outstanding debts to switch a supplier, the Rules constitute another obstacle to eligibility in practice.

5. Market Opening and Price Regulation

In former Yugoslav Republic of Macedonia, eligible customers are obliged to switch supplier and cannot be supplied at regulated prices. All electricity customers, except small customers and household customers, had the obligation to switch as of 1 April 2014. The list of eligible customers is published by *MEPSO* and the latest update counts 241 eligible customers. New suppliers have already entered the market.

For some, primarily state-owned companies, procuring in the competitive market has proven cumbersome as the Public Procurement Law obliges them to purchase electricity through tender procedures. Mandatory and lengthy public procurement procedures thus implicitly impede market opening.

Public service obligations include supply of last resort and electricity generation to meet the demand of the suppliers of last resort. Incumbent suppliers are to act as suppliers of last resort for captive customers without time limitation. This is in breach of Article 3 of the Directive. Regulated supply contracts between tariff customers and suppliers of last resort will be valid until 2020.

ERC additionally regulates the price at which the incumbent generator *ELEM* sells electricity to the suppliers of last resort. This amounts to an excessive and disproportionate public service obligation detrimental to the functioning of the wholesale market.

6. Balancing

The Market Rules from February 2014 establish the principles for balance responsibility for the market participants involved. Imbalances are settled on an hourly basis. To enable participation, distribution system operators developed standardized load profiles for market participants without hourly load registration.

Balance responsible parties are registered in 41 balancing groups, out of which seven have more than one market participant. Although imbalances are calculated for all balancing groups, the costs are charged only to eligible customers and their respective balancing groups. Undertakings with an obliga-

tion to provide public services (including regulated generation, distribution and supply by *ELEM* and distribution and supply by *EVN*, *MEPSO*) are exempted from the imbalance charges.

As part of its public service obligation, *ELEM* is currently the provider of the ancillary services. As of January 2015, *MEPSO* was to procure ancillary service in a market-based procedure on the balancing market, but the procurement and provision of balancing energy still remains regulated. This poses an obstacle hindering former Yugoslav Republic of Macedonia from participating in any regional initiatives, as required by the Treaty.

7. Customer Protection and Protection of Vulnerable Customers

Measures for customer protection, in particular consumer rights, as defined in the Annex I of Directive 2009/72/EC, are not properly transposed.

ERC is in charge of the protection and promotion of rights of consumers and system users. Some principles of customer protection are defined in the Rules for the Supply of Electricity.

The notion of vulnerable electricity customer has not been explicitly defined in the Energy Law. The Government implements the Annual Programme for the Reduction of Energy Poverty, offering monthly financial subsidies for consumed energy. Households belonging to a social protection scheme can claim reimbursement for their monthly domestic energy consumption.

c. Conclusions and Priorities

Former Yugoslav Republic of Macedonia has missed the deadline for implementation of the Third Package by 1 January 2015.

Amendments to the Energy Law in October 2014 entailed several instances of non-compliance with the Treaty, including impediments to market opening, suspension of already existing eligibility right and prevention of regional market integration.

Therefore, the adoption of new legislation is urgently needed to overcome not only the breaches introduced in October 2014, but also to ensure proper transposition of the requirements of the Third Package, particularly in terms of market opening, unbundling and efficient regulatory powers and independence.

Any obstacles to trade and market integration should be removed, including obstacles of a fiscal nature.

Excessive price regulation, such as wholesale price regulation, must be eliminated without delay. Public service obligations should only be applied as a tool for overcoming market failure and not as an instrument to obstruct the developments of markets.

Former Yugoslav Republic of Macedonia must effectively implement its Market Rules, particularly regarding the procurement of balancing energy and setting prices for ancillary services and balancing energy.





7.2 Gas

| | | | 2013 | 2014 |
|--|---|---|---------|------------------|
| Natural gas production [Bcm] | 0 | 0 | | |
| Imports flows [Bcm] | 0.1586 | 0.1347 | | |
| Exports flows [Bcm] | 0 | 0 | | |
| Stock changes [Bcm] | 0 | 0 | | |
| Total supply [Bcm] | 0.1586 | 0.1347 | | |
| Gross consumption of natural gas [Bcm] | 0.1586 | 0.1347 | | |
| Consumption in energy sector [Bcm] | 0.1255 | 0.0947 | | |
| Available for final consumption of natural gas [Bcm] | 0.0331 | 0.0400 | | |
| Interconnectors' capacity [Bcm] | Total | | 0.80 | 0.80 |
| interconnectors capacity [bcm] | | out of which bidirectional | 0 | 0 |
| Storage working capacity [Bcm] | | | 0 | 0 |
| Length of transmission network [km] | | | 181 | 181 |
| Length of distribution network [km] | | | 29 | 37 |
| | Total | | 99 | 116 |
| | out of which: | Non-households | 60 | 71 |
| Natural gas customers | | Eligible customers under national legislation | 3 | 5 |
| | | Active eligible customers | 3 | 5 |
| | | Households | 36 | 40 |
| Internal market | Gas supplied to active eligible customers [Bcm] | | 0.125 | 0.1106 |
| internal market | Share of total of | Share of total consumption [%] | | 82.11% |
| Final consumption of natural gas per sector [Bcm] | | | 0.1582 | 0.1347 |
| | Energy transfor | Energy transformation | | 0.0452 0.0495 |
| Consumption structure [Bcm] | Industry and co | Industry and commercial customers | | 0.0400 |
| | Households | | 0.00004 | 0.00004 |
| | | | | |

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

a. Sector Overview

There is no domestic gas production in the country. Almost the entire consumption, *approx*. 140 mcm per year, is imported from Russia through the only entry point at the Bulgarian border. Natural gas is mainly consumed for electricity and heat production and by industrial customers. Households have only a very small share of consumption. The distribution network in the city of Strumica, in the South of the country, is not connected with the transmission network at all and supply is ensured by truck transport of compressed natural gas (CNG) from Bulgaria.

15 licences have been issued for trade and five for supply. *Makpetrol* imports gas under a long-term contract with *Gazprom* and three big consumers import gas individually for their own needs. *Prom-gas,* a subsidiary of *Makpetrol*, acts as a supplier and, since 15 December 2014, also as a supplier of last resort. A transmission system operator, *GAMA*, is jointly controlled by *Makpetrol* and the state, operating 98 km of the main transmission pipeline and 82 km of branch pipelines.

In terms of gas infrastructure development, a law concerning the construction of the pipeline section Klecovce–Block Station 5 (near Shtip) was adopted in 2014. Construction of the 61 km long section of the pipeline Klecovce-Shtip-Negotino-Kavadarci started in March 2015 within the framework of a clearing agreement with the Russian Federation by *Macedonia Energy Resources (MER)* and a Russian company. 80% of financing is provided from clearing debts whereas the rest of the investment is ensured by the Government. Negotiations for an *EBRD* and *World Bank* loan for construction of another 300 km of transmission pipelines, Shtip–TEP Negotino-Kavadarci, Negotino-Prilep-Bitola, Shtip-Radovish-Hamzali to the border with Bulgaria, Hamzali-Stojakovo to the border with Greece, and Skopje-Tetovo-Gostivar, are ongoing.

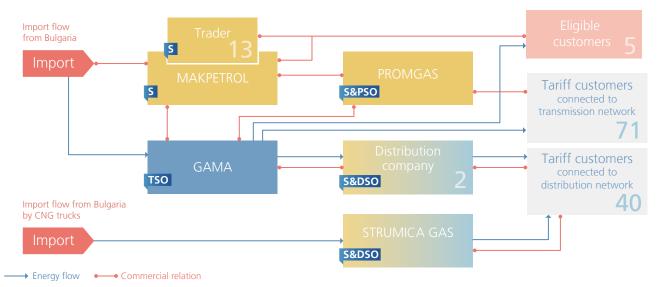
In 2014 the Government launched a public tender for a public private partnership contract for development of a gas distribution system in the Skopje region. A tender for the Eastern and the Western region was launched at the end of 2014, but failed. A follow up tender will be launched during 2015.

The natural gas market is governed by the Energy Law of 2011 and secondary legislation, namely the Supply Rules, the Rules on Supply of Last Resort, the Transmission Grid Code and the Tariff Methodologies. In January 2014 the Energy Regulatory Commission (ERC) approved the Natural Gas Market Rules, which were subsequently amended in June and September 2014. The Distribution Grid Codes were approved by ERC in April 2015.

The Regulation on Security of Supply, adopted by the Government in 2013, complements the legislative framework for natural gas.

The work on drafting a new Energy Law to transpose the Third Energy Package started in late 2013. The working group is developing a final proposal to be submitted to the Government. During the reporting period, the Secretariat has not received any new versions of the draft Law for review or updates on its status.

Former Yugoslav Republic of Macedonia's Gas Market Scheme



Source: Energy Regulatory Commission of FYR of Macedonia (ERC), compiled by the Energy Community Secretariat, status as of 31. 12. 2014 Refer to the market schemes legends on page 248 for a more detailed description.

b. State of Compliance

The Energy Law currently in force transposes only those requirements of Directive 2009/73/EC which remained the same as in Directive 2003/55/EC. All novelties introduced by the Third Package are yet to be transposed.

1. Authorisation

The Energy Law requires a license by ERC to perform an energy activity and an authorisation by the Government and local authorities to construct a new transmission or distribution network. The procedures for both licensing and construction authorization are transparent, objective and public. However, they are not fully in line with Directive 2009/73/EC, as they fail to require a notification of refusals to the Secretariat as well as provisions on facilitating authorisation procedures for new facilities which are important for the development of the internal gas market.

The differentiation between licenses for transmission and transmission system operation continues to breach the Law of 2011, which does not allow the same entity to hold both licenses. Both licences are held by *GAMA*. Moreover, *MER* has

been authorized by the Government to develop a transmission network while an application for the transmission system operation license is pending since 2012. Furthermore, allowing public private partnerships as the only model for constructing gas distribution grids leads to discrimination of all other possible models.

2. Unbundling

At present, *GAMA*, acting as transmission system operator, is under joint control of the State and *Makpetrol*, the biggest gas importer and supplier. The operation of this vertically integrated company does not comply with the unbundling requirements of Directive 2009/73/EC.

Each of the three existing distribution companies has less than 100,000 customers. They are at the same time licensed for supply and distribution system operation, which is compliant with the *acquis*.

3. Third Party Access

The Energy Law defines conditions for third party access in line with Directive 2009/73/EC. An exemption procedure for new

infrastructure with the involvement of the Energy Community Regulatory Board and the Secretariat is missing. Further, reasons for refusal, as limited by the Directive, have not been transposed properly, allowing for broad refusals in "cases of risk to the reliability of supply".

Obligations to provide third party access services are included in the Law. The Transmission Grid Code and the Gas Market Rules transpose the requirements for capacity allocation and transparency, but not in a sufficiently detailed way to be compliant with the requirements of Regulation (EC) 715/2009 as regards cross-border issues and assessing market demand for new investment. The regulatory authority approves both the methodology and the tariffs for access to the transmission and distribution systems.

An entry-exit transmission tariff system as required by Regulation (EC) 715/2009 is not in place.

4. Eligibility

According to the Energy Law, all customers have been granted eligibility status conditioned by the adoption of secondary legislation. The Gas Market Rules of January 2014 provide these conditions, but practical implementation was postponed at first until 1 October 2014, and then until 1 January 2015. ERC argued that the application of the Rules needed to be postponed on account of non-existence of all necessary players. The lack of establishment of a supplier of last resort prevented customers to acquire eligibility for one year.

Nevertheless, the licence for supply of tariff customers has been changed into a licence for supply of last resort, which was given to the same entity, *Promgas*, on 15 December 2014. Thus, all customers are formally eligible from 1 January 2015.

Switching Rules were developed as part of the Gas Market Rules.

5. Market Opening and Price Regulation

In practical terms, only three big customers, with annual consumption above 10 mcm (*TE-TO AD Skopje*, *Kogel Sever* and *Proizvodstvo EE*) exercised eligibility by changing supplier, *i.e.* by cancelling the previous contracts with *Makpetrol* and importing gas directly. Another big customer (*Makstil*) is supplied at market prices under a contract with *Makpetrol*.

Until the end of 2014, all other customers directly connected to the transmission network were captive customers supplied at regulated prices by *Promgas*. Since 1 January 2015 they are eligible customers supplied by the supplier of natural gas *Promgas* at market prices. The customers which are directly connected to the distribution networks, supplied by the *DTIRZ*, *Kumanovo Gas* and *Strumica Gas*, are also being supplied at market prices. In the first half of 2015, there was no case of a request by a customer to be supplied by the supplier of last resort at regulated prices.

Most of the customers in the country are non-household customers connected to the transmission network (with the exemption of around 40 household customers in the city of Strumica, with an isolated distribution network and supplied by *Strumica gas*). Industrial customers are supplied at market prices since the beginning of this year, however by the same supplier, which had previously been their supplier at regulated prices.

6. Balancing

The Transmission Grid Code of 2009 introduces general principles for balancing on a monthly basis. The Gas Market Rules further developed the balancing rules, introducing balancing groups, balancing responsibility and imbalance charges. They are in line with Regulation (EC) 715/2009.

7. Security of Supply

The provisions of Directive 2004/67/EC have been fully transposed by the Regulation for the Criteria and Conditions for Proclamation of State of Crisis in the Supply of Natural Gas adopted by the Government in 2013.

8. Customer Protection and Protection of Vulnerable Customers

General measures for customer protection are stipulated in the Energy Law of 2011 and elaborated further by the Natural Gas Supply Rules of 2012. They are not fully in line with Directive 2009/73/EC since some provisions (energy efficiency measures, prepayment, etc.) are missing. In particular provisions related to vulnerable customers have not yet been defined as required by Directive 2009/73/EC. However, protection of vulnerable customers is implemented in practice as a programme for subsidizing the consumption of energy where the Government allocates monthly funds covering part of the costs for energy (electricity, heating energy, natural gas and other) for social aid recipients is in place since 2010.

c. Conclusions and Priorities

The transposition of the Third Energy Package is not moving ahead at the required pace. For former Yugoslav Republic of Macedonia, transposition and implementation of Directive 2009/73/EC and of Regulation (EC) 715/2009 should be the ultimate priority. The deadline of 1 January 2015 for transposition of the Third Energy Package was missed.

The establishment of a fully functioning transmission system operation was an issue of dispute which relates to the shared ownership of the existing network between *Makpetrol* and the State. Transposition and implementation of Directive 2009/73/EC, with a focus on defining the appropriate unbundling model, could help to resolve this deadlock situation and determine the further development of infrastructure and the market in the country.



7.3 Regulatory Authority

a. Organisation, Competences and Assessment of Independence

The Energy Regulatory Commission (ERC) is the single authority for regulating the energy sector of former Yugoslav Republic of Macedonia equipped with country-wide regulatory competences in the gas and electricity sector. ERC is headed by five Commissioners one of which acts as President. The term of the Commissioners is limited to a period of five years, renewable once. A rotation scheme as required under the Third Energy Package is not in place. Appointment requirements for Commissioners are prescribed in detail by law, including explicit reference to political independence and based on a public vacancy announcement. A 2014 amendment to the Law introduced the requirement for applicants to pass a psychological and integrity test with undefined criteria. This requirement unduly limits the transparency of the selection processes and has potential for misuse. Also, a selection committee of neutral experts for short-listing applicants should be introduced in order to better decouple the appointment procedure from politics. The current selection is based on a proposal of the Government and subject to approval by the Parliament.

Dismissal of Commissioners may happen in cases of conflict of interest but also in case of performing office duties in an "unconscious and unprofessional manner". The potential for misuse of this provision is, however, cushioned by the fact that fulfilment of this criterion has to be confirmed by ERC itself based on a positive vote of at least three Commissioners.

Former Yugoslav Republic of Macedonia has not yet transposed the Third Package. ERC's competences need to be extended to the complete set of regulatory powers and objectives foreseen under the Third Package. No progress has been made compared to 2014 in terms of regulatory independence. ERC is by law set up as an institution legally distinct and functionally independent from any other public entity. Establishment of ERC is solely based on legislation meaning that it cannot be liquidated by act of another public institution.

In principle, ERC takes binding decisions autonomously and independently. This is supported by a legal prohibition for top management and staff to execute political functions, have interest in regulated utilities or have an employment relationship with the energy sector entailing sanctions (dismissal) in case of non-compliance. At the same time ERC's decisions are open to judicial review and are by law required to be duly substantiated and justified for this purpose. Also, ERC ensures impartiality and transparency of its decision-making via active stakeholder involvement. Moreover, sessions of the Commission are public and legal provisions list cases for which the involvement of

stakeholders (i.e. public hearings) is compulsory. Publishing information on the reflection of stakeholders' views in Board decisions should become mandatory.

A requirement for the statutes to be approved by the Parliament represents an undue intervention in ERC's autonomy to define its internal organisation.

ERC has autonomy in defining its Annual Work Programme as well as on set up and use of its Annual Budget. The legally required approval of the regulator's budget by the Parliament per se does not necessarily have to be seen critically since it, so far, has not ben used for any intervention in the regulator's right to freely allocate its budget.

ERC ensures accountability of its activities by presenting its Annual Report to the Parliament, Ministry and Government.

Management is independent in relation to staff appointment and organisation of the internal structure including autonomy in setting of salaries. ERC salaries are comparable with salary levels of the public sector for Commissioners and slightly higher salary levels of staff members compared to the public sector.

On the regional level, ERC is relatively active in the Energy Community Regulatory Board (ECRB). However, on the national level ERC does not live up to its legally granted independence and, in particular, still does not take the active role necessary for tackling competition barriers in the energy market. In particular, ERC has neither shown activity to promote participation of the electricity transmission system operator *MEPSO* in regionally coordinated capacity allocation and congestion management procedures nor expressed resistance, or even concerns, against the postponement of the electricity market opening until 2020. To this extent, genuine independence has not been proven yet.

b. Conclusions and Priorities

The following changes in law and regulatory practice are key priorities for ERC in order to comply with the Third Package:

- ERC's competences need to be expanded to the complete set of regulatory powers and objectives foreseen under the Third Energy Package.
- A rotation scheme for Board members needs to be introduced.
- 3. The requirement for applicants for the post of Commissioner to pass a psychological and integrity test needs to be abol-

ished or complemented by transparent assessment criteria.

- 4. A selection committee of neutral experts for short-listing applicants for Commissioner posts should be introduced.
- 5. The requirement for the statutes to be approved by the Parliament represents an undue intervention in ERC's autonomy to define its internal organisation and needs to be abolished.
- 6. ERC needs to make more active use of its independence.
- 7. Transparency should be improved in relation to decision-making rules and information on the reflection of stakeholders' views in Board decisions.





7.4 Oil

a. Sector Overview

There was no import of crude oil into former Yugoslav Republic of Macedonia in 2014. While the domestic refining capacity is 2.5 mt/year, there was also no production of petroleum products in 2014. The export of petroleum products has increased by 23.3% to 181.5 kt. The import of petroleum products has also increased by 28.6% to a level of around 1.092 kt in 2014. The overall consumption of petroleum products in 2014 was 858.5 kt, an increase of around 10% compared to 2013.

The storage capacity for crude oil and oil products totals 557,200 cm, 382,000 cm of which are owned by the refinery *OKTA* and 195,000 cm of crude oil storage capacities were rented in the port of Thessaloniki. The company *Makpetrol* owns *approx*. 150,000 cm, *Lukoil* 5,200 cm and other wholesale trade companies *approx*. 20,000 cm.

The Law on Compulsory Oil Reserves, which transposes Directive 2009/119/EC, entered into force in October 2014. The Law was supposed to be applicable as of 1 January 2015. However, on 2 December 2014, the Parliament amended the Law on Compulsory Oil Reserves, postponing the application of the Law for one year to 1 January 2016. This Law establishes the obligation to build maintain minimum stocks of crude oil and/or oil derivatives in the form of compulsory oil reserves. It determines the manner and conditions for the creation, storage and maintenance of the compulsory reserves. The Law also introduces the necessary procedures for responding to a severe shortage of oil derivatives in the market.

While the approval of this Law represents a significant step forward, it must now be followed by the development and approval of by-laws.

The development of an Action Plan for the Establishment of Compulsory Reserves and the preparation of the secondary legislation related to the transposition of the Annexes to Directive 2009/119/EC are being supported by the Secretariat and are expected to be prepared/approved no later than 1 January 2016.

b. Conclusions and Priorities

Former Yugoslav Republic of Macedonia is the second Contracting Party that has transposed the most relevant provisions of Directive 2009/119/EC. The main priority during 2015 should be the approval of the secondary legislation related to the transposition of the Annexes to Directive 2009/119/EC, namely a Decision on the Quantity and Structure of the Compulsory Oil Reserves for the current year, a Decree prescribing the manner of determining and calculating the amount and reimbursement of expenses for maintaining compulsory reserves, a Decree prescribing the manner of determining and calculating the amount of the fee for oil reserves, as well as the content, manner and submission deadlines for data on the placement of oil derivatives in the country. In addition, the Action Plan for the Establishment of Compulsory Reserves and the Intervention Plan in the event of an emergency disruption to the supply of the market with crude oil and oil derivatives needs to be approved.





7.5 Renewable Energy

a. Sector Overview

1. State of Play, Legislation and Promotion of Renewable Energy

Former Yugoslav Republic of Macedonia has committed to a binding target of 28% in overall energy consumption. Currently, Directive 2009/28/EC is only partly transposed by the Energy Law of 2011. The *National Renewable Action Plan (NREAP)* has not been adopted. The country is in breach of Directive 2009/28/EC.

The Energy Law of 2011 includes a chapter on renewable energy determining measures for the transposition of the Directive. Based on the Energy Law, several by-laws have been adopted.

The Government has still not adopted a *NREAP* because of differences between the adopted binding targets for 2020 calculated based on consumption surveys in 2009 and the existing official data on consumption of biomass of the State Statistical Office. During 2015, further analysis of energy consumption of households in the country, including from biomass, will be conducted by a survey to be realised by the State Statistical Office.

2. Electricity from Renewable Sources

Support for promotion of renewable energy by the Government is the feed-in tariff system. Currently feed-in tariffs exist for small hydro, wind, solar PV, biomass, and biogas. The Decree on Electricity Feed-In Tariffs stipulates in detail the specific terms and conditions required from a power plant in order to qualify for obtaining the status of preferential electricity generator, the upper threshold of a power plant's installed capacity, the electricity feed-in tariff and the period of their application. It is expected that tariffs for cogeneration power plants using biomass will be adopted in the near future. Feed-in tariffs are reviewed once a year or more often if necessary to keep in line with the cost of technology. The Ministry of Economy is in charge of adjusting the support for renewable energy to ensure the country meets its target. Technology caps have been introduced for wind (100 MW), solar PV (18 MW), biomass (10 MW) and biogas (7 MW) until 2020.

The market operator, established within the transmission system operator *MEPSO*, is obliged to buy all the electricity produced from preferential producers. Power purchase agreements are offered for 20 years for hydro and wind, and 15 years for solar PV, biomass and biogas. The contracts are based on a template which has been approved by the Energy Regulatory Commission, ERC.

The Ministry of Economy is responsible for issuing authorisations to build new energy power plants with capacity above 10 MW. The competence for issuing water concessions for electricity generation from small hydropower plants with capacity below 5 MW is within the Ministry of Environment and Spatial Planning. The regulator issues electricity generation licenses and grants preferential producer status (relevant for feed-in tariffs) for electricity generated from renewable sources. It also maintains a registry with all preferential producers. No authorisation is required for capacities below 10 MW or for capacities for electricity production for own needs.

Legislation differentiates between renewable energy plants based on their technology. Simpler permit and licensing procedures are applied to small-scale projects below 1 MW and for the construction permit or environmental licensing for power plants up to 10 MW. No authorisation procedure is required at all for renewable energy capacities below 10 MW for own consumption.

The Ministry of Transport and Communications is responsible for issuing permits for construction of renewable energy plants at or above 1 MW installed capacity. The municipal governments are in charge of issuing construction permits and permits for use for renewable energy plants below 1 MW. For hydropower installations, a public tender procedure is in place based on a 2012 Law on Concessions and Public Private Partnership. The highest bid for the concession fee determines the winner and, for small hydropower units below 10 MW, it also guarantees the feed-in tariffs valid at the time of tendering.

A new Law on Spatial and Urban Planning was adopted in December 2014 to further simplify the administrative procedures and shorten the timeframe to a maximum of 220 days. The planning timeframe has been shortened to 95 days, in urban planning to 110 days, and as regards property issues to 15 days. Moreover, the new Law on Urban and Spatial Planning simplified the requirements for small hydropower plants by eliminating some steps and shortening the timeframe. Amendments to the Law on Construction in 2014 and 2015 resulted in the shortening of the administrative procedures in this area to a total of 60 days.

According to the Energy Law, the Energy Regulatory Commission issues licenses for producing electricity from renewable energy sources and decides on the status of preferential renewable energy producers according to the procedure described in the Rulebook on Preferential Producers.

There is no priority or guaranteed access for electricity produced from renewable sources in the legislation. However, priority dispatch for electricity generated from renewable sources is implemented in practice. The market operator must purchase all the energy delivered to the grid by renewable energy producers that have been granted preferential status at the approved feed-in tariffs.

Preferential producers are not charged for their imbalance. A balancing group created by the market operator takes balance responsibility for all preferential producers. Preferential producers with capacities above 10 MW have to submit daily physical nominations to the market operator. Starting 2015, large preferential producers are obliged to take balance responsibility.

To improve connection procedures the Distribution Network Codes have been amended three times during 2014. The new Transmission Grid Code has also been approved by the regulator at the end of 2014. With these amendments the application form for connection to the grid has been simplified. The initiation of the process for connection to the grid before the construction permit is issued is now possible. *MEPSO* reduced the time taken to issue different types of permits as well as the timeframe for realisation of the connection to the grid. All these measures resulted in shortening of the timeframes to 155 days.

According to the Network Codes, producers shall bear all connection and technical adaptation costs pursuant to a methodology stipulated therein. However, the Energy Law allows the regulator to oblige the competent operator to cover the connection costs of preferential generators and recover the costs incurred as part of the regulated services price when needed to

provide incentives to promote renewable generation or when necessary to attain the targets set out in the Government's Renewable Energy Strategy. Cost sharing rules governing how costs should be distributed between subsequently connected producers that benefit from the same reinforcements and new connection facilities are defined in the Distribution Network Code, while in cases of connection to the transmission system this issue is not as clearly defined, being handled on a case-by-case basis.

The Energy Agency is appointed as the issuing body for guarantees of origin for the electricity generated from renewable sources. The Government adopted the Rulebook that regulates, among others, the terms and procedures for issuance, transfer and cancellation of guarantees of origin, recognition of guarantees of origin issued by foreign states and keeping of an electronic registry. A guarantee of origin can be issued to an electricity generator that produces electricity from renewable energy sources only if it is recorded in the register and in the case it does not receive operation support based on feed-in tariffs.

3. Renewable Energy in Heating and Cooling

In order to stimulate the use of solar energy in the country, since 2007 the Ministry of Economy has been granting each year (except in 2008 and in 2010) investment subsidies for reimbursement of part of the costs for installing solar thermal collectors in households covering 30% of the total investment, with a cap of EUR 300 per household. The Government also adopted a decision lowering the VAT rate for solar collector systems from 18% to 5% which is still valid.



The Energy Law also provides a legal basis for the establishment of financial support mechanisms to promote renewable energy in heating and cooling, which would also be ensured upon the establishment of the Energy Efficiency Fund envisaged in the legislation. Further, the Government decreased the price of wood biomass for 10% for households and 20% for recipients of social subsidies in order to stimulate the use of biomass during the period of the European financial crisis.

4. Renewable Energy in Transport

The draft *NREAP* envisages a target for biofuels of 10.3% by 2020. This would require consumption of *ca.* 58 ktoe of renewable energy in transport. However, the share achieved in 2009 was 0.7%, 0.41% in 2010, and 0% in 2012. Former Yugoslav Republic of Macedonia thus falls short of increasing the share of biofuels in transport as envisaged.

The legislative framework for biofuels consists of the Energy Law of 2011 and the Rulebook on the Quality of Liquid Fuels. It provides a possibility for blending diesel and motor fuels with 5% and more of biofuels. Currently, diesel mixed with 8% biodiesel is sold on the market. ERC is mandated to determine biofuels prices.

A working group was set up by the Ministry of Economy to prepare a draft Law on Biofuels and relevant secondary acts with consultancy support. The legislative package is expected to be adopted in the second half of 2015.

According to the draft Law, production of biofuels shall be supported through incentives to be calculated on the basis of the quantity of biofuels that are produced and supplied in former Yugoslav Republic of Macedonia to the obligatory biofuel quota suppliers or to end-users. The Government will also adopt an Ordinance on the Promotion of the Production of Biofuels for Transport. Further, according to the draft Law, the Government shall adopt a National Action Plan on Biofuels for a period of ten years. The draft Law defines the overall national target, while annual mandatory targets for placing on the market will be defined by the Action Plan.

The Government intends to achieve the 10% renewable energy target in transport through biofuels and bioliquids from imports and from domestic production. A small number of facilities for the production of biofuels exist in the country. The first refinery for biodiesel production was opened by the private company *Makpetrol* in 2007, with a capacity of 20,000 t/year. Three smaller factories produce biodiesel with a total capacity of 5,000 t/year. Most of the biofuels are exported. Only ca. 1,000 tonnes were sold domestically in 2013.

b. State of Compliance

Despite the progress in some areas during the reporting period, the existing legal framework is still non-compliant. The Energy Law currently under revision must transpose the missing provisions of Directive 2009/28/EC. Upon the finalisation of the "Biomass Consumption Survey Study", the energy balance has to include the revised renewable energy consumption so as to ensure the country is on track to meet the 2020 renewable energy targets.

1. National Renewable Energy Action Plan

The NREAP describing the policies and measures aiming to achieve the 28% renewable energy target in 2020 has not been adopted and notified to the Secretariat. Therefore the country fails to comply with Directive 2009/28/EC which is subject to a Reasoned Request by the Secretariat. In the draft NREAP, there is still some confusion about the target of 28%. The draft envisages three possible scenarios for reaching 21.1%, 24.32% and 28% in 2020. Moreover, a 2011 Government Decision which stipulates a 21% renewable energy target is still in force. This must be clarified and corrected in a binding manner in the NREAP.

2. Support Schemes

Support schemes for various technologies have been adopted. However, the caps on capacities imposed for several types of renewable sources like wind, solar, biomass and biogas until 2020 have to be revised with a view to ensure the country will reach the renewable energy targets in 2020 in the most cost-effective way.

3. Cooperation Mechanisms

The provisions related to cooperation mechanisms among Contracting Parties or with EU Member States have not been transposed.

4. Administrative Procedures

In the last years, steps have been taken to remove some of the barriers related to administrative procedures like authorization, urban planning and property issues. Deadlines have been shortened and unnecessary procedural steps have been abolished. However, there are no clear mechanisms for coordination of the different authorities. Authorisation, certification and licensing rules are not always objective and non-discriminatory in practice. The creation of a one-stop shop for all permit applications is envisaged in the future without concrete plans. Availability of information for interested parties has to be further increased. Full compliance with Article 13 of Renewable Energy Directive is not achieved yet.

5. Access to and Operation of the Grids

Particular rules regarding taking renewable energy into consideration in transmission and distribution network development planning are not in place. Principles for access to the networks and operation of the grids for renewable energy producers still have to be transposed in primary legislation. The Distribution

Grid Code has been amended to introduce a chapter for the connection of renewable energy installations to the distribution network. To comply fully with Article 16 of Directive 2009/28/EC, MEPSO and EVN as network operators also have to become more transparent towards the producers of renewable energy with regard to information on the estimated costs and timeframe for connections. ERC 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 there are cases of doubt in this project.

6. Guarantees of Origin

A certification system based on guarantees of origin has been established. The Energy Agency is in charge of the implementation of the certification system and the issuing body for these types of certificates. However, guarantees of origin are only given to producers which do not benefit from feed-in tariffs, which means that no guarantee of origin has been yet issued. A register for guarantee of origin is already established, but there are no applications at the moment, not even from the existing large hydropower plant producers. The country is currently non-compliant.

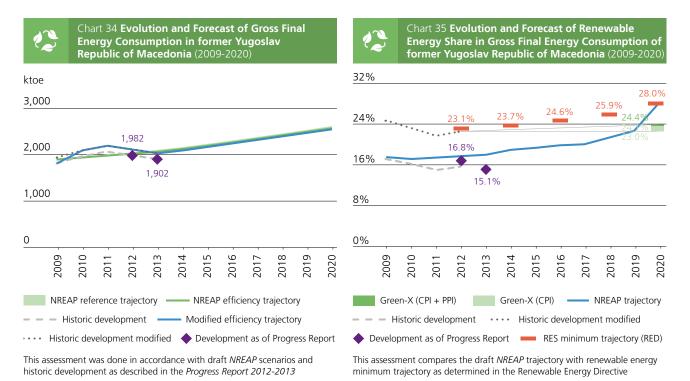
7. Renewable Energy in Transport

Articles 17 to 21 of Directive 2009/28/EC related to sustainability of biofuels have not been transposed. Currently, there is no certification scheme defined or relevant body established. It must be concluded that former Yugoslav Republic of Macedonia is completely incompliant with Directive 2009/28/EC in the transport sector.

c. Quantitative Assessment of the Progress towards National Renewable Energy Trajectory

In chart 34, the historic development of the gross final energy consumption (GFEC) is mostly in line with the planned trajectory in the draft *NREAP*. After a 4% increase from 2010 to 2011, in 2012 the GFEC went back to the level of 2010 and decreased even further in 2013. Therefore, in 2013 the actual GFEC is nearly 8% below the efficiency trajectory in the draft *NREAP*.

Chart 35 highlights the significant differences between the historic renewable energy share evolution according to energy balances in EUROSTAT database and the development that has been corrected with the biomass consumption data. In 2012, the difference was 6.6 percentage points (16.0% vs. 22.6%). Those differences lead to questioning the fulfilment of the indicative trajectory if no revision of biomass consumption is made. According to the EUROSTAT data, in 2013 the renewable energy share of the country was approx. 3 percentage points below the draft NREAP target, but with revised biomass data there would be a significant overachievement of the draft NREAP targets in 2013, as well in 2012. However, according to the modelling projections, former Yugoslav Republic of Macedonia will not reach its 2020 renewable energy targets by more than 5 percentage points, even in the case of adjusted biomass consumption based on the current policies or with planned policy initiatives.



Source Study on the Assessment of the National Renewable Energy Action Plans and the Progress in Promotion of Renewable Energy in the Energy Community, by ECN et all, 2015

d. Conclusions and Priorities

Former Yugoslav Republic of Macedonia failed to transpose Directive 2009/28/EC on time, including the 28% target. The adoption of the *NREAP* in line with the commitments taken to reach the 28% target remains the first priority for the country. A key precondition in this respect is to review the energy statistics on biomass consumption and to finalise energy data compilation based on consumption surveys in accordance with the *EUROSTAT* methodology.

The revision of the Energy Law to transpose the provisions of Directive 2009/28/EC must be completed immediately. The process of simplification and streamlining the procedures for authorisation, permitting, licensing and connection to the grids has to continue as it is critical for the further development of energy from renewable sources

For biofuels, it is to be recalled that uncertified production cannot be counted towards the fulfilment of the national target or exported to the EU, which in turn depends on sustainability criteria and an adequate certification system in place.





7.6 Energy Efficiency

| Energy Efficiency Ac | tion Plan (EEAP)* | | | | | | |
|--|-------------------|---|----------------|-------|----------|-------|--|
| Period covered by EEAP | | 2010 – 2018 | | | | | |
| Overall energy savings target - Directive 2006/32/EC (ktoe / % / year) | | | 147 / 9 / 2018 | | | | |
| EEAP status | | Final Draft 2 nd EEAP submitted in May 2014 – adoption pending | | | | | |
| Achieved energy savings 2010 – 2012 | | 41.9 ktoe (2.6%) | | | | | |
| | | Ministry of Economy; Energy Agency | | | | | |
| Main data and energy efficiency indicators** | | 2010 | 2011 | 2012 | 2013 *** | | |
| Total primary energy | supply (TPES) | ktoe | 2,883 | 3,107 | 2,968 | 2,746 | |
| Energy intensity (TPES/GDP) toe / 1,000 USD | | 0.41 | 0.42 | 0.41 | 0.36 | | |
| TPES/Population toe/capita | | 1.37 | 1.48 | 1.41 | 1.30 | | |
| Total final energy co | nsumption (TFEC) | ktoe | 1,823 | 1,952 | 1,874 | 1,815 | |
| | Residential | | 29% | 28% | 28% | 25% | |
| | Services | | 13% | 11% | 12% | 12% | |
| Share of TFEC by | Industry | % | 30% | 33% | 32% | 31% | |
| sector | | 70 | 25% | 24% | 25% | 27% | |
| | Others | | 2% | 1% | 1% | 1% | |
| | Non-energy use | | 2% | 3% | 3% | 3% | |

^{*} Source: Energy Community website / 2nd NEEAP of the Former Yugoslav Republic of Macedonia

a. Sector Overview

There is a clear indication that the final energy consumption was on a downward trend in 2012 and 2013 in former Yugoslav Republic of Macedonia, while the gross domestic product resumed growth in 2013. The positive trend is reflected in the decreased energy intensity in 2013 and the decoupling of economic growth from energy demand growth.

The Energy Law includes an extensive chapter on energy efficiency and establishes a good legal basis for the development of secondary legislation and implementation of Directives 2006/32/ EC, 2010/30/EU and 2010/31/EU. The Energy Law strongly emphasises the exemplary role of the public sector and requires mandatory energy measures for buildings, building units, equipment and plants owned or occupied by public entities. It also encourages the model of public private partnership through energy performance contracting. It further requires adoption of plans and programmes on energy efficiency, development of a monitoring system, obligatory energy audits for buildings and building units, certification of buildings and labelling of energy-related products. Moreover, the Law includes provisions for distribution system operators and suppliers to encourage promotion of energy efficiency by means of informative billing and publishing information on energy efficiency services.

In order to implement the energy audit scheme required by Directive 2006/32/EC, a Rulebook on Energy Audits, adopted in

June 2013 and amended in February 2015, further elaborates energy audit procedures. Trainings and exams for energy auditors started in 2014. Amendments to the Energy Law adopted in October 2014 enabled electronic examination of energy auditors and clarified the minimum energy efficiency requirements for construction of new buildings and major renovation of existing buildings.

The draft second *Energy Efficiency Action Plan (EEAP)* was submitted to the Secretariat in May 2014. The draft sets a less ambitious indicative overall energy savings target of 147.2 ktoe (9%) in 2018, compared to the first *EEAP* (12.2%). The draft second *EEAP* also sets an intermediary target of 80.1 ktoe (4.9%) to be reached in 2015. The Secretariat positively assessed the second *EEAP* as a good strategic document with a clear overview of the current situation and plans for improvement of energy efficiency. During 2014 a public debate was held, but the process of adoption was put on hold since August 2014 without any good reason.

According to the draft second *EEAP*, the energy savings achieved in 2012 amounted to 41.9 ktoe, which translates into 2.6% savings of final inland energy consumption, out of 9% planned for 2018.

The web platform for monitoring and verification of savings achieved through *EEAP* measures was finalised and the training of the responsible institutions continues.

^{**} Source: International Energy Agency

^{***} Indicators calculated by the Energy Community Secretariat based on preliminary energy balances for 2013

The Rulebook on Labelling of Energy-Related Products was amended in November 2012. It requires energy efficiency labels to be attached to a range of products corresponding to those addressed by Directive 2010/30/EU and the Delegated Regulations.

The Rulebook on Energy Performance of Buildings (adopted in June 2013 and amended in January 2015) includes a methodology for calculation of energy performance of buildings, certification of buildings, a supervision scheme, inspection of heating and air conditioning systems, obligations for installation of solar hot water collectors, etc. Moreover, a number of European Committee for Standardization (CEN) standards became mandatory through adoption of the Rulebook. However, the latest amendments to the Energy Law adopted in March 2015 deleted or amended certain articles dealing with energy audits and energy performance certification, restricting their application to new buildings only. Moreover, the implementation for existing buildings was postponed until accession to the European Union. This constitutes a clear breach of the obligation to implement Directive 2010/30/EU as a Contracting Party of the Energy Community.

Key institutions responsible for the promotion of energy efficiency are the Ministry of Economy and the Energy Agency. The Energy Law also provides a legal basis for the establishment of financial support mechanisms, including an Energy Efficiency Fund. During 2014, the Ministry of Economy undertook activities to establish the Fund.

b. State of Compliance

1. Energy Services Directive 2006/32/EC

Directive 2006/32/EC was transposed by the adoption of the Energy Law in 2011 and its amendments in 2013, as well as by secondary legislation (on energy audits, monitoring and management, etc.). In accordance with the Energy Law, the public sector is obliged to implement measures aimed at energy efficiency improvements in their premises. The draft second *EEAP* puts an adequate focus on the public sector.

However, the draft second *EEAP* has not been adopted at the time of publication of this Report, in spite of the fact that it was subject to a public professional debate in 2014 and sent to the Government for approval after the public consultation. The deadline for submitting the second *EEAP* to the Energy Community Secretariat was 30 June 2013. By not submitting the approved second *EEAP* to the Secretariat, former Yugoslav Republic of Macedonia fails to comply with this requirement of Directive 2006/32/EC.

2. Energy Labelling Directive 2010/30/EU

Directive 2010/30/EU and the Delegated Acts were transposed with the adoption of the Rulebook on Labelling of Energy-Related Products and its amendments of November 2012.

3. Energy Performance of Buildings Directive 2010/31/EU

Key provisions of Directive 2010/31/EU were incorporated in the Energy Law and in the Rulebook on Energy Performance of Buildings. However, the amendments to the Energy Law of March 2015 resulted in non-compliance with the following Articles of Directive 2010/31/EU: Article 11 (Energy performance certificates), Article 12 (Issue of energy performance certificates), and Article 13 (Display of energy performance certificates). The Secretariat will start infringement actions.

c. Conclusions and Priorities

Former Yugoslav Republic of Macedonia has progressed in the implementation of the energy efficiency *acquis* in the reporting period, including the update of primary and secondary legislation. However, the recent decision to postpone the implementation of the certification scheme shows a lack of political will to implement in full the requirements of Directive 2010/31/EU, but also to enable investments in building renovation.

The first priority for former Yugoslav Republic of Macedonia in the following period remains to adopt the second *EEAP* and to implement its measures. The Ministry of Economy should take the initiative to promptly unblock the Government's approval of the second *EEAP*, as a key policy document enabling investments in energy efficiency.

Further implementation of Directive 2010/31/EU remains a priority, in particular, with the development of calculation software and the cost-optimal level of minimum requirements of energy performance of buildings and building components.

Further transposition of the Labelling Delegated Regulations should start in 2015, in accordance with the Ministerial Council Decision of September 2014.

Finally, strengthening the institutional capacity in both the Ministry of Economy (the Energy Efficiency department) and in the Energy Agency is extremely important, as the existing human resources proved to be insufficient during the realization of the first *EEAP*. The draft second *EEAP* proposed also the establishment of the Energy Efficiency Fund, which is expected to strongly support the implementation of energy efficiency measures.



7.7 Environment

a. Sector Overview

1. Environmental Impact Assessment Directive

Environmental impact assessment is covered by the Environmental Law of 2005. The Law has been amended several times. Furthermore, several pieces of secondary legislation are in place transposing the Directive's requirements on screening and scoping. There were no legislative changes in the course of the last reporting period.

A total of three requests for environmental impact assessment related to the energy sector were submitted to the authorities of former Yugoslav Republic of Macedonia, one relating to the construction of overhead power lines and two related to installations for hydroelectric production. The first procedure concerns a Project of Energy Community Interest (the only one in former Yugoslav Republic of Macedonia), namely the 400 kV overhead line between former Yugoslav Republic of Macedonia and Albania (Bitola-Elbasan). It was completed in 2015.

2. Sulphur in Fuels Directive

Former Yugoslav Republic of Macedonia adopted a Law on Ambient Air Quality and Rulebooks on the Quality of Liquid Fuels, on Maximum Permissible Concentration and Quantities of other Harmful Matters that May be Released into the Air by Individual Pollution Sources, and on Ambient Air Quality. In 2013, the Secretariat initiated enforcement procedures for the lack of complete transposition of the Directive's requirements into national law with respect to the rules on sampling and analysis. In the course of 2013, former Yugoslav Republic of Macedonia drafted a Decree on the Quality of Liquid Fuels which could have addressed the issues raised by the Secretariat in its Opening Letter. The draft was never adopted.

3. Large Combustion Plants Directive

Former Yugoslav Republic of Macedonia has six plants falling under the scope of the Large Combustion Plants Directive with a total of eight units and a total rated thermal input of 3,659 MW. Four units are fired by lignite, three by natural gas and one is run on fuel oil.

The provisions of the Large Combustion Plants Directive are transposed by a Rulebook on the Limit Values for the Permissible Levels of Emissions and Types of Pollutants in the Exhaust Gases and Vapours Emitted into the Air from Stationary Sources. The emission limit values for new and existing plants are

aligned with those of the Directive. The Rulebook also includes the common stack approach. Following the adoption of Ministerial Council Decision 2013/05/MC-EnC, amendments to the Rulebook are being prepared. A Decree for Determining the Combustion Facilities That Have to Take Measures to Protect Ambient Air Pollution Quality requires the operators of large combustion plants to prepare and implement a five-year plan (to be reviewed annually) to reduce the plants' emissions.

Former Yugoslav Republic of Macedonia has already started to draw up a *National Emission Reduction Plan* under Article 4(6) of the Large Combustion Plants Directive (as adapted by the Decision of the Ministerial Council), covering all large combustion plants in the country.

b. State of Compliance

1. Environmental Impact Assessment Directive

The Environmental Impact Assessment Directive was transposed into national law by the Environmental Law as amended in 2010 and 2011, as well as a number of by-laws which follow closely the structure and content of the Directive.

2. Sulphur in Fuels Directive

In 2013, the Secretariat initiated infringement action for violation of the Directive's requirements with respect to the rules on sampling and analysis. The adoption of the draft Decree on the Quality of Liquid Fuels would complete the transposition of the Sulphur in Fuels Directive and rectify the shortcomings referred to in the Opening Letter. However, the draft Decree has still not been adopted and therefore the Secretariat is currently preparing a Reasoned Opinion.

3. Large Combustion Plants Directive

Former Yugoslav Republic of Macedonia has already taken certain legislative and practical steps with a view to prepare for the implementation of the relevant provisions of the Large Combustion Plants and Industrial Emissions Directives in secondary legislation as well as through the adoption of the National Programme for the Gradual Reduction of the Quantities of Emissions of Certain Pollutants for the period 2012 - 2020 and the Decision on the Preparation of a National Emission Reduction Plan. These efforts must be continued to ensure that the Directives' provisions are complied with by the deadline stipulated in the Treaty.

c. Conclusions and Priorities

In former Yugoslav Republic of Macedonia, efforts should be focused on the practical implementation of the already transposed provisions of the Environmental Impact Assessment Directive and on capacity building for the authorities responsible for their implementation.

Former Yugoslav Republic of Macedonia should adopt immediately the draft Decree on the Quality of Liquid Fuels and must make sure that the provisions of the Sulphur in Fuels Directive are complied with.

The country should also proceed with the adoption of the amendments to the Rulebook Related to Emissions into the Air and, adopt and submit to the Secretariat their *National Emission Reduction Plan* by end-2015.



Former Yugoslav Republic of Macedonia

7.8 Competition

a. Sector Overview

1. Competition Law

Competition law is governed by the Law on Protection of Competition adopted in 2010 and amended several times since then. The provisions of the Law concerning the prohibition of cartels and the abuse of dominance correspond to Articles 101 and 102 TFEU respectively. The Law applies to public undertakings owned by the State or by the municipalities, as well as to undertakings entrusted with providing services of general economic interest. The authority entrusted with the enforcement of competition law is the Commission for Protection of Competition (CPC).

There have been no legislative changes in the area of competition law in the reporting period. With regard to enforcement, the CPC adopted a decision fining five companies EUR 3 million for participating in a cartel. According to the CPC, the companies, which were involved in the trade of electricity on the territory of the country, had participated in prohibited concerted practices in the period from October 2011 to February 2012. The companies took part in the tendering procedure organised by the state-owned incumbent utility Elektrani na Makedonija AD (ELEM) for the purchase of electricity for covering the needs of customers under regulated prices. Before submitting the offers, these companies cooperated with each other in order to agree on the prices and the quantities that they intended to offer. This resulted in fixing of prices and sharing of the market of trade in electricity. The decision of the CPC to fine these companies has been appealed and is currently pending before the Administrative Court. The enforcement of the decision is suspended until the Court brings its final decision.

2. State Aid Law

The Law on State Aid was adopted in 2010. The provisions of the Law correspond to Articles 107(2) and (3) TFEU. The authority entrusted with the assessment and monitoring of State aid is the CPC. There have been no changes to State aid legislation

in the reporting period. No case of State aid granted in the energy sector has been assessed by the CPC during this time.

b. State of Compliance

1. Competition Law

The Law on Protection of Competition and secondary legislation transpose the competition *acquis* into domestic legislation. In terms of enforcement, the CPC's decision fining the five cartel participants is a positive development and a contribution to the active enforcement of competition law. The CPC should continue to be an example of rigorous enforcement of competition law in the region, especially in relation to prohibited agreements and practices as defined in Article 101 TFEU.

2. State Aid Law

The Law on State Aid Control transposes the State aid acquis into national legislation, but the enforcement of State aid law needs to be improved. Even though each State aid provider is obliged to submit to the CPC a notification of every plan to grant new or alter existing State aid, regardless of whether it is granted as individual aid or as an aid scheme, no notification has been submitted for aid in the energy sectors. Moreover, the CPC has not acted ex officio either and no decision on State aid in the energy sectors has been adopted since 2013.

c. Conclusions and Priorities

The CPC started enforcing competition law more rigorously by concluding the cartel investigation in the electricity sector. The CPC should continue to actively enforce competition law by investigating cases concerning the structures of the energy markets. As a priority, the CPC should become more active in the enforcement of State aid law. A comprehensive enforcement in all areas of competition law, including State aid law, would ensure that obligations stemming from the Treaty are being complied with.



7.9 Statistics

a. Sector Overview

The State Statistical Office (SSO) is an independent organisation operating in accordance with the Law on State Statistics from 1997, as amended in 2007 and 2011. SSO is responsible for the compilation of official statistics and coordination of all statistical activities in the country.

The Energy Law allows the Ministry in charge of energy and the national regulatory authority to collect certain energy data, particularly data for planning and establishment of energy balances. The Minister adopted a Rulebook for Energy Balance and Energy Statistics in October 2011.

The Government adopted a Programme for Statistical Surveys 2013 - 2017 and Annual Work Plans, entrusting the SSO to collect, compile and disseminate energy statistics, including price data, in accordance with the definitions and methodology set by *EUROSTAT*.

To improve the quality of data, SSO is implementing a survey of consumption of energy in households. The scope of work is expected to provide information about the consumption patterns in the households, relevant not only to improve accuracy of the annual energy balances but also for energy efficiency indicators.

b. State of Compliance

1. Annual Energy Statistics

Annual data are compiled and disseminated in questionnaires for coal, oil, natural gas, electricity, heat, and renewable energy. The breakdown of final consumption is presented in accordance with the national classification of activities. SSO has already established a quality system which is capable of producing quality reporting as required under the Treaty.

Data are collected through monthly and annual surveys from reporting units with full coverage of businesses dealing with production, transmission and distribution of energy, and samples taken from industrial energy consumers, quarterly and annual surveys on forestry, annual surveys on agriculture, and external trade statistics. The commercial and public sectors are not covered, and energy consumption in other sectors and in households, apart from electricity and heat, is estimated.

On the basis of all collected data, the SSO develops energy balances for all energy commodities used in the country. Annual

questionnaires are communicated to IEA and EUROSTAT timely and in compliance with the acquis.

2. Monthly Energy Statistics

The SSO releases monthly energy statistics on electricity and natural gas from 2013 and statistics on oil and petroleum products and solid fuels from 2014. From 2014 on, it collects and submits to *EUROSTAT* monthly energy statistics which are published by *EUROSTAT*. This is in accordance with Annex C of Regulation (EC) No 1099/2008 on Energy Statistics.

In 2015 SSO established *JODI* data communication with *UNSD*, ensuring the visibility of its oil and gas statistics in the global *JODI* database.

3. Price Statistics

Prices of electricity charged to industrial end-users and households and prices of natural gas charged to industrial end-users are compiled and submitted to *EUROSTAT*. From 2014, SSO published the average electricity and gas prices for industry and households per consumption band on its webpage.

Annual reporting of electricity prices components for industrial end-users as required by Directive 2008/92/EC is still not completed. So far SSO has not produced nor submitted to *EUROSTAT* the report on price systems. To comply with this requirement, the capacity of SSO will have to be increased.

c. Conclusions and Priorities

Financial resources and allocation of sufficient staff with adequate remuneration are key prerequisites for SSO to fulfil its tasks, including tasks in energy statistics. Better coordination with the Ministry and in the case of price reporting with ERC may be the most cost-effective solution.

The survey of consumption in households based on representative samples conducted in 2015 will improve data quality, not only in terms of consumption structure but also completeness and consistency of data on renewable energy. Sufficient resources must be made available to SSO to improve its data collections.

The system of continuous data collection should be permanently improved and adjusted to reflect the changes in the energy sector and to the reporting requirements from competitive markets.



7.10 Open Infringement Cases

a. Non-Participation of MEPSO in Regionally Coordinated Capacity Allocation

On 20 January 2011, the Secretariat sent an Opening Letter to, *inter alia*, former Yugoslav Republic of Macedonia in Case ECS-4/11. The Secretariat is concerned that *MEPSO* has not yet adopted a common coordinated congestion management method and procedure for the allocation of capacity to the market, according to their obligation from a Decision by the Ministerial Council of 2008. The Secretariat entered into discussions with former Yugoslav Republic of Macedonia regarding its participation in the *Coordinated Auction Office in Southeast Europe (SEE CAO)* but no progress has been achieved. On 4 September 2014, the Secretariat sent a Reasoned Opinion.

b. Non-Compliance with the Sulphur in Fuels Directive

On 11 February 2013, the Secretariat sent an Opening Letter to, *inter alia*, former Yugoslav Republic of Macedonia in Case ECS-3/13. The Secretariat comes to the preliminary conclusion that the country has not yet transposed and implemented the requirements of Directive 1999/32/EC as required by Article 16 and Annex II of the Treaty. Directive 1999/32/EC aims to reduce emissions of SO₂ resulting from combustion of heavy fuel oils and gas oils. The Secretariat is currently preparing a Reasoned Opinion against former Yugoslav Republic of Macedonia in this case.

c. Lack of Adoption of a National Renewable Energy Action Plan

On 11 February 2014, the Secretariat sent an Opening Letter to, *inter alia*, former Yugoslav Republic of Macedonia, for failure to comply with Energy Community law related to renewable energy. In the Opening Letter in Case ECS-5/14, the Secretariat addresses the failure by the country to adopt and submit to the Secretariat a *National Renewable Energy Action Plan*, the deadline for which expired on 30 June 2013. Following the lack of adoption of a *National Renewable Energy Action Plan*, a Reasoned Opinion was sent to former Yugoslav Republic of Macedonia on 24 February 2015. On 12 May 2015 the Secretariat submitted a Reasoned Request to the Ministerial Council.

d. Postponement of Full Electricity Market Opening

On 30 January 2015, the Secretariat sent an Opening Letter to former Yugoslav Republic of Macedonia for its failure to comply with the Energy Community's eligibility rules by postponing full opening of the electricity market until beyond 2020. The Energy Community Treaty sets 1 January 2008 as the implementation deadline for market opening for non-household customers and 1 January 2015 for all customers including households. The new rules effectively deprive small businesses and all household customers of their right to purchase electricity directly from the supplier of their choice. On 27 April 2015, the Secretariat sent a Reasoned Opinion in Case ECS-2/15.







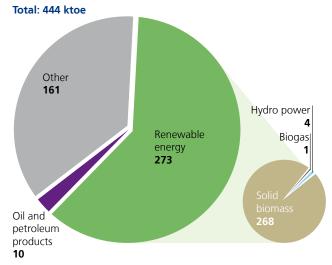
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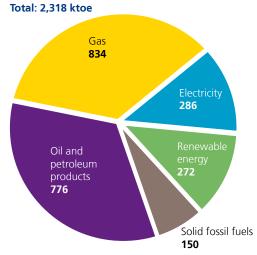
Moldova is in a unique situation with regard to its energy sectors on account of its dependence on a single supply source in gas and very limited supply options in electricity. The conditions for opening markets are thus very difficult, security of supply is constantly at risk and on top of this the economic situation deteriorated due to currency devaluation. Against that backdrop, the efforts of the Moldovan authorities to create a Third Package compliant legal framework in electricity

and gas deserve respect. Long overdue price adaptations also took place for the first time in years during the reporting period. The independence of the National Agency for Energy Regulation (ANRE), however, still remains critical. In the latest events leading up to the suspension of the price increase and the setting of a distribution tariff, ANRE demonstrated that it could not withstand pressure from politics and business leaders for a long time.

Energy mix in primary production 2013 in ktoe



Gross inland consumption 2013 in ktoe



Source: National Bureau of Statistics (NBS)



4

Moldova

8.1 Electricity

| Description of data [unit] | | | 2013 | 2014 |
|---|-------------------|--|---------------------|-----------|
| Electricity production [GWh] | | | 748 | 788 |
| Net imports [GWh] | | | 3,331 | 3,342 |
| Net exports [GWh] | | | 0 | 0 |
| Total electricity supplied [GWh] | | | 4,079 | 4,130 |
| Gross electricity consumption [GWh] | | | 4,079 | 4,130 |
| Losses in transmission [GWh] | | | 117 | 112 |
| Losses in transmission [%] | | | 2.9% | 2.7% |
| Losses in distribution [GWh] | | | 411 | 371 |
| Losses in distribution [%] | | | 10.9% | 9.7% |
| Consumption of energy sector [GWh] | | | 0 | 0 |
| Final consumption of electricity [GWh] | | | 3,551 | 3,646 |
| 6 | Industrial, trans | port, services and other non-residential sectors | 1,946 | 1,990 |
| Consumption structure [GWh] | Households (re | sidential customers) | 1,605 | 1,656 |
| Net maximum electrical capacity of power plan | ts [MW] | | 398 | 401 |
| | Coal-fired | | 0 | 0 |
| | out of which: | multi-fired | 0 | 0 |
| | Gas-fired | | 380 | 380 |
| | out of which: | multi-fired | 0 | 0 |
| | Oil-fired | Oil-fired | | 0 |
| | Nuclear | | 0 | 0 |
| Net maximum electrical capacity | Hydro | Hydro | | 16 |
| of power plants [MW] | · | small hydro | 0 | 0 |
| | out of which: | pumped storage | 0 | 0 |
| | Other renewab | Other renewables | | 4.9 |
| | | wind | 1.1 | 1.1 |
| | | solar | 0.1 | 1.0 |
| | out of which: | biomass | 0.4 | 2.8 |
| | | biogas | | |
| | 380 kV or more | 380 kV or more [km] | | 203 |
| | 220 kV [km] | | | 377 |
| | 110 kV [km] | | 377 3,335 | 3,335 |
| Horizontal transmission network [km] | HVDC [km] | | 0 | 0 |
| , | | Substation capacity [MVA] | | 4,749 |
| | | Number of interconnectors | | 22 |
| | | Interconnecting capacities [MVA] | | 9,127 |
| | | Total | | 1,330,534 |
| | out of which: | non-households | 1,319,706 69,557 | 72,365 |
| Electricity customers | | ers under national legislation | 4 | 4 |
| | Active eligible | | 1 | 1 |
| | <u> </u> | lied to active eligible customers [MWh] | 108,960 | 85,220 |
| Internal market | | onsumption [%] | 3.07% | 2.34% |
| | Shale of hild C | Onsumption [70] | 5.07 /0 | Z.J4 /0 |

Source: National Energy Regulatory Agency of Moldova (ANRE)

a. Sector Overview

The electricity sector in Moldova is governed by the Electricity Law of 2009 as amended in 2011 and 2014, and the Energy

Law of 1998. Other relevant legislation includes the Law on Conducting Licensed Activities, the Law on Public Service, the Law on Basic Principles for Regulating Entrepreneurial Activity, the Law on Customer Protection, and the Concession Law.

In June 2014 the Secretariat submitted a draft Electricity Law to the Moldovan authorities. The draft introduces provisions related to unbundling and certification of the transmission system operator, independent decision-making by the National Agency for Energy Regulation (ANRE) and creating the conditions for opening the electricity market in Moldova and further pan-European integration. The draft is envisaged to be submitted to the Government for approval in autumn 2015.

In January 2015, ANRE adopted a decision for temporary application of distribution tariffs for the customers of the newly established legally independent supply company *Gas Natural Fenosa Furnizare Energie*. Due to the lack of tariffs for access to the distribution networks, the procedure for supplier switching was not effective. The Secretariat initiated a dispute procedure in May 2015. In July 2015, ANRE set a distribution tariff only to suspend this decision again recently under political pressure.

The electricity system of Moldova operates synchronously with the Ukrainian system as part of the *Unified Power System (UPS)* and not with the *European Network of Transmission System Operators for Electricity (ENTSO-E)* system. The state-owned *Moldelectrica* is the transmission system operator.

Electricity production in Moldova relies on a dominant electricity producer, the gas-fired thermal power plant *Cuciurgani-Moldavskaya GRES* (2,520 MW installed capacity) owned by the Russian company *INTER RAO UES* and located in the region of Transnistria. The electricity purchased from this power plant and potential imports from Ukraine meet up to 80% of the overall demand. The remaining 20% is covered by gas-fired

combined heat and power generation and one hydropower plant in Moldova.

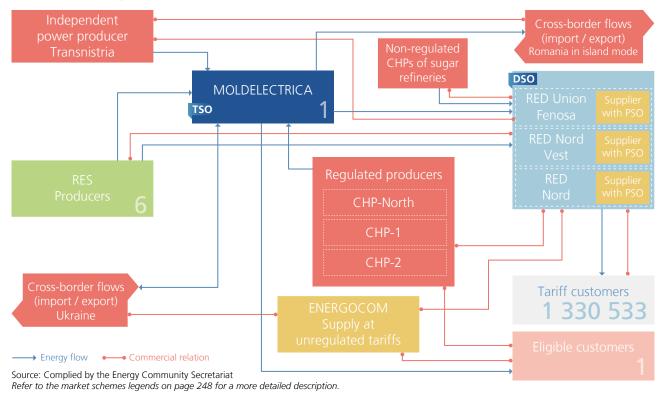
In November 2014, Ukraine imposed electricity export restrictions to Moldova due to the unavailability of coal-fired power plants located in Eastern Ukraine. Without any possibilities of diversifying its electricity supplies with Romania due to the lack of sufficient interconnection capacities, this increased dependence on the *Cuciurgani* power plant.

The three distribution system operators in Moldova are the state-owned *RED Nord*, *RED Nord-Vest* and *RED Union Fenosa*, owned by the Spanish utility *Gas Natural Fenosa*. In January 2015, *Gas Natural Fenosa Furnizare Energie* was established as a supply company legally separated from distribution activities.

The two state-owned distribution companies have been legally separated from supply activities since 1 August 2015. A single state-owned supply company *Furnizare Energie Nord* has received the supply licence and supplies electricity to the final electricity customers connected to the two state-owned distribution companies. Currently, both existing supply companies have received licences to supply only at regulated tariffs according to the Electricity Law in force. Separate legal companies have to be established and licensed by the regulator to supply on the open market.

When ANRE adopted separate distribution tariffs for all three distribution companies in July 2015, it also increased the end-consumers electricity tariffs by about 37% to account for depreciation of the local currency since November 2014.

Moldova's Electricity Market Scheme



b. State of Compliance

Moldova is late with the adoption of Third Package compliant electricity legislation. However, several steps to increase compliance with provisions from the Second Package have been taken in the reporting period.

1. Authorisation

Moldova fails to have compliant procedures for authorisation and tendering in accordance with Directive 2009/72/EC. The Government issues authorisations for new power plants with a capacity higher than 20 MW. Authorisations for power plants with a capacity below 20 MW are granted by local authorities on the basis of connection notices issued by the local distribution company. Tendering for new generation capacities by the Government is possible to ensure security of energy supply but has never been used so far. The draft Electricity Law transposes the requirements of Article 7 of Directive 2009/72/EC.

2. Unbundling

The transmission system operator is a state-owned enterprise, legally unbundled from generation and supply activities in Moldova. The draft Electricity Law transposes the ownership unbundling model for the transmission system operator and the conditions for its certification in compliance with provisions of Directive 2009/72/EC. Currently, Moldova fails to comply.

The three electricity distribution companies are legally separated from supply activities. Two electricity supply companies are supplying customers in the Moldovan market at regulated tariffs. The process of rebranding will follow for both new supply companies, as well as the appointment of the compliance officers. Full compliance with the unbundling requirements remains to be achieved.

3. Third Party Access

The right to third party access has been transposed in the Law currently in force. The Transmission Tariff Methodology was revised in May 2013 in order to include the network losses in the cost structure of the company. In July 2015, ANRE adopted a new transmission tariff to account for the cost induced by the energy purchased to cover the transmission losses.

Access tariffs to the distribution network at different voltage levels which are separate from the end-user electricity price were adopted for all three distribution companies only in July 2015. The decision rectified the violation of Article 32 of Directive 2009/72/EC expressed in the Opening Letter sent to Moldova in the dispute procedure initiated by the Secretariat in May 2015. Due to the suspension by ANRE, Moldova is currently non-compliant.

Rules for Access to Interconnection Capacities have been drafted but remain to be adopted. Currently, no Ukrainian company is exporting to Moldova due to security of supply concerns. To contribute to creation of competition in supply in Moldova, potential traders and suppliers must have non-discriminatory access to the interconnections between Ukraine and Moldova and to the Ukrainian electricity market, which is significantly more diversified in terms of generation than the Moldova market. The insufficient connection capacities between the Moldovan and the Romanian systems which are non-synchronously connected are allocated jointly based on market procedures and performed by the Romanian system operator.

4. Eligibility

The eligibility requirements have been properly transposed in the Electricity Law currently in force. All non-household customers became eligible as of 1 January 2013 and households are considered eligible customers as of 1 January 2015. The tariffs for access to the distribution networks adopted by ANRE at the end of July 2015 ensure the eligibility right of any customer connected to the distribution grids. The Electricity Law in force contains a provision establishing a "sub-customer" category which is per se excluded from eligibility. This is in breach of Article 28 of Directive 2009/72/EC. The draft of the new Electricity Law rectifies this non-compliance by transposing appropriately the concept of closed distribution systems as defined in Directive 2009/72/EC.

5. Market Opening and Price Regulation

Currently, the electricity market in Moldova is entirely dependent on a single main generation source, *Cuciurgani-Moldavskaya GRES* power plant. Any attempt to create competition on the wholesale market is impossible in the absence of access to the Ukrainian and Romanian market.

Despite the existing provisions in the Electricity Law granting eligibility to all customers starting 1 January 2015, the electricity market in Moldova is *de facto* entirely captive. Only one eligible customer, a cement factory, has exercised the eligibility right and it is supplied at unregulated prices by the state-owned *ENERGOCOM*. For all other customers supplied by their incumbent companies, ANRE regulates the end-user price. Eligible customers have the option to return to the regulated tariffs of the incumbent supply companies, which further impedes market opening and breaches Article 3 of Directive 2009/72/EC.

Moreover, the current Electricity Law prevents the incumbent suppliers at regulated tariffs to provide competitive supply, unless they obtain a new license as independent suppliers. Such a license would give them access to the entire electricity market in Moldova. This is another impediment to both eligibility and further market opening. This requirement is abolished in the new draft of the Electricity Law.

6. Balancing

Moldova is balancing its system mostly through imports from Ukraine. However in the last year, due to cancellation of imports from Ukraine, the demand had to be covered entirely from *Cuciurgani-Moldavskaya GRES* and domestic combined heat and power plants (CHPs). Despite the fact that adoption of balancing rules by the transmission system operator and the designation of balancing responsible parties are envisaged by the Electricity Law, the Methodology for the Allocation of Costs Associated with Imbalances has not been approved by the transmission system operator. Moldova thus fails to comply with the *acquis* on balancing.

7. Customer Protection and Protection of Vulnerable Customers

Currently, Moldova fails to protect customers in a targeted manner.

The Directive's provisions on customer protection are strengthened in the new draft of the Electricity Law. The supplier of last resort is appointed to provide, for a period of maximum 90 days, electricity at a tariff set by ANRE in case the customer lost its supplier under certain conditions.

The category of vulnerable customers is defined in the draft Law. Upon its adoption, vulnerable customers shall be entitled to receive compensation for the cost incurred with electricity consumption in accordance with the programme adopted by the Government. The existing programme to support the socially vulnerable families defined in a governmental Decree should be extended to address vulnerability in relation to electricity consumption. Appropriate support from the State budget needs to be further targeted to protect vulnerable customers outside the electricity tariffs.

c. Conclusions and Priorities

Moldova must speed up the process of adoption of the new Electricity Law to transpose the Third Package. It has already missed the deadline of 1 January 2015. Moreover, it has to rectify the breaches and shortcomings of the existing legal framework. The reforms required to effectively open the electricity market in Moldova have to be strengthened and become consistent with the principles reflected in the primary legislation.

In this sense, creation of a common electricity market between Ukraine and Moldova would be a step for wholesale suppliers in Moldova to be given non-discriminatory access to competitive supply from the Ukrainian market as well as market-based access to capacities on interconnections for cross-border trade. The Ministries, regulators and system operators from these two countries have to start a cooperation in this respect. Rules for capacity allocation of cross-border capacities and transparency requirements have to be adopted and implemented by *Moldelectrica* and *Ukrenergo* in accordance with Regulation (EC) 714/2009.

The Ministry of Economy as the sole shareholder of *Moldelectrica* needs to strengthen the institutional capacity needed for the company to live up to its role in a liberalised electricity market. Appropriate balancing rules have to be adopted by *Moldelectrica* and swiftly implemented to incentivize the network users to balance their input and off-takes. This could be introduced even before the structural reforms of the transmission system required by the Third Package are implemented with the new Electricity Law.

ANRE has to fulfil its mandate of regulating access to networks. It must immediately lift the suspension of the decision to set distribution tariffs. ANRE should also establish a close cooperation with the Ukrainian regulatory authority in order to remove the trade barriers for electricity exports and to allow suppliers in Moldova to have access to competitive electricity supplies and non-discriminatory access to interconnections.



Moldova

8.2 Gas

| | | | 2013 | 2014 |
|--|---|---|---------|----------|
| Natural gas production [Bcm] | | | 0.00011 | 0.000093 |
| Imports flows [Bcm] | 1.031157 | 1.053077 | | |
| Exports flows [Bcm] | 0 | 0 | | |
| Stock changes [Bcm] | 0 | 0 | | |
| Total supply [Bcm] | 1.0313 | 1.0532 | | |
| Gross consumption of natural gas [Bcm] | | | 1.0313 | 1.0532 |
| Consumption in energy sector [Bcm] | 0.4818 | 0.4906 | | |
| Available for final consumption of natural gas [Bcm] | | | 0.5495 | 0.5626 |
| Interconnectors' conscitu [Dem] | Total | | 45 | 45 |
| Interconnectors' capacity [Bcm] | out of which bidirectional | | 0 | 0 |
| Storage working capacity [Bcm] | | | 0 | 0 |
| Length of transmission network [km] | | | 1,560 | 1,560 |
| Length of distribution network [km] | | | 22,410 | 22,699 |
| | Total | | 672,049 | 682,909 |
| | out of which: | Non-households | 12,081 | 12,184 |
| Natural gas customers | | Eligible customers under national legislation | 672,049 | 682,909 |
| | | Active eligible customers | 0 | 0 |
| | | Households | 659,968 | 670,725 |
| Internal market | Gas supplied to active eligible customers [Bcm] | | 0.00 | 0.00 |
| internal market | Share of total consumption [%] | | | |
| Final consumption of natural gas per sector [Bcm] | | | 0.9388 | 0.9576 |
| | Energy transfor | Energy transformation | | 0.3969 |
| Consumption structure [Bcm] | Industry and co | mmercial customers | 0.2604 | 0.2769 |
| | Households | | 0.2847 | 0.2838 |

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

a Sector Overview

Moldova does not have underground storages or LNG facilities and domestic gas production covers only 1% of the demand. Its gas market is important from several perspectives. Firstly, it is a transit market of Russian gas to Turkey and the Balkan countries (250 km of pipelines and several running in parallel and 35 bcm per year of capacity, of which only half is used). Secondly, domestic consumption of natural gas (3 bcm per year) accounts for ca. 60% of primary energy consumption and gas is used for 96% of production of electricity and heat. Two-thirds of the national gas consumption is used for electricity generation in the Transnistria region and one-fifth takes place in the capital Chisinau. Moldova used to be fully dependent on imports from Russia.

In this context, supply from Romania starting from March 2015, via the interconnector lasi–Ungheni, is of a particular importance. It broke the dependence on one supply source and route. For the time being, this new connection has still limited impact as only 1 mcm has been contracted for 2015, compared to an overall capacity of 1.5 bcm. To utilise the full capacity of the

new interconnector, the Romanian and Moldovan grids need to be strengthened. In this context, some preparatory steps were undertaken during this reporting period. On the Romanian side, the grid extension has been one of the two defined infrastructure priorities for *Transgaz*. In Moldova, the Ministry of Economy launched a feasibility study for an extension of the interconnection by 130 km from Ungheni to Chisinau.

Moldova's gas market is fully monopolized. All activities, import, supply, cross-border and national transmission, distribution and retail, are performed by one vertically integrated company, *Moldovagaz. Moldovagaz's* shares are divided between the State (36.6%), authorities in Transnistria (13.4%) and *Gazprom* (50%).

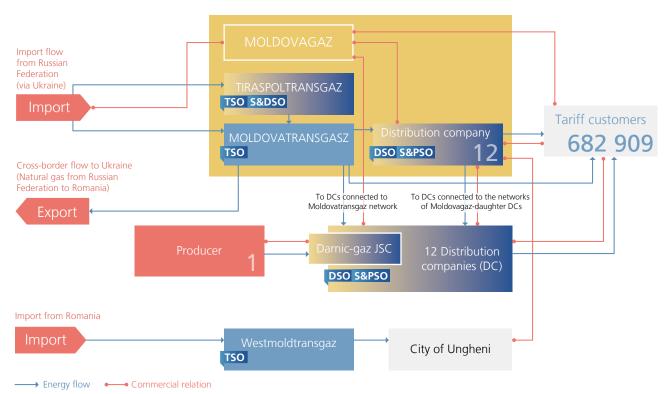
Moldovagaz acts as an importer and a wholesale and (in Chisinau) retail supplier. Two daughter companies, Moldovatransgaz and Tiraspoltransgaz operate the transmission system, 11 subsidiaries of Moldovagaz operate the distribution network and are engaged in retail supply, while another daughter company operates the distribution network in Chisinau.

The other 11 distribution and supply companies independent of *Moldovagaz* have a market share of only 2%.

The legislative framework for the gas market is defined by the Natural Gas Law, as adopted in December 2009 and amended in July 2014. The Law transposed the provisions of Directive 2003/55/EC and Directive 2004/67/EC. Several acts of secondary legislation, mainly of a technical nature, complement the Law without transposing details of Regulation (EC) 1775/2005.

They include technical standards for natural gas transmission and distribution networks, regulations on the quality of natural gas transmission and distribution services and a regulation on the provision and use of natural gas. In 2014, Moldova started to develop a new Gas Law with the aim to transpose the Third Package and to rectify breaches of Energy Community *acquis* in the existing legislation. The initial draft was provided by the Secretariat. ANRE drafted Market Rules and a Methodology for Calculation of Network Losses, which are not yet in force.

Moldova's Gas Market Scheme



Source: Compiled by the Energy Community Secretariat Refer to the market schemes legends on page 248 for a more detailed description.

b. State of Compliance

The Law on Natural Gas of 2009 as amended in July 2014 fails to transpose the Third Package requirements.

1. Authorisation

The Law requires from a natural gas undertaking a license issued by the regulatory authority to perform an energy activity. It also requires an authorization for new infrastructure issued by the Government and local authorities. The authorization procedures for new infrastructure investments are discriminatory and as such not compliant with the *acquis* as they apply only for projects financed from the State budget. It is not clear to what extent - if at all - private investments are covered by these procedures. Further, the Law fails to introduce a duty to notify refusals to the Secretariat as required by Directive 2009/73/EC.

2. Unbundling

The Law is not compliant with unbundling requirements for transmission system operators and certification procedures, as defined by Directive 2009/73/EC. The Law on Natural Gas transposes only the unbundling provisions of Directive 2003/55/EC, including an exemption for distribution operators serving less than 100,000 customers.

The implementation of unbundling - for transmission and distribution - violates even the provisions of the Second Package. Although *Moldovatransgaz* and *Tiraspoltransgaz* were established as subsidiaries of the vertically integrated company *Moldovagaz*, functional unbundling of either company is not applied in practice. *Moldovatransgaz* is not independent from the mother company in decision-making, whereas *Tiraspoltransgaz* is a vertically integrated undertaking itself, as it is involved in both

transmission and trade activities in the region of Transnistria. Compliance programmes are not in place. *Moldovagaz's* daughter companies operate distribution systems and provide retail supply for more than 653,000 customers in total, *i.e.* above the allowed threshold for exemption from unbundling.

The Secretariat is particularly concerned about the amendments to the Natural Gas Law adopted in July 2014. They envisage postponement of any unbundling requirements of the transmission system operators until 1 January 2020, whereas the derogation granted by the Ministerial Council in December 2012 to Moldova concerns only Article 9(1) of Directive 2009/73/EC. If Moldova will not adopt a Third Package compliant Law during the next few months, the Secretariat will start infringement action.

3. Third Party Access

The rules on third party access are not compliant with Directive 2009/73/EC. ANRE approves transmission and distribution network tariffs. There are no obligatory provisions to establish a separate tariff for each entry and exit point to/from the transmission grid, as required by Regulation (EC) 715/2009. There are also other issues of non-compliance: Firstly, the grid component is not explicitly shown on the bill for final consumers. Secondly, the Gas Law does not transpose the provisions concerning third party access services, capacity allocation and congestion management procedures as required by Regulation (EC) 715/2009. Thirdly, rules on exemptions from third party access are missing in the Law on Natural Gas, which constitutes a clear violation of Directive 2009/73/EC.

4. Eligibility

A clear definition of eligibility is missing in the Natural Gas Law. Moldova thus fails to comply with the *acquis*.

5. Market Opening and Price Regulation

All customers are supplied under regulated prices, switching rules are not in place and supplier switching is impossible by law and in practice. Moldova is not compliant as regards market opening and price regulation.

6. Balancing Rules

Balancing rules are not implemented at all, thus Moldova is not compliant with Regulation (EC) No 715/2009.

7. Security of Supply

General responsibilities for security of supply policy as well as monitoring and reporting on security of supply are vested in the Ministry of Economy.

Apart from the main principles on security of supply from Directive 2004/67/EC included in the amendments to the Natural Gas Law, the following provisions have not been transposed or implemented: minimum security of supply standards, definition of protected customers, national emergency measures and a list of instruments for security of gas supply.

8. Customer Protection and Protection of Vulnerable Customers

Customer protection is defined only in general terms by the Natural Gas Law, which gives tasks and responsibilities to ANRE related to customer protection and examination of customer complaints. Some protection schemes are established by general legislation on social protection.

Vulnerable customers are only mentioned by the Law, which does not establish further criteria nor introduce measures as required by Article 3 of Directive 2009/73/EC. Moldova is thus far away from fulfilling the standards of the Third Package in this respect.

c. Conclusions and Priorities

There was no progress during the reporting period, thus the priorities remain the same. The implementation of the Third Package, with the sole exception of Article 9(1) of Directive 2009/73/EC, should be the ultimate priority. Activities on restructuring of *Moldovagaz* in line with the Second Energy Package are still pending and have to go in parallel with the development of the new framework in line with the Third Package. Adopting secondary legislation on access to the network, grid codes and market rules as soon as possible is the third priority.

Without these legislative changes, further supply diversification and market development (despite the new interconnector with Romania) will not be possible.



Moldova

8.3 Regulatory Authority

a. Organisation, Competences and Assessment of Independence

The National Agency for Energy Regulation (ANRE) is the single authority for regulating the energy sector of Moldova equipped with country-wide regulatory competences in the gas and electricity sector, as required by the Third Energy Package. ANRE is headed by five Board members out of whom the Parliament designates one as Director General. The term of Board members is limited to six years for the Director General, four years for two Board members and two years for the other two Board members. In this respect, a rotation scheme as required by the Third Package already exists. However, the overall limit for terms in office is set at a maximum of 12 years for all cases, which leads to a renewable term more than once for four board members.

Appointment requirements for Board members are, compared to other regulatory authorities in the Energy Community, rather vaguely prescribed. A selection committee and/or involvement of neutral experts do not exist. Board members are appointed by the Parliament upon proposal of a Parliamentary Commission. The Parliament also designates the Director General upon the proposal of the Chairman of the Parliament following the positive opinion of the Parliamentary Commission.

Dismissal of a Commissioner is by law limited to cases of conflict of interest or conviction for criminal act. However, also the vague and unspecified case of "incompatibility" is listed among the reasons for dismissal, which opens a possibility for misuse and political intervention. The Parliament has already made use of this instrument by suspension of the Director General in 2013 and 2014, which has proven the problematic nature of this provision in real terms. Following a first removal from office in 2013 by the Parliament on political grounds which has been declared illegal by the Constitutional Court later on, the Director General was finally removed from office in February 2014 based on questionable accusations for violations of the rules on state secrecy and an opaque decision by a Court of Appeal.

Moldova has not yet transposed the Third Package. ANRE's competences need to be extended to the complete set of regulatory powers and objectives foreseen under the Third Energy Package. To this extent, also no progress has been made compared to the 2014 assessment of the Secretariat on overcoming shortcomings in terms of regulatory independence. The independence criteria stipulated by Articles 35(4-5) and 37(16) of Directive 2009/72/EC and Articles 39(4-5) and 41(16) of Directive 2009/73/EC are theoretically met to a certain extent. ANRE is by law set up as an institution legally distinct and functionally independent from any other public entity. The

establishment of ANRE is solely based on legislation, meaning that it cannot be liquidated by act of another public institution.

In theory, ANRE takes binding decisions autonomously and independently. This is supported by a legal prohibition for top management to execute political functions, to have interest in regulated utilities or to have an employment relationship with the energy sector. Legislation foresees that Board meetings are open to the public and decisions need to be published. However, stakeholder involvement should be further improved by conducting public consultations and publishing information on the reflection of stakeholders' views in Board decisions.

In theory, ANRE has autonomy in defining its Annual Work Programme and management is independent in relation to staff appointment and organisation of its internal structure including autonomy in setting of salaries within the budget limits approved by the Government. ANRE must present its Annual Report to the Parliament but does not need approval of its Annual Report.

Financial independence is, in principle, granted by entitling ANRE to design and use its Annual Budget autonomously and at a level sufficient to cover its operating costs. The budget requires formal approval by the Parliament. A certain limit to financial independence is, however, foreseen by putting an overall budget limit at the level of up to 0.15% of the annual cost of electricity, natural gas supplied to consumers, main petroleum products and liquefied gas imports.

Attempts to interfere in the regulator's financial independence by initiating an extraordinary auditing of ANRE by the Court of Auditors were reported in mid 2015. Such measures amount to State control interfering with ANRE's independence. Furthermore, ANRE's budget for 2015 has not been formally approved, which seriously weakens the regulator's budgetary autonomy and may even lead to non-payment of staff salaries. Further to this, the Supreme Security Council in August 2015 formally recommended the regulator to suspend its decisions of July 2015 to increase the natural gas and electricity prices. These measures must be seen as serious interventions into the financial independence of the regulator and its autonomous decision making.

Draft laws prepared by the Secretariat in 2014 - 2015 revising legislation in the light of the Third Package also target overcoming the shortcomings in terms of competences and independence of ANRE.

On the regional level, ANRE should become more active in the Energy Community Regulatory Board (ECRB).

b. Conclusions and Priorities

The following changes in law and regulatory practice are key priorities for ANRE in order to comply with the Third Package:

- 1. ANRE's competences need to be expanded to the complete set of regulatory powers and objectives foreseen under the Third Energy Package.
- 2. A limitation to only once renewable term for all Board members needs to be introduced.
- A selection committee of neutral experts for short-listing applicants for Board member posts should be introduced in order to better decouple the appointment procedure from politics.

- 4. The vague reason for dismissal of "incompatibility" has to be removed.
- 5. ANRE has to be granted full budgetary autonomy. The recent interventions in financial independence have to be stopped.
- 6. The 2015 budget needs to be approved without further delay.
- 7. Interventions in ANRE's autonomous decision making must be stopped.
- 8. Transparency and stakeholder involvement should be further improved by performing public consultations and publishing information.





Moldova

8.4 Oil

a. Sector Overview

Moldova is completely reliant on imports of petroleum products to meet domestic oil demand. Moldova imported and consumed petroleum products in the amount of 636 kt in 2014. In terms of storage of petroleum products, the total capacity is over 150,000 cm, encompassing State and industry storage but excluding the army. In addition the *Giurgiulesti* terminal has eight tanks for petroleum products with capacities of 63,600 cm at its disposal.

Moldova currently has no legislation on emergency oil stockholding. Until now the issue has not been given high priority. The industry has no legal obligation to hold oil stocks. The Material Reserves Agency is the only State administration which has some institutional capacities and which partially operates on the oil market. It has the legal authority to execute contracts regarding the purchase and storage of oil products. The Commodity Reserves Law deals with oil stocks by requiring the Material Reserves Agency to keep oil stocked in the amount of 30 days of consumption in the previous year. Details of these stocks are treated as a state secret, and therefore the current level and composition is undisclosed. However, it is unlikely that the full 30 days are currently being covered due to funding dif-

ficulties. The State Material Reserves' oil stocks may be used not only in situations of natural disasters and wars, but also in cases of market disruptions. The Commodity Reserves Law includes procedures to release and report on such stocks which are, however, not in compliance with Directive 2009/119/EC.

b. Conclusions and Priorities

The Secretariat believes that oil security and transposition of the Directive should be given more attention in the near future in Moldova. The establishment of emergency oil stocks is an opportunity to bring Moldova's oil market in order. The Ministry of Economy is currently focussing on introducing a transparent formula for retail price calculation, which is considered an important precondition for the (possible) introduction of a stockholding fee. The Moldovan authorities have indicated that they support an emergency oil system based on an agency public stockholding model.

At the same time, Moldova will need to establish a monthly reporting system to comply with the Directive. The collection of information and monitoring of the domestic oil market is a critical issue that must be addressed. The existing data gathering should be adjusted.





Moldova

8.5 Renewable Energy

a. Sector Overview

1. State of Play, Legislation and Promotion of Renewable Energy

With the adoption of Directive 2009/28/EC, Moldova committed to a binding target of 17% of energy from renewable sources in gross final energy consumption by 2020, compared with 11.9% in 2009. The "2030 Energy Strategy of Moldova" sets a more ambitious (indicative) objective of reaching a 20% share in 2020.

The National Renewable Energy Action Plan (NREAP) was adopted by the Government in December 2013. According to the document, the 20% target is broken down into an indicative share of 10% in electricity consumption, 27% in heating and cooling and a binding share of 10% in the transport sector. According to the NREAP, additional electricity generation from renewable energy sources will mainly come from wind power, biogas, as well as solar PV. The NREAP also projected a surplus of 3% or 64,8 ktoe that could be transferred to other Contracting Parties or EU Member States, if achieved.

The existing legal framework for renewable energy based on the Law on Renewable Energy in force since 2007 has not proven its capability to attract investments. The main reason is the fact that the support schemes were adopted annually on project by project basis and several gaps in the legal and regulatory framework were not filled with secondary legislation. Currently, only six small electricity producers from renewable sources from biogas, wind and solar PV are in operation.

While a draft Law on the Promotion of Energy from Renewable Sources that will repeal the existing Law on Renewable Energy of 2007 has passed the first reading in Parliament in July 2014, it has not advanced since then. The draft Law would transpose the binding 17% target and the 10% target of renewable energy in transport as well most of the requirements of Directive 2009/28/EC. However, it does not include any sustainability criteria for biofuels or a certification scheme and bodies required by Articles 17-21 of the Directive.

The draft Law also introduces support schemes for energy from renewable sources based on tendering, a market-based mechanism which is supposed to provide the development of renewable energy at lower cost for customers. The successful bidder will be the one to offer the lowest price, not exceeding the pre-defined ceiling. The status of eligible producer conferred in this way includes the right to sell the whole volume of electricity produced at the price offered for a period of 15 years, provided that operation starts within 18 months after

the announcement of the results of the tender. ANRE is tasked to develop power purchase agreements based on which the central electricity supplier designated by the Government will purchase electricity from eligible renewable energy producers. Electricity suppliers will be required to buy certain volumes of the renewable electricity from the central supplier.

Currently, licensing procedures are common for all electricity producers. Authorisation, certification and licensing are separately regulated with respect to each stage of a project. Potential investors in renewable energy are faced with significant barriers in this respect. The draft Law on the Promotion of Energy from Renewable Sources requires licensing rules to be objective, transparent and non-discriminatory. Moreover, the draft Law envisages the simplification and streamlining of administrative, permitting and licensing procedures and requires several implementation by-laws to be developed to ensure coordination of the institutions involved. In this respect, the Energy Efficiency Agency is tasked to submit proposal to improve procedures of authorisation, certification and licensing. The Energy Efficiency Agency would operate as a one-stop shop only for public information purposes and not with regard to processing the licensing procedure.

According to the general technical rules, the network operators need to take into consideration the current and future electricity supply and demand when drafting their plans for network development. There are no concrete rules for taking into consideration renewable energy integration in network planning. Applications are examined on a case-by-case basis by the transmission system operator, *Moldelectrica*.

The draft Law on the Promotion of Energy from Renewable Sources includes provisions on guaranteed access to the grid and priority dispatch. Network operators will also be required to provide the applicants with sufficient information about the connection, including about the costs to be incurred in this regard, the time required for the connection and any network expansion planned in the area. Currently, the network operators do not publish on their websites a clear timetable for processing connection applications.

The draft new Law on Promotion of Renewable Energy clarifies that connection costs are covered by the applicant according to the conditions set out in the Electricity Law and relevant regulations approved by ANRE. Cost of connection to the grid is fully borne by the investors and the relevant assets remain their property.

The Law on Renewable Energy appoints the operator of the

network to which the producer is connected to issue guarantees of origin. The Methodology for Issuing, Transfer and Cancellation of Guarantees of Origin was adopted by ANRE in 2009. There is no guarantee of origin issued yet. The draft Law on the Promotion of Energy from Renewable Sources took over the same approach and tasks all network operators with issuing guarantees of origin. Guarantees of origin will be issued for the total volume of energy produced from renewable energy from power plants of 10 kW and more.

2. Renewable Energy in Heating and Cooling

A Law on Heat Energy and Promotion of Cogeneration was adopted in 2014. It includes, among others, provisions regarding the use of renewable energy in heating and cooling and the introduction of support schemes. Moreover, the draft Law on the Promotion of Energy from Renewable Sources also includes provisions relating to the calculation of the gross final consumption of energy from renewable energy in heating and cooling and designation of the authorities responsible to promote the use of renewable energy in heating and cooling. Financial support for the use of renewable energy for heating and cooling purposes is not based on a generally applicable support scheme, but on project-based support by several funds and programmes.

Biomass is extensively used for heating by households, amounting to 268 ktoe in 2013. To facilitate the transition from heating based on gas towards promotion of consumption of biomass, create a biomass market and alleviate the dependence on imported energy of the country, a Biomass and Energy Project has been extended by another three years starting 2015. A programme to promote switching from gas to efficient biomass boilers has increased the subsidies from EUR 1,000 to EUR 1,300 per unit of equipment.

3. Renewable Energy in Transport

The 2007 Renewable Energy Law provides for relatively high mandatory targets for biofuels, namely 6% of ethanol in the total gasoline consumption, 5% of biodiesel in the diesel mix by 2013, and 20% of biofuels in the total fuel mix by 2020. The draft Law on the Promotion of Energy from Renewable Sources and the *NREAP* revise and reduce these targets in line with Directive 2009/28/EC. The share of renewable energy in the transport sector is currently zero, and Moldova will have to rely mostly on imports. The first consumption of biofuels is expected in 2015 at a level of 1.12%.

The only form of support for biofuels, as defined by the Renewable Energy Law in force, consists of tariffs to be approved by ANRE for different types of biofuels to cover investments, construction, extension, transport and distribution costs for a period of 15 years, provided that the rate of return is no higher than twice the rate of return for conventional fuels. Furthermore, the complete volume of biofuels produced locally must be acquired by local fuel suppliers. This constitutes discrimination and breaches the Treaty.

According to the *NREAP*, a regulation on sustainability criteria will be developed by the Ministry of Transport and Road Infrastructure and approved by the Government. The Energy Efficiency Agency will act as a certification body once the relevant framework is in place, including voluntary certification schemes.

There is production of bioethanol (40 tonnes per day) in Moldova, to be used as a fuel in transport. Biodiesel plant stopped production in 2009, due to poor rapeseed harvest.

b. State of Compliance

The existing legal framework is full of gaps in terms of compliance. Consequently, the interest of investors has been low due to the fact that the existing remuneration scheme for electricity or biofuels generated from renewable sources differs from the usually applicable support schemes (feed-in tariffs, feed-in premiums or green certificates) where a generally applicable tariff calculation methodology is in place, based on which producers can calculate annually their own tariffs and submit them to ANRE for approval.

1. National Renewable Energy Action Plan

Moldova adopted and submitted to the Secretariat the NREAP required under Directive 2009/28/EC as well as the Progress Report on the Promotion of Energy from Renewable Sources for 2012 - 2013.

2. Support Schemes

Following the adoption of the Law on Promotion of Renewable Energy, Moldova will implement support schemes based on tendering. Currently, there is no compliance with Article 3(3) of the Directive.

3. Cooperation Mechanisms

Cooperation mechanisms are not transposed yet. Moldova fails to comply with the relevant provisions.

4. Administrative Procedures

Moldova must urgently implement a more simplified, transparent and non-discriminatory framework taking into account particularities of individual renewable energy technologies. Moldova fails to comply with the requirements of Directive 2009/28/EC in this respect.

5. Access to and Operation of the Grids

Currently, guaranteed access to the grids for renewable energy producers is included in the 2007 Renewable Energy Law and priority dispatch is included in the Electricity Law. The draft Law on the Promotion of Energy from Renewable Sources includes requirements for non-discriminatory access to the grid, priority dispatch of electricity generated from renewable energy,

guaranteed purchase for eligible producers (selected through auctioning) and minimisation of curtailment.

Methodologies for determining connection costs for new renewable energy producers have not been issued yet, neither for connection to the transmission nor the distribution grids. The current practice of the network operator to provide information only on a case-by-case basis is not compliant. In general, Moldova fails to meet the requirements of Article 16 of the Directive.

6. Guarantees of Origin

For the time being, there is still no electronic registry, no guarantee of origin issued and no disclosure to the end-customers of the energy produced from renewable sources in the energy mix. The requirements for setting-up, maintaining of separate accurate, reliable and fraud-resistant registries for the issue, transfer and cancellation of guarantees of origin for all four operators creates a significant burden on these institutions. A single entity managing one system for the entire country should be envisaged. Moldova is not complying with Article 15 of Directive 2009/28/EC.

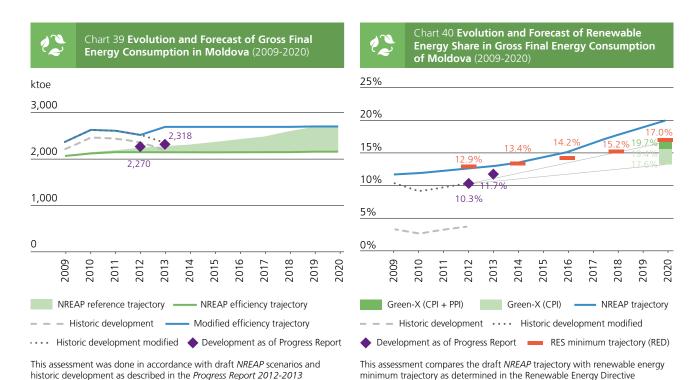
7. Renewable Energy in Transport

Article 17 of Directive 2009/28/EC has not been transposed at all and there is no certification scheme defined or relevant body established.

c. Quantitative Assessment of the Progress Towards National Renewable Energy Trajectory

The development of the actual gross final energy consumption (GFEC) of Moldova is constantly above the planned trajectory. In 2012, the actual GFEC was 9.8% above the reference trajectory and 5.2% above the trajectory with energy efficiency measures, presented in chart 39 below. As a result, the modified projected trajectory with energy efficiency measures shows a GFEC which is 150 ktoe above the original projection.

Chart 40 shows that, regardless which data for the biomass consumption is applied, Moldova has not reached its *NREAP* targets for the share of renewable energy in gross final energy consumption. In 2013, Moldova reported in its *Progress Report on Promotion of Renewable Energy* a renewable energy share of 11.7%, compared to its *NREAP* trajectory of 13%. The *NREAP* trajectory for the renewable energy share shows a pretty ambitious growth for the upcoming period, aiming to reach a 20% share of energy from renewable sources in 2020. According to the results of the modelling projection for the share in 2020, Moldova could be on track to reach only the binding target of 17% and not the voluntary target of 20% in 2020.



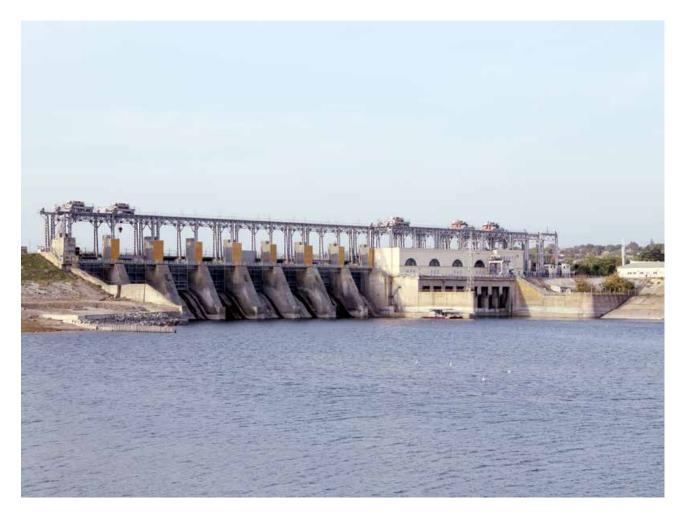
Source Study on the Assessment of the National Renewable Energy Action Plans and the Progress in Promotion of Renewable Energy in the Energy Community, by ECN et all, 2015

d. Conclusions and Priorities

The adoption of the Law on the Promotion of Energy from Renewable Sources should be the absolute priority as the legal and regulatory framework for renewable energy has to undergo a major overhaul to reach compliance with the *acquis*. With its adoption, Moldova will move much closer to implementing Directive 2009/28/EC. It will improve the framework needed to attract investment in renewable energy projects to ensure that the 2020 objectives are met.

The methodology for support schemes for renewable energy projects based on tendering needs to be developed and the administrative procedures including access and connection to the networks need to be simplified immediately after the new Law is adopted. Later on, monitoring of the effectiveness of the measures by the Ministry of Economy will be crucial.

Since nothing was done during the last year in the area of renewable energy in transport, the priorities remain the same as in the previous reporting period. The new Law should also introduce the concept of sustainability criteria and certification of biofuels. After the adoption of the new Law, the regulatory framework will have to be completed and updated. More generally, the significant agricultural potential of the country should be tapped to develop domestic biofuels production rather than relying on biofuel imports.





Moldova

| С | 8.6 Energy | / Efficiency | | | | | |
|--|--|---|----------------------------------|-------------------------------------|--------|----------|--|
| Energy Efficiency Ac | tion Plan (EEAP)* | | | | | | |
| Period covered by EEA | Р | | | 2013 | – 2015 | | |
| Overall energy savings target - Directive 2006/32/EC (ktoe / % / year) | | | 428 / - / 2015 867 / 9 / 2016 | | | | |
| EEAP status | | | 1st EEAP adopted on 7 I | 1st EEAP adopted on 7 February 2013 | | | |
| Achieved energy savin | gs | | Not elaborated (as this | is 1st EEAP) | | | |
| Key institution(s) in charge | | Ministry of Economy; Energy Efficiency Agency; Ministry of Regional Development and Constructions | | | | | |
| Main data and energ | Main data and energy efficiency indicators** | | | 2011 | 2012 | 2013 *** | |
| Total primary energy | supply (TPES) | ktoe | 3,405 | 3,324 | 3,276 | 2,318 | |
| Energy intensity (TP | Energy intensity (TPES/GDP) toe / 1,000 USD | | 0.97 | 0.89 | 0.89 | 0.57 | |
| TPES/Population | | toe/capita | 0.96 | 0.93 | 0.92 | 0.65 | |
| Total final energy consumption (TFEC) ktoe | | 2,329 | 2,328 | 2,262 | 2,061 | | |
| | Residential | | 40% | 41% | 39% | 42% | |
| | Services | | 11% | 11% | 12% | 12% | |
| Share of TFEC by sector | Industry | % | 29% | 27% | 28% | 28% | |
| | Transport | 70 | 15% | 16% | 16% | 12% | |
| | Others | | 3% | 3% | 3% | 3% | |
| | Non-energy use | | 2% | 2% | 2% | 2% | |

^{*} Source: Energy Community website / 1st EEAP of Moldova

a.Sector Overview

There is a clear indication that the final energy consumption in Moldova was on a downward trend from 2010 to 2013, while the gross domestic product resumed growth. The positive trend is reflected in the significant decrease of energy intensity in 2013 and the decoupling of economic growth from energy demand growth.

The Ministry of Economy, the Ministry of Construction and Regional Development together with the Energy Efficiency Agency are involved in the transposition and implementation of the energy efficiency acquis. The Energy Efficiency Fund significantly supports the process by financing projects in the area of energy efficiency and renewable energy. Nevertheless, in order to enhance the effectiveness of its institutions, the Ministry of Economy is working on the reorganization of the Energy Efficiency Fund and the Energy Efficiency Agency. The changes are expected to contribute to attracting external financing and removing certain administrative barriers.

The Energy Efficiency Law of 2010 provides the basic legal framework for the development of national and local energy efficiency programmes and action plans, tackling energy audits, energy management schemes, etc. At the time of publication of this Report, 40 companies (legal entities) and 87 individuals were authorized as energy auditors.

The (first) Energy Efficiency Action Plan for 2013-2015 (EEAP) was developed by the Agency in collaboration with the central Government and local authorities and adopted by the Government in February 2013. In April 2014, the Moldovan Energy Efficiency Agency submitted the report on the implementation of the first EEAP to the Government. The second EEAP (2016-2018) will be developed by the end of 2015 (Moldova follows different deadlines due to its later accession to the Energy Community). Further progress in the transposition of Directive 2006/32/EC was achieved by the adoption of the Energy Audit Regulation in November 2012 and ESCO Regulation in December 2013. Following the provisions of this Regulation, the Energy Efficiency Agency is developing a model energy performance contract and guidelines on energy performance contract implementation within the public and private sector.

The Law on the Energy Performance of Buildings, partially transposing Directive 2010/31/EU, was adopted in July 2014. A roadmap for its implementation was signed between the Ministry of Regional Development and Construction and the Energy Efficiency Agency. The roadmap supports the development of secondary legislation for this Law, including programmes and plans to ensure increased energy efficiency in buildings and support to vulnerable citizens. Moldova continues to work on the secondary legislation for the implementation of the Law on Energy Performance of Buildings.

^{**} Source: International Energy Agency

^{***} Indicators calculated by the Energy Community Secretariat based on preliminary energy balances for 2013

The Law transposing the Energy Labelling Directive 2010/30/ EU was adopted in spring 2014 and came into force in October 2014. In December 2014, the Government adopted a list of energy labelling regulations for the following energy-related products: Labelling Requirement to Energy Labelling of Household Tumble Driers (transposing Delegated Regulation (EU) 392/2012), Labelling Requirement to Energy Labelling of Air Conditioners (transposing Delegated Regulation (EU) 626/2011), Labelling Requirement to Energy Labelling of Domestic Ovens and Range Hoods (transposing Delegated Regulation (EU) 65/2014), Labelling Requirement to Energy Labelling of Electrical Lamps and Luminaires (transposing Delegated Regulation (EU) 874/2012) and Labelling Requirement to Household Washing Machines (transposing Delegated Regulation (EU) 1061/2010).

b.State of Compliance

1. Energy Services Directive 2006/32/EC

The main provisions of Directive 2006/32/EC are transposed by the Energy Efficiency Law and the secondary legislation. The *EEAP* for 2013 - 2015 was adopted in 2013 setting an energy savings target of 9% by 2016. The second *EEAP* is under preparation. Yet, the Directive has not been fully transposed. In order to achieve that, a set of secondary legislation on energy end-use efficiency in the public sector, an ESCO mechanism, *etc.* still needs to be adopted. Therefore, Moldova is only partially compliant with Directive 2006/32/EC.

2. Energy Labelling Directive 2010/30/EU

Moldova made significant progress regarding transposition of Labelling Directive 2010/30/EU within the reporting period. The framework Law on the Labelling of Energy-Related Products in Moldova came into force in October 2014 and a number of energy labeling regulations was adopted to support the process. Nevertheless, Moldova remains only partially compliant with this Directive, as long as the remaining labelling regulations adopted by the Ministerial Council are not in force.

3. Energy Performance of Buildings Directive 2010/31/EU

The deadline for the implementation of Directive 2010/31/EU expired in 2012. In June 2014 the Law on Energy Performance of Buildings was adopted, but it is not fully compliant with the Directive (particularly energy performance certification does not apply to multi-apartment buildings that were commissioned before the Law came into force, even if they are sold or rented). Together with this, to enforce the Law and transpose Directive 2010/31/EU, the Government is working on secondary legislation regarding minimum energy performance requirements, methodology for energy performance calculation, forms and schedule for heating systems inspection, *etc.* As long as the required secondary legislation is not adopted, Moldova is only partially compliant with Directive 2010/31/EU.

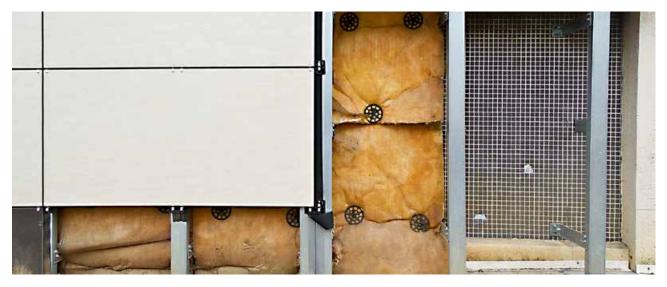
c. Conclusions and Priorities

The reporting period was characterised by good progress, *i.e.* the adoption of the labelling requirements, development of methodologies and secondary legal acts to support enforcement of Energy Efficiency and Energy Performance of Buildings Laws. Nevertheless, as long as the secondary legislation is not fully adopted, Moldova remains only partially compliant with the *acquis*.

The first priority for Moldova is the adoption of missing secondary legislation for the implementation of the above mentioned Laws and the introduction of energy efficiency requirements in the public sector (*i.e.* for public procurement).

A second priority is the further transposition of Energy Labelling Regulations and the development of financial mechanisms to boost the energy services market.

Finally, in order to support the Government of Moldova in its efforts to transpose the Energy Community *acquis*, the Secretariat invites the responsible institutions to submit draft legislative acts to the Secretariat for a compliance check before consultations within the Government take place.





Moldova

8.7 Environment

a. Sector Overview

1. Environmental Impact Assessment Directive

Environmental impact assessment is regulated by the Law on Environmental Impact Assessment adopted in 2014. In the framework of preparation for the implementation of the Law, Guidelines on the Application of the Environmental Impact Assessment Procedure are expected to be approved in the 3rd quarter of 2015.

The process of environmental impact assessment is split into two stages. Firstly, there is a preliminary procedure (screening), the results and findings of which are to determine whether a full environmental impact assessment is necessary. In order to carry out the screenings, a Preliminary Environmental Impact Assessment Committee was established.

During the reporting period, one environmental impact assessment related to projects in the energy sector was concluded in Moldova. This concerned the overhead line between Balti (MOL) and Suceava (ROM), the only Project of Energy Community Interest in the country. Furthermore, the construction of the Chisinau-Ungheni pipeline project passed the scoping phase and the environmental impact assessment report is scheduled to be submitted for approval by the Ministry of Economy in September 2015.

2. Sulphur in Fuels Directive

Regarding the Sulphur in Fuels Directive, the implementation deadline for Moldova expired on 31 December 2014.

A draft Regulation on the Reduction of the Sulphur Content of Certain Liquid Fuels is prepared and its adoption is planned for the 3rd quarter of 2015. The draft has not been submitted to the Secretariat for review.

3. Large Combustion Plants Directive

Moldova has two plants falling under the scope of the Large Combustion Plants Directive with a total of eight units and a total rated thermal input of 1,294 MW. All units are run on natural gas.

Currently, there is no legislative framework on the regulation of emissions from large combustion plants in force.

b. State of Compliance

1. Environmental Impact Assessment Directive

With the Law on Environmental Impact Assessment adopted in 2014, Moldova has fully transposed the Directive's provisions into national law.

2. Sulphur in Fuels Directive

Moldova has failed to transpose and implement the provisions of the Sulphur in Fuels Directive by the deadline set in the Accession Protocol.

3. Large Combustion Plants Directive

Moldova has not yet transposed the relevant requirements of the two Directives regulating the emissions of large combustion plants into national law. The steps ahead are unclear. It is also unclear whether Moldova intends to adopt and implement a *National Emission Reduction Plan* under Article 4(6) of the Large Combustion Plants Directive, as adapted by the Decision 2013/05/MC-EnC of the Ministerial Council.

According to the "Action Plan for the Implementation of the Environment Strategy for 2014 - 2023" (approved in April 2014), the drafting of the Law transposing the Industrial Emissions Directive is planned by 2018.

c. Conclusions and Priorities

Moldova should ensure the practical implementation of the Law on Environmental Impact Assessment and provide the administrative capacities necessary for the task.

Moldova must adopt the draft regulation setting limits on the sulphur content of liquid fuels immediately; otherwise it will face infringement action.

Moldova must also intensify its efforts in transposing the Large Combustion Plants and Industrial Emissions Directives into national law. Furthermore, it should decide urgently whether or not to prepare and adopt a *National Emission Reduction Plan* with a view to the submission deadline of end-2015.



Moldova

8.8 Competition

a. Sector Overview

1. Competition Law

Moldova adopted a Competition Law in 2012. The provisions of the Law prohibiting anticompetitive agreements and the abuse of dominance correspond to Articles 101 and 102 TFEU. The Law applies to undertakings providing services of general economic interest in accordance with Article 106 TFEU. The authority in charge of enforcing competition law in Moldova is the Competition Council.

In January 2015, the Competition Council approved the Regulation on Accepting Commitments Offered by Undertakings. The new Regulation lays down general principles applicable by the Competition Council, types of commitments, the conditions that the proposed commitments must meet the deadlines, and the procedure for the evaluation of the commitments in relation to both anticompetitive practices and mergers. With regard to anticompetitive practices, the Regulation stipulates that the Competition Council may adopt a decision conferring binding commitments to an undertaking without reaching a final conclusion as to whether there has been an infringement of competition rules, which is in line with the *acquis*. The provisions on conditions for the reopening of the procedure are also in line with the provisions of EU Regulation 1/2003.

There were no decisions by the Competition Council or inquiries in the energy sector during the reporting period.

2. State Aid Law

State aid in Moldova is governed by the State Aid Law adopted in 2012. The Law contains a general prohibition of State aid in accordance with Article 107(1) TFEU. Aid to providers of services of general economic interest is covered by the Law. The Competition Council is entrusted with the enforcement of State aid legislation. In the reporting period, the Competition Council approved seven pieces of secondary legislation on the evaluation of aid in different sectors of the economy which do not concern the energy sector.

The Competition Council reviewed a notification from the Energy Efficiency Fund on the establishment of a State aid scheme whose purpose would be the enhancement of energy efficiency and uptake of renewable energy. The scheme was meant to provide support for individual projects for the rehabilitation of buildings in all sectors of the national economy that require energy efficiency measures or uptake of renewable energy. According to the scheme, individual aid would be granted in

the amounts starting from MDL 300,000 to MDL 5 million per beneficiary. The Competition Council declared the State aid scheme compatible under the special rules of the Regulation on State Aid for Environmental Protection based on its positive environmental effects. It, however, obliged the supplier to notify any individual aid that exceeds the set threshold and any changes of the scheme budget in the future exceeding 20% of the budget.

b. State of Compliance

Articles 18 and 19 of the Energy Community Treaty have been properly transposed into Moldovan legislation.

1. Competition Law

The Competition Law transposes the Energy Community acquis. The Secretariat's remarks as regards the provisions of the Law giving the Government the possibility to block excessive price increases in the economic sectors where competition is restricted or does not exist have still not been taken into account.

2. State Aid Law

The provisions of the State Aid Law are in line with the acquis. When assessing the State aid scheme for energy efficiency and renewable energy, the Competition Council conducted a step-by-step assessment of the aid scheme, beginning with the examination of State aid elements and concluding with the compatibility assessment under the special rules of the Regulation on State Aid for Environmental Protection. The provisions of this Regulation on Aid for Energy Savings correspond to the EU Guidelines on State Aid for Environmental Protection of 2008 (that were replaced by the new Guidelines on State Aid for Environmental Protection and Energy 2014 - 2020 in July 2014). The Competition Council concluded that the scheme constituted State aid, but it declared it compatible as the aid fulfilled the conditions of the Regulation related to the aid 'intensity' and the aid purpose. According to the Competition Council, the aid intensity amounted to 30% of the total investment which is below the threshold set by the Regulation. In addition, the Competition Council concluded that the aid was not meant to finance operational activities, but that it would finance the improvement of infrastructure, which meant that the impact on competition would be dispersed over time. The Competition Council, however, failed to examine the criteria related to limitation of the eligible costs.

c. Conclusions and Priorities

In the past, the Moldovan Competition Council was one of the most active enforcers of competition law in the energy sectors. However, since there have been no new decisions in the area of competition in the reporting period, the Competition Council should address the enforcement of competition law more rigorously in the following period. The beginning of the application of the State aid law to the energy sectors is a positive development. The Competition Council should continue to enforce State aid Law in the energy sector with more intensity and follow the State aid Rules strictly and systematically, especially as regards the compatibility criteria.



Moldova

8.9 Statistics

a. Sector Overview

The Law on Official Statistics of 2004 designates the National Bureau of Statistics (NBS) as the central statistical body. It is the main producer of official statistics and is responsible for the coordination of the Moldovan statistical system. The Law gives the statistical bodies the right to obtain and collect data, including from respondents to surveys, administrative data held by central and local public authorities and other entities.

A governmental Decree on Energy Statistics was adopted in February 2014. Energy statistics are also covered by the Law on Energy which defines general rules for statistical reports and transparency. A Statistics Work Programme for 2015 was approved by the Government's Decision in December 2014. The list of works approved by a Government Decision includes activities to establish a reporting system for monthly statistics and energy prices.

Following this plan, with the support of the EU-funded Energy Sector Policy Support Programme and in coordination with the Secretariat, NBS has developed and published a methodology for calculating the annual and monthly statistical indicators of energy and energy prices, corresponding to the requirements of the *acquis* on energy statistics.

b. State of Compliance

1. Annual Energy Statistics

Since 2012, NBS has been preparing an annual energy balance in time series from 1990 in line with the unified format of *IEAI EUROSTAT* and energy balances. Annual questionnaires are communicated timely to the *IEA* and annual data is published on NBS's webpage.

Annual data are obtained using unified questionnaires for all registered legal entities in Moldova with detailed instructions to respondents, including specially designed questionnaires for energy undertakings.

Energy consumption in households is estimated using reports of electricity, natural gas and heat distributors. A pilot survey of energy consumption in households was conducted in 2014. Firewood consumption is obtained from statistical data on agriculture.

In 2014 NBS has conducted a survey of production and consumption of energy from renewable sources and established a registry of undertakings which produce and use renewable energy.

NBS is producing annual data in compliance with the acquis.

2. Monthly Energy Statistics

In accordance with the methodology for calculating the annual and monthly statistical indicators of energy and energy prices and with NBS's annual plan, the monthly reporting scheme for primary supply of electricity, gas, oil and coal has been established in Moldova.

NBS has started to compile and publish monthly datasets for coal, oil and petroleum products, natural gas and electricity from January. NBS has been compiling *Joint Organisations Data Initiative (JODI)* oil and gas questionnaires starting with January 2015.

The obligation to submit questionnaires to *EUROSTAT* still cannot be fulfilled because of reasons outside the power of the Moldovan authorities. Apart from communication to *EU*-

ROSTAT, Moldova has ensured compliance with its obligations from the *acquis* as regards monthly statistics.

3. Price Statistics

After a successful pilot project in 2014, NBS developed a methodology and reporting system to collect electricity and gas prices. Regular surveying of electricity and gas prices charged to end-users was initiated in 2015.

Despite the persistent lack of human and financial resources, NBS has established a reporting system compliant with the requirements of Directive 2008/92/EC. The dissemination of these data started in August 2015 when the first collection of prices for the first semester 2015 was published on NBS's web page. In this respect, Moldova has achieved compliance with the *acquis* on price statistics.

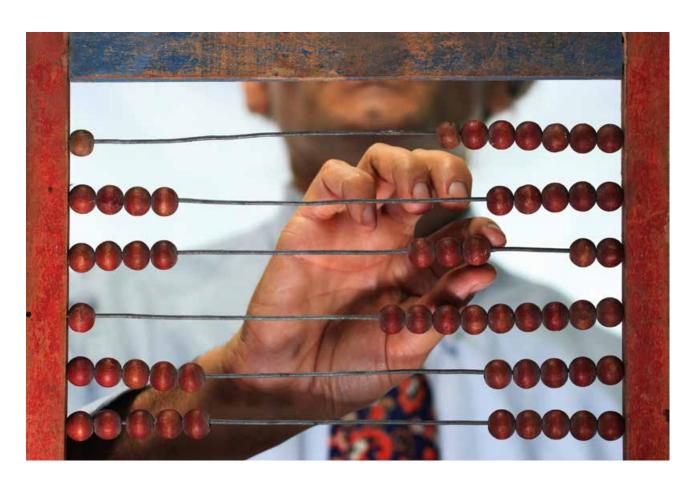
c. Conclusions and Priorities

NBS has to be given credit for keeping up with the Action Plan for Implementation of the Rules on Energy Statistics developed and agreed with the Secretariat.

In order to maintain a sustainable system of energy statistics, NBS must be equipped with the technical means and sufficient financial resources to perform its tasks.

The remaining task is developing quality reporting as required by Regulation (EC) 1099/2008.

The system of continuous data collection should be permanently improved to reflect the changes in the energy sector.





Moldova

8.10 Open Infringement Cases

a. Failure to Adopt Electricity Distribution Tariffs

The Secretariat, acting upon a complaint, initiated a dispute settlement proceeding against Moldova by sending an Opening Letter in Case ECS-5/15 on 22 April 2015. In its preliminary assessment, the Secretariat took the view that by failing to adopt distribution tariffs applicable to all eligible customers (including suppliers), Moldova failed to comply with its obligations under Directive 2009/72/EC. In its Opening Letter, the Secretariat concluded that the failure of ANRE to adopt distribution tariffs for all distribution system operators prevents

new suppliers established in or outside of Moldova from accessing the distribution network, as there is no tariff applicable to them. Moreover, customers are refused the right to access the distribution networks and thus also their right to freely choose their supplier.

After the Opening Letter, ANRE adopted on 18 July 2015 a Decision Setting Tariffs for Access to Electricity Distribution Networks applicable by all distribution companies to all system users in the country. As ANRE subsequently suspended its Decision, the case has not been closed.





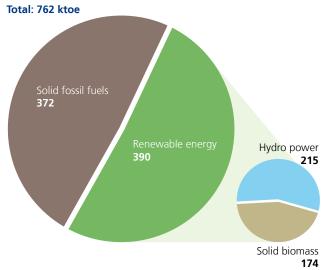


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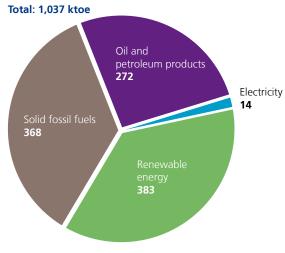
Montenegro is on a firm path towards compliance with the *acquis*. It is a frontrunner in the Energy Community, despite a certain delay in transposing the Third Energy Package. That said, it still faces considerable challenges such as market open-

ing in electricity, the implementation of the emission limits or renewable energy targets. It is to be seen whether Montenegro will live up to the standards set by legislation when it comes to implementing it.





Gross inland consumption 2013 in ktoe



Source: EUROSTAT



4

Montenegro

9.1 Electricity

| Description of data [unit] | | | 2013 | 2014 |
|---|----------------------------------|---|--------|---------|
| Electricity production [GWh] | 3,809 | 3,038 | | |
| Net imports [GWh] | 195 | 886 | | |
| Net exports [GWh] | 681 | 634 | | |
| Total electricity supplied [GWh] | 3,323 | 3,290 | | |
| Gross electricity consumption [GWh] | 3,323 | 3,290 | | |
| Losses in transmission [GWh] | 142 | 125 | | |
| Losses in transmission [%] | 4.28% | 3.9% | | |
| Losses in distribution [GWh] | 480 | 433 | | |
| Losses in distribution [%] | 18.96% | 17.6% | | |
| Consumption of energy sector [GWh] | | | 9 | 9 |
| Final consumption of electricity [GWh] | | | 2,692 | 2,723 |
| Consumption structure [CM/b] | Industrial, trans | sport, services and other non-residential sectors | 1,476 | 1,542 |
| Consumption structure [GWh] | Households (re | sidential customers) | 1,216 | 1,181 |
| Net maximum electrical capacity of power plants | [MW] | | 876 | 876 |
| | Coal-fired | | 218.5 | 218.5 |
| | out of which: | multi-fired | 0 | 0 |
| | Gas-fired | | 0 | 0 |
| | out of which: | multi-fired | 0 | 0 |
| | Oil-fired | | 0 | 0 |
| | Nuclear | | 0 | 0 |
| Net maximum electrical capacity | Hydro | | 658 | 658 |
| of power plants [MW] | out of which: | small hydro | 9 | 8 |
| | | pumped storage | 0 | |
| | Other renewab | Other renewables | | 0 |
| | | wind | 0 | 0 |
| | out of which: | solar | 0 | 0 |
| | | biomass | 0 | 0 |
| | | biogas | 0 | 0 |
| | 380 kV or more | 380 kV or more [km] | | 283 |
| | 220 kV [km] | | 367 | 337 |
| | 110 kV [km] | | 617 | 680 |
| Horizontal transmission network [km] | HVDC [km] | HVDC [km] | | |
| | Substation cap | Substation capacity [MVA] | | 3,359 |
| | Number of inte | Number of interconnectors | | 11 |
| | Interconnecting capacities [MVA] | | 5,727 | 5,727 |
| | Total | Total | | 384,736 |
| Electricity customers | out of which: | out of which: non-households | | 34,434 |
| Electricity customers | Eligible custom | Eligible customers under national legislation | | 4 |
| | Active eligible | customers | 3 | 4 |
| Internal market | Electricity supp | Electricity supplied to active eligible customers [MWh] | | 709,049 |
| internal market | Share of final o | consumption [%] | 29.13% | 26.02% |

Source: Energy Regulatory Authority of Montenegro (RAE)

a. Sector Overview

Montenegro's electricity sector is governed by the Energy Law from 2010 and the secondary legislation based on this Law. Ac-

tivities to transpose the Third Energy Package started in 2013. Montenegro developed two draft laws and conducted comprehensive consultations with its stakeholders and the Secretariat. Adoption of these Laws is still pending.

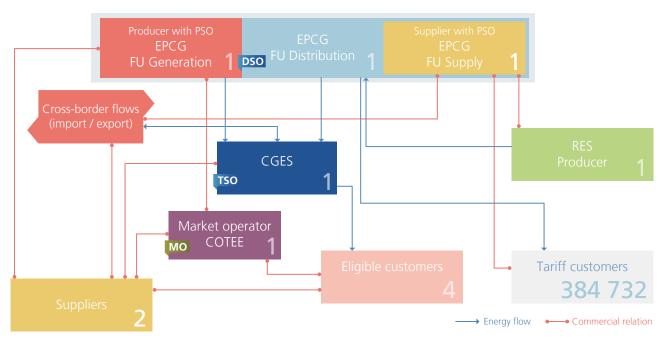
The electricity sector in Montenegro is dominated by the utility *Elektroprivreda Crne Gore (EPCG)*, which performs generation, distribution and supply activities. The company is controlled by the State (57% of the shares) and the Italian *A2A* (42% of the shares). The transmission system operator *Crnogorski elektroprenosni sistem (CGES)* belongs to the State (55% of the shares), the Italian *TERNA* (22% of the shares) as well as several investment funds. The electricity market operator *COTEE* was established in 2011 and is in full State ownership.

There is substantial transit of electricity from north to south in Montenegro, which nearly equals the average annual consumption of electricity in the country.

There are currently 38 market participants registered, comprising 31 traders, three generation companies (including one so-called privileged producer, *i.e.* a company operating five small hydropower plants), two suppliers of end-customers and *CGES. EPCG* performs the task of public supplier and supplier of last resort.

As an exception in the region, Montenegro does not require licenses for trade. A license is required only for supply to end-users.

Montenegro's Electricity Market Scheme



Source: Complied by the Energy Community Secretariat Refer to the market schemes legends on page 248 for a more detailed description.

b. State of Compliance

1. Authorisation

Construction and reconstruction of energy facilities require an energy permit or a concession issued by the Ministry. Construction permits for power plants with a capacity lower than 1 MW are granted in a simplified procedure by a municipal authority. The Ministry is obliged to open a tender for new infrastructure if applications for energy permits and concessions are not sufficient to meet the expected demand or to ensure security of supply, in accordance with the Energy Strategy and the Action Plan implementing it. These procedures are in line with the *acquis*.

2. Unbundling

The Energy Law in force does not transpose the unbundling requirements from the Third Package, in particular in relation

to transmission unbundling. Transmission system operation is legally unbundled from other activities. Given that the State holds the majority of shares in all key undertakings, the implementation of the Third Package will require significant additional unbundling measures, which are not yet transposed in the legislation.

Distribution, generation and supply are still bundled within *EPCG*. The current Law does not require legal unbundling of distribution. Three functional units have been established within *EPCG*. The allocation of certain assets with multiple purposes between regulated and competitive activities and defining the status of shared services within the company still pose a challenge for both *EPCG* and the Energy Regulatory Authority of Montenegro (RAE). No compliance programme is in place. Accounting unbundling of the three functional units is allegedly performed, in accordance with the rules on regulatory accounting, although financial statements for the regulated activities are not separately prepared or published.

In terms of unbundling, Montenegro fails to comply even with the Second Package.

3. Third Party Access

The Law requires network operators to ensure non-discriminatory access to all system users, unless this endangers the provision of public services. Should the access be denied, the affected party is entitled to file a complaint with RAE.

Terms, conditions and fees for access and use of transmission and distribution networks are defined in the respective rules approved by RAE.

CGES is a founding member of the Coordinated Auction Office in Southeast Europe (SEE CAO) in Podgorica. For 2015, SEE CAO started joint capacity allocation on yearly, monthly and daily basis for the interconnections between Montenegro and Bosnia and Herzegovina. CGES applies Rules for Allocation of Interconnection Capacity through annual, monthly and daily auctions of interconnection capacities split 50:50 with the Serbian and Albanian electricity systems. Congestion income is used for the reduction of tariffs.

The network operators are still to adopt programmes and measures for ensuring non-discriminatory access to the transmission and/or distribution networks, as required by the Law and the acquis.

4. Eligibility

All customers are eligible from 1 January 2015. The conditions and procedure for supplier switching are defined in the respective rules set by RAE. In this respect, Montenegro complies with the *acquis*.

5. Market Opening and Price Regulation

In the wholesale electricity market there are currently 25 active traders. The price of domestic generation is regulated separately based on the price in the previous period and corrected by a factor reflecting the reference market price. There is a phasing-out plan for wholesale price regulation that would gradually close the gap between the price set by the regulator and the reference market price. In the retail market, there are currently only two licensed suppliers of end-customers in Montenegro.

As of 2013, the electricity prices for the four customers connected to the transmission network are not regulated. Customers connected to the distribution network, *i.e.* all other customers in Montenegro, are still entitled to public supply at regulated end-user prices determined by RAE. As the public supplier, *EPCG* performs the tasks of supplier of last resort, taking over the supply of electricity to any customer who was left without a supplier for a period of three months. It is also the supplier for vulnerable customers.

The current degree of retail market opening in Montenegro is not satisfactory. The structure of public supply and over-regulation of prices make supplier switching unattractive and impede the interest of new entrants to enter the supply market.

6. Balancing

According to the Energy Law in force, the provision of balancing services and the prices of imbalances are regulated. On the basis of an annual contract, the transmission system operator procures all ancillary services with the only Montenegrin service provider, *EPCG*. All producers are mandatory providers of ancillary services. The Market Rules define principles for functioning of the balancing market and setting market-based imbalance prices for customers connected to the transmission network. *COTEE* is responsible for the calculation of imbalances and ensuring the financial settlements. In principle, this system is compliant with the *acquis*.

Ancillary services are financially settled between *EPCG* and *CGES* at regulated prices and in line with the Methodology adopted by RAE. Whilst activation of the secondary reserve is settled with the providers at zero price, activation of the tertiary reserve follows at a hourly price offered by *EPCG*. Pursuant to the Market Rules, balance responsibility and imbalance settlement are applied in a non-discriminatory manner. The imbalance settlement price is derived from the price of activated tertiary regulation in a cost-reflective manner. There is however a need to further align the developed methodologies in order to properly reflect the costs of the activated secondary reserve.

As of 1 May 2015, *CGES* and the Serbian *EMS* implement a mechanism for exchange of balancing energy from tertiary reserve based on the common merit order list. This marks a step towards cross-border competition in the balancing market.

It is the distribution system operator's responsibility to develop load profiles for customers without hourly meter readings. Until these documents are developed and adopted, implementation of the Market Rules and further opening of the market for customers connected to the distribution network are not feasible.

7. Customer Protection and Protection of Vulnerable Customers

RAE is responsible for monitoring and enforcing measures related to service quality and protection of end-users. It also decides on complaints concerning disconnection.

The Law contains a definition of vulnerable customers and an obligation for the Government to provide financial support for protection of these customers. The definition of vulnerable customers is compliant with the *acquis*. RAE adopted tariffs for vulnerable customers for the tariff period until July 2015.

c. Conclusions and Priorities

Montenegro has failed to comply with the Third Package transposition deadline of 1 January 2015. Recalling that two key laws are in the final drafting stage, it should finalize the adoption of the new legislation compliant with the Third Package without further delay.

Montenegro's most important task is to create conditions for effective market opening. The provisions of balancing energy and allocation of balance responsibility to market participants are to be tackled as a priority. Furthermore, secondary legislation must be developed and enforced ensuring that eligible customers can make effective use of their rights.



Montenegro

9 2 Gas

a. Sector Overview

Montenegro has no gas market. Nonetheless, the regional gas studies envisage a possibility of Montenegro to be interconnected with the mature market in Croatia or an emerging market in Albania, which corresponds to Montenegro's strategic plans.

Another opportunity for Montenegro is the exploration of offshore gas resources in the Adriatic Sea.

The Energy Law of 2010 (amended in 2011 and 2013) provides the legal and regulatory framework for the gas sector. The Law aims at setting a consistent regulatory framework for the organisation and development of the energy sector in Montenegro.

Draft energy laws aimed at transposing the Third Energy Package were reviewed by the Secretariat and are expected to be sent to the Government for review and approval in the second half of 2015.

The company *Montenegro Bonus*, a company licensed for electricity supply as well as oil and LPG activities, was designated by the Government in September 2013 as a gas transmission system operator, albeit it was not issued a licence to perform such activity by the regulatory authority.

b. State of Compliance

Despite having an excellent basis in place for future gas penetration, Montenegro has not yet properly transposed all elements of the *acquis*.

1. Authorisation

Performing any activity in the natural gas sector, except trade, requires a license issued by the regulator. Besides the license, a construction permit for gas infrastructure facilities for transmission, distribution, storage or terminals for liquefied natural gas is required and issued by the Ministry in charge of energy. The conditions and procedure for licensing and permits in the natural gas sector are defined in compliance with Directive

2009/73/EC, except that they do not envisage that refusals of licenses should be notified to the Secretariat.

In practice, no undertaking in Montenegro has been licensed or authorised for construction of gas infrastructure.

2. Unbundling

The Energy Law is non-compliant with the Third Energy Package unbundling and certification requirements.

Montenegro will have to transpose and implement ownership unbundling as the only possible transmission system operator unbundling model. Additional requirements for the unbundling of the distribution and storage system operators will also have to be introduced in line with Directive 2009/73/EC. Those requirements were included in the draft submitted to the Secretariat.

The designated transmission system operator *Montenegro Bonus* is thus not licensed or unbundled from activities related to electricity trade, let alone certified, in line with the Third Energy Package.

3. Third Party Access

The general requirements for non-discriminatory access to the transmission and distribution networks as well as to storage facilities are stipulated in the Law on Natural Gas currently in force. However, with regard to access to storages, the Law empowers the regulator to define the criteria for identification of priorities for access to storage systems. As the regulatory did not adopt any criteria, this contradicts provisions on free access to storage facilities in principle.

The conditions for refusal of access are aligned with the gas acquis. The exemption from third party access is not transposed in line with the Third Package. Full compliance will require involving the Secretariat in the exemption procedure, together with provisions related to reasoning and publishing of decisions adopted upon an exemption procedure.

The Tariff Methodologies and systems for access to networks together with rudimentary rules for capacity allocation are compliant with Directive 2009/73/EC, albeit with two notable exceptions. The regulator's competences are not compliant with the acquis nor are there obligatory provisions to establish a separate tariff for each entry and exit point to/from the transmission grid, as required by Regulation (EC) 715/2009. The tariff systems have not been adopted. The most serious shortcoming of the Law, however, is the different treatment of national and cross-border (transit) gas transmission, which runs counter to the gas acquis.

4. Eligibility

The Law grants eligibility to all customers with the exception of households which will be eligible as of 1 January 2015. This is compliant with the Treaty.

5. Market Opening and Price Regulation

The Law allows market opening in line with the Third Package, once the gas infrastructure is developed. The Law envisages *inter allia* public supply and supplier of last resort, but without secondary acts to implement the general principles.

6. Balancing

The Law requires the transmission system operator to adopt balancing rules subject to the regulator's approval. The Law does not envisage that such balancing rules must be market based as required by Regulation (EC) 715/2009. The balancing rules and imbalance charges have not yet been adopted.

7. Security of Supply

The Law transposes provisions of Directive 2009/73/EC and

Directive 2004/67/EC relevant for security of supply, *i.e.* the roles and responsibilities of different market players, monitoring and safeguarding measures, supply standards and measures to ensure security of gas supply. However, the Ministry did not adopt the secondary regulation to implement concrete measures to satisfy the supply standard nor did the transmission system operator adopt an emergency plan.

8. Customer Protection and Protection of Vulnerable Customers

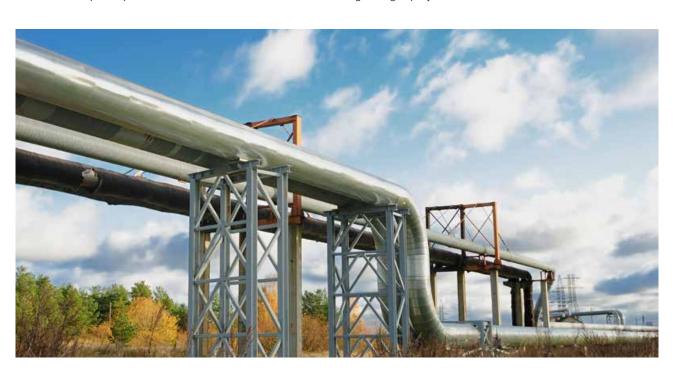
The Law envisages customer protection measures as well as measures to protect vulnerable customers. The difference between costs and revenues from the activity of a supplier for vulnerable electricity or gas customers will be covered by the Government. As regards the gas market, no programme has been developed.

The Law also envisages the public supplier as the supplier of vulnerable customers. Provisions on the obligation to establish single points of contact to provide customers with the necessary information are missing.

c. Conclusions and Priorities

Montenegro has missed the deadline for implementation of the Third Package by 31 December 2014 and it is of utmost priority to adopt the draft energy laws as soon as possible.

At the moment, Montenegro fails to comply with numerous provisions related to the powers and duties of the regulatory authority, access to networks and unbundling and certification of the transmission system operator. In addition, it has to develop secondary acts which are missing even under the current Law. Only afterwards will Montenegro be able to engage in regional gas projects.





9.3 Regulatory Authority

a. Organisation, Competences and Assessment of Independence

The Energy Regulatory Authority of Montenegro (RAE) is the single authority for regulating the energy sector of Montenegro, as required by the Third Energy Package. RAE is headed by a Board consisting of three members as well as a Director and a Deputy Director. The term of the Board members is limited to a period of five years, while the terms of the Director and Deputy Director are limited to four years. All terms are renewable once. A rotation scheme for Board members as required under the Third Energy Package is not in place.

Appointment of Board members follows one of the most transparent procedures among the Contracting Parties including public announcement of job vacancies, legal definition of selection criteria, short-listing by a Selection Committee of independent experts appointed by the Government and final nomination by the Parliament to be published.

Dismissal of a Board member may happen in cases of conflict of interest or conviction for a criminal act. However, dismissal reasons also include lack of approval of RAE's Annual Report by the Parliament. This is a unique case in the Contracting Parties and opens enormous possibilities for undue political intervention having in mind that no criteria for approval or disagreement on the Annual Report are in place. Further to this, the vague grounds of "incapability of performing duties" for dismissal of Board members, the Director and the Deputy Director offer room for undue political intervention.

RAE's powers have yet to be expanded to the complete set of regulatory powers and objectives foreseen under the Third Energy Package. Also no progress was made in overcoming shortcomings in terms of regulatory independence. The independence criteria stipulated by Articles 35(4-5) and 37(16) of Directive 2009/72/EC and Articles 39(4-5) and 41(16) of Directive 2009/73/EC are met to a certain extent only. RAE is by law set up as an institution legally distinct and functionally independent from any other public entity. Establishment of RAE is solely based on legislation, meaning that it cannot be liquidated by act of another public institution.

According to the Law, RAE takes binding decisions autonomously and independently. This is supported by provisions prohibiting top management and staff to hold political functions, have an interest in regulated utilities or have an employment relationship with the energy sector, triggering dismissal in case of non-compliance. RAE's decisions are open to judicial review. RAE ensures transparency of its decision-making via public consultations, publication of decision-making rules and information

on the reflection of stakeholders' views in Board decisions.

RAE has autonomy in defining its Annual Work Programme. However, RAE does not have autonomy on its internal organisation, *i.e.* the statutes, including principles of internal organisation, require approval by the Government.

Also, RAE does not have financial independence. The budget requires approval of the Parliament. While in other cases this has not materialised in intervention, salaries of RAE have been subject to reduction by the Parliament upon intervention of the Government. Salaries are reported to be comparable to civil servants but lower than the regulated industry's.

Another threat to independence is the practice of extreme delays in the appointment of Commissioners, which results in them overstaying their terms in office (without a renewed mandate) for a significant period of time.

RAE participates actively in the regulatory discussions in the Energy Community Regulatory Board, the President of which is the Director of RAE.

b. Conclusions and Priorities

The following changes in law and regulatory practice are key priorities in order to comply with the Third Package:

- RAE needs to be granted autonomy on defining its internal organisation.
- RAE needs to be granted budgetary autonomy including autonomy of the management to define staff salaries comparable to salaries in the regulated industry.
- Vague grounds for dismissal of Board members, the Director and the Deputy Director such as "incapability of performing duties" or lack of acceptance of the agency's Annual Report by the Parliament without further specification need to be removed.
- RAE's competences need to be expanded to the complete set of regulatory powers and objectives foreseen under the Third Energy Package.
- Board members' terms in office should be renewed promptly
 after the expiry of their mandate (or they should be replaced
 by other candidates). Board members should not be in office
 without a mandate.



9.4 Oil

a. Sector Overview

Montenegro is exploring for oil in the Adriatic Sea. The first offshore bid round for the production concession contract was closed on 15 May 2014 with three consortiums applying. The Tender Evaluation Committee has completed the formal and technical evaluation of the companies. Negotiations with the companies are in process. The Government's decision is expected during 2015, while the ultimate approval of the concession contract is with the Parliament.

The consumption of petroleum products in Montenegro has decreased by 2.2% to a level of around 231.8 kt in 2014. These products are mainly imported from Greece, Serbia and other neighbouring countries. Total storage capacity that could be used as strategic stocks, is around 205,000 cm.

The Energy Law of 2010 requires that strategic reserves of oil and petroleum products are equal to 90 days of average domestic consumption in the previous year and places the responsibility of emergency stockholding fully on the industry. However, the provisions of the Law related to oil stocks have not been implemented to date. A decision has been made to regulate this area by a new law which would focus exclusively on strategic stocks of oil and oil products. The draft Law on Compulsory Oil Stocks is in the initial stages of preparation by the Ministry responsible for energy.

The newly adopted "Energy Development Strategy by 2030" foresees the establishment of a stockholding agency, a detailed plan for ensuring stocks of oil products and secondary legislation.

The Government of Montenegro has approved an Action Plan for Implementation of the Oil Stocks Directive in April 2015.

Based on this Action Plan, Montenegro decided to select the combined (industry and state) stockholding model, with the possibility of changes in property share, storage and ticket price. According to this model Montenegro would entrust a part of its mandatory oil stocks to the industry through clearly defined contractual obligations. One part of the stocks would be provided from its budget funds, whereas the other part would be provided through tickets. The initial volume of the stocks would be physically located in Montenegro, whereas certain quantities on the territory of EU Member States would be reserved by tickets. According to this Plan, the required amount should be reached by the end of 2022 with the following ownership structure: 33,23% industry share, 33,23% state share and the remaining 33,54% in the form of tickets.

The Government has also adopted a Decision on the Establishment of the Administration for Hydrocarbons and allocated initial operational funds in the budget of Montenegro for 2015 for its operation. During 3rd quarter of 2015 the Hydrocarbons Administration will commence its operation.

b. Conclusions and Priorities

Montenegro should focus on adopting the new draft Law on Compulsory Oil Stocks and the subsequent secondary legislation in line with Directive 2009/119/EC during 2015, as well as on improving data collection. In concrete terms the following tasks should be taken into consideration: establishment of an agency (structure, budget, basic tasks), start of negotiations with the banking sector, having available storage capacities from the oil companies (state-owned and private), improving data collection to develop a workable reporting system (to calculate net imports) and modification of the basic model of the stockpilling regime.





a. Sector Overview

1. State of Play, Legislation and Promotion of Renewable Energy

With the adoption of Directive 2009/28/EC, Montenegro committed to a binding 33% target for energy from renewable sources compared with 26.3% in 2009. The *National Renewable Energy Action Plan (NREAP)* has been adopted and submitted to the Secretariat in December 2014, closing the case initiated in February 2014. The *Report on the Progress in Promotion of Renewable Energy 2012 - 2013* was also submitted.

In July 2014, the new "Energy Development Strategy by 2030" was adopted. The Strategy estimates that Montenegro could even have a renewable energy share of about 46% in gross final energy consumption in 2020.

Provisions related to electricity and heating generated from renewable sources are included in the existing Energy Law adopted in 2010. They are further implemented through a set of governmental Decrees of 2011, namely for privileged producers, feed-in tariffs, and guarantees of origin. A new Energy Law is in drafting procedure and will also transpose Renewable Energy Directive. The proposed changes include, *inter alia*, provisions related to access to and operation of the grids for electricity from renewable sources, administrative procedures, regulations and codes, the framework for the cooperation mechanisms and monitoring and reporting obligations.

2. Electricity from Renewable Sources

In terms of promotion of renewable energy, the Law tasks the Ministry of Economy to set the Methodology for Feed-in-Tariffs in Montenegro. Governmental Decrees on feed-in tariffs for small hydropower plants, wind and biomass as well as for cogeneration and power plants that use solid waste, biogas and waste gases are in place for so-called privileged producers since 2011. The tariffs are revised annually based on the inflation index. Support is given for 12 years irrespective of technology. Support to small hydropower plants, plants using biomass, biogas, solid waste or landfill gas and cogeneration plants are limited to a maximum capacity of 10 MW.

The market operator, *COTEE*, is assigned with the function of single buyer of electricity produced from privileged producers and taking balance responsibility for the entire portfolio of the privileged producers under a power purchase agreement (PPA). *COTEE* concludes agreements with electricity suppliers who are obliged to purchase a certain percentage of electricity

from renewable sources. The status of a privileged producer may be obtained only after the renewable energy plant is constructed and connected to the transmission or distribution system. *COTEE* has adopted a pre-power purchase agreement to lock-in the applicability of the feed-in tariffs at the moment of signature of the agreement. Pre-PPA and PPA are available on the market operator's website. All renewable energy supply contracts between the market operator and electricity suppliers are covered by bank guarantees to insure investor confidence.

In January 2014, the Government adopted a Decree Defining the Method for Allocating the Cost for Promoting the Use of Energy from Renewable Sources to End-Customers based on an incentive fee depending on the level of electricity consumption. The Regulation tasks the Ministry to set the incentive fee. The Decree further introduces the concept of self-supplier of electricity from renewable sources. They came under the obligation of supplying the available electricity produced from renewable sources and grants an exemption from balance responsibility.

Numerous state and local level authorities are involved in licensing and administrative procedures for renewable energy. There is not sufficient communication between these bodies, and the information on the process has not been summarised in guidelines or similar.

There is no one-stop shop planned to deal with all permits and authorisations for a renewable energy project.

Few steps to simplify and streamline the process have been taken in the last reporting period. The number of procedures for issuing the construction licenses and permits in the Ministry of Sustainable Development and Tourism were reduced from 36 to two. After the energy permit was issued by the Ministry of Economy, there are several procedures involving different authorities before the renewable energy project becomes operational. The energy regulator (RAE) is confirming the fulfilment of privileged producer status and issuing guarantees of origin, transmission and distribution network operators grant grid connection and the market operator concludes power purchase agreements. There are simplified procedures for renewable energy plants with installed capacity of up to 20 kW where no authorization is required except the approval of the connection to the electricity distribution grid.

Since 1 September 2014, the Ministry accepted applications only for small hydropower plants up to 1 MW capacity. These applications are currently evaluated by a Commission established within the Ministry.

The Energy Law empowered RAE to approve the Ten Year Network Development Plans (TYNDP) for the transmission system prepared by the transmission system operator (CGES) in accordance with the "Action Plan of the Energy Development Strategy" and the development plans of neighbouring transmission system operators. Similarly, the distribution system operator (EPCG) shall prepare a Ten Year Development Plan for the distribution system and update it every three years. CGES has the obligation to publish on its webpage the TYNDP and the annual investment plan approved by RAE. As of today, these documents are not publicly available. The draft Energy Law requires the network operators to take into consideration the plans for promotion of renewable energy sources when planning the development of the networks.

The Methodology for Determining the Costs of Connections provides that the cost for connection is paid by the users (including producers and end-customers) connected to the system including also the cases for increasing the capacity. The connection costs consist of: costs for financing of the study on connection of the user to the transmission system, review of the technical documents (main design), supervision of transmission system operator for the construction works and technical examination of the connector. The Distribution Grid Code requires the investor in a small production power plant to pay for the costs of issuing the conditions for connection, and the costs for connection. The connection costs include: costs of equipment, installations and materials, works and preparation of technical documents, as well as legal costs to solve land property issues.

The Law on Energy provides for priority access and dispatch for the privileged renewable energy producers. Transmission and distribution system operators are obliged to give priority to the privileged renewable energy producers, within the technical parameters of the respective network. The operators must undertake necessary measures in case of curtailment and report to RAE in case priority dispatch is not provided to the privileged renewable energy producers due to exceeding the security limits imposed in the grids.

RAE was appointed to issue guarantees of origin for electricity generated from renewable energy sources and to maintain a register of issued guarantees. An initial online registry is established by RAE and several certificates for guarantees of origin were issued. The Law on Energy provides that foreign guarantees of origin will be recognised in Montenegro under the condition of reciprocity and in accordance with international agreements.

3. Renewable Energy in Heating and Cooling

Montenegro conducted a "Biomass Consumption Survey Study" in 2011 and changed retrospectively their solid biomass consumption for heating purposes. Today, the energy statistics for the year 2009 report solid biomass consumption 3.6 times as high as in the NREAP, thus altering the effort required to reach the 2020 renewable energy target. With this review, Monte-

negro had overachieved the 2020 renewable energy target of 33% already in 2013. Montenegro reported a 42% renewable energy share in gross final energy consumption in 2013.

The NREAP envisaged policy and support schemes for promoting use of renewable energy sources in heating and cooling as planned measures for 2015. Currently adopted national measures are: an obligation for new buildings in certain climate zones to cover a quota of their energy needs for domestic hot water with renewable energy mostly based on solar thermal systems; support programmes for increasing use of renewable energy in heating and cooling; and subsidies in some municipalities for the installation of solar systems in new buildings by reducing utility costs.

4. Renewable Energy in Transport

Montenegro is the only Contracting Party which did not transpose a single provision with regard to renewable energy used in transport, not even the basic elements of the previous Directive 2003/30/EC. It also does not provide any incentives for the production or use of biofuels or set a sustainability verification system as required by Directive 2009/28/EC. After a repeated tendering procedure, a project on development of sustainable energy use started last year. The main focus of the project is on sustainable transport, covering the relevant regulatory framework, capacity building and promotion of sustainable use.

b. State of Compliance

Despite progress with the adoption of support schemes and several attempts with simplification of procedures, Montenegro has still not completed the adoption of the legal and regulatory framework to comply with Directive 2009/28/EC.

1. National Renewable Energy Action Plan

Montenegro adopted and submitted the *NREAP* required by Directive 2009/28/EC with delay. The Secretariat launched an infringement action in February 2014 and closed the case at the end of 2014 after the adoption and submission of the *NREAP*.

2. Support Schemes

Support schemes for various technologies exist and several projects are being implemented. However, no support schemes for renewable energy in heating and cooling or for transport have been adopted yet. Montenegro has to increase compliance with this requirement of Directive 2009/28/EC.

3. Cooperation Mechanisms

Despite the possibilities to overshoot the 2020 binding renewable energy targets and enter into cooperation mechanisms with other Contracting Parties or EU Member States, the provisions related to cooperation mechanisms have not been transposed so far.

4. Administrative Procedures

The administrative procedures for permitting, construction and licensing remain quite lengthy and burdensome despite several simplification rounds in the last years. A one-stop shop is not envisaged even for small projects. There is no full compliance with regard to coordination between the authorities. Currently, Montenegro fails to comply with the requirements of Article 13 of Directive 2009/28/EC.

5. Access to and Operation of the Grids

The requirements related to access to and operation of the grids as well as rules for connection to the grids for renewable energy producers provided for in Article 16 of Directive 2009/28/EC are still not entirely implemented. Due to the lack of transmission and distribution capacities, applications for connections to the grids are on hold. Moreover, the system operators still have not come up with plans to develop their network to integrate more renewable energy into the grids.

6. Guarantees of Origin

The 2011 Government Decree on Guarantees of Origin constitutes the framework for the issue, transfer and cancellation of guarantees of origin. Montenegro should ensure the standardisation and harmonisation of the guarantees of origin with the European practice and thus increase compliance with Article 15 of Directive 2009/28/EC.

7. Renewable Energy in Transport

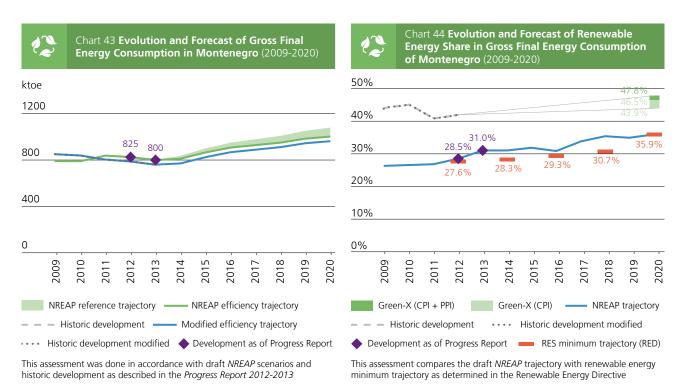
As regards renewable energy in the transport sector, the situation is characterized by a complete lack of compliance. The targets in transport have not been set. Articles 17 to 21 of Directive 2009/28/EC related to sustainability criteria for biofuels and bioliquids have not been transposed. The lack of experience dealing with implementation of Directive 2003/30/EC related to promotion, incentives and monitoring of biofuels will delay the implementation of the new requirements. Directive 2009/28/EC defines even more complex requirements for the definition of a certification scheme and establishment of the relevant body for certification and conditioning achievement of the targets by proven sustainability. In practical terms, it means that even some small biofuels consumption as of 5,000 tonnes, reported by unofficial sources for 2013, cannot be calculated towards the target due to lack of verified sustainability.



c. Quantitative Assessment of the Progress Towards National Renewable Energy Trajectory

According to EUROSTAT energy data, Montenegro managed to have a constant decrease of the gross final energy consumption (GFEC) since 2008, which results in a total reduction of 21% between 2008 and 2012. It is important to mention here that there are significant differences between the historic data and the data in the Progress Report on Promotion of Renewable Energy and NREAP of Montenegro.

Actual statistics show that based on a "Biomass Consumption Survey Study" conducted in 2011, Montenegro changed its solid biomass consumption for heating purposes retrospectively. Today, the energy statistics report on solid biomass consumption for the year 2009 which is 3.6 times as high as reported in the NREAP. The renewable share of 42% reached in 2013, is well above the 33% renewable energy target in 2020, considering the corrected solid biomass data. The modelling results with the current and planned policy initiatives show that Montenegro could overachieve the renewable energy targets up to 14% and reach 47% in 2020.



Source Study on the Assessment of the National Renewable Energy Action Plans and the Progress in Promotion of Renewable Energy in the Energy Community, by ECN et all, 2015

d. Conclusions and Priorities

Despite progress made in the last years, Montenegro fails to comply with the *acquis* on renewable energy. Lack of administrative capacity is hindering further promotion of renewable energy.

The retroactive revision of the biomass data for 2009 - 2012 shows that Montenegro has already reached a 42% renewable energy share in 2012 without any additional effort. The validity of the 33% renewable energy target for 2020 is, therefore, questionable.

The swift adoption of the Third Energy Package compliant Energy Law including amendments to transpose Directive 2009/28/EC, must become the first priority.

Connection to the grids for new renewable energy power plants as well as market integration of renewable energy remains critical in the country. In the permitting and grid connection procedures, simplification (a one-stop shop) and more transparency are urgently required to create a conducive investment framework. The poor record of installing electricity generation capacities from renewable sources shows the seriousness of the situation.

Finally, the entire legal framework for renewable energy in the transport sector has to be set up from scratch, including targets, assessment of potential, sustainability criteria, a certification scheme and a certification body, incentives, promotion and monitoring powers. Efficient cooperation among many institutions will have to be urgently initiated to put Montenegro on track to fulfil the 10% target in transport by 2020.



9.6 Energy Efficiency

| Energy Efficiency Action Plan (EEAP)* | | | | | | | |
|--|----------------|---|--|-------|---------|-------|--|
| Period covered by EEAP | | | 2010 – 2018 | | | | |
| Overall energy savings target - Directive 2006/32/EC (ktoe / % / year) | | | 58.9/9/2018 | | | | |
| EEAP status | | | 2 nd EEAP adopted on 21 November 2013 | | | | |
| Achieved energy savin | gs 2010 – 2012 | | 25 ktoe (4%) | | | | |
| Key institution(s) in charge | | Ministry of Economy (Directorate for Energy Efficiency); Ministry of Sustainable Development and Tourism | | | | | |
| Main data and energy efficiency indicators** | | 2010 | 2011 | 2012 | 2013*** | | |
| Total primary energy supply (TPES) kto | | ktoe | 1,174 | 1,126 | 1,062 | 1,037 | |
| Energy intensity (TPES/GDP) toe / 1,000 USD | | 0.42 | 0.39 | 0.37 | 0.36 | | |
| TPES/Population 1 | | toe/capita | 1.86 | 1.81 | 1.71 | 1.67 | |
| Total final energy consumption (TFEC) ktoe | | 806 | 763 | 734 | 719 | | |
| | Residential | % | 41% | 35% | 38% | 40% | |
| | Services | | 1% | 1% | 2% | 4% | |
| Share of TFEC by sector | Industry | | 24% | 29% | 27% | 25% | |
| | Transport | | 28% | 28% | 28% | 26% | |
| | Others | | 1% | 1% | 1% | 1% | |
| | Non-energy use | | 5% | 6% | 4% | 3% | |

^{*} Source: Energetska Efikasnost u Crnoj Gori website / 2nd NEEAP of Montenegro

a. Sector Overview

There is a clear indication that the final energy consumption in Montenegro was on a downward trend from 2011 to 2013, while the gross domestic product resumed growth in 2013, after contracting in 2012. The positive trend is reflected in the constant decrease of energy intensity since 2010 to 2013 and the decoupling of economic growth from the energy demand growth.

The main legislative progress in the reporting period was the adoption of the Law on Efficient Use of Energy in December 2014. This Law repeals the Energy Efficiency Law of 2010 and further strengthens the national legislative framework for energy efficiency, in accordance with Directives 2012/27/EU, 2006/32/EC, 2010/30/EU and 2010/31/EU.

The new Law introduced improved or new requirements regarding the development of the inventory and plans for the reconstruction of public administration buildings, registration of large energy consumers and development of relevant energy efficiency improvement plans, methodology for measurement and verification of the energy savings supported by an electronic system, energy management, authorization for training on energy audits, energy efficiency obligation schemes for distributers and suppliers of energy, stricter inspection and penalties, etc. This Law promotes the efficient use of energy, while the draft Energy Law deals with the promotion of energy

efficiency on the supply side, covering energy efficiency requirements in energy production, transformation, transmission and distribution.

Adoption of the new and improvement of the existing by-laws is expected to be finalized within one year from the adoption of the Law on Efficient Use of Energy, *i.e.* by the end of 2015. A Rulebook on the Methodology for Determining the Level of Energy Efficiency in Public Procurement of Goods and Services and a Guideline for the Introduction of Minimum Technical Criteria in the Procurement of Energy Efficient Products were drafted and submitted to the Ministry of Economy in February 2015. Awareness raising and capacity building activities for responsible institutions are being carried out as well. Support activities to implement Article 7 (Energy efficiency obligation schemes) and Article 15 (Energy transformation, transmission and distribution) of Directive 2012/27/EU were initiated with a review of the primary legislation in March 2015.

Montenegro adopted the second *Energy Efficiency Action Plan (EEAP)* as required by Directive 2006/32/EC in November 2013. It represents a comprehensive strategic document for implementation of energy efficiency policy in the end-use sectors for the period 2013 - 2015, with projections for 2018. The second *EEAP* also includes a detailed review of implemented measures envisaged by the first *EEAP*. In December 2014, the Government of Montenegro adopted the Energy Efficiency Operational Plan of Public Administration Institutions for 2015,

^{**} Source: International Energy Agency

^{***} Indicators calculated by the Energy Community Secretariat based on preliminary energy balances for 2013

which promotes the exemplary role of the public sector in line with the requirements of Directive 2006/32/EC and further elaborates energy efficiency measures in the public sector. Energy management systems in municipalities are under development, linked with implementation of local energy efficiency improvement programmes.

Montenegro is still lacking adequate end-use statistical data and a system for calculation of energy efficiency indicators. On the other side, the methodology and web platform for monitoring and verification of *EEAP* measures were developed and supported with the organization of training workshops.

The Fund for Energy Efficiency was established in 2006, as an independent budget item within the State budget allocations to the Ministry of Economy. The Fund manages projects supported by the State budget, donations, loans and/or other financing mechanisms.

Directive 2010/31/EU is being implemented jointly by the Ministry of Economy and the Ministry of Sustainable Development and Tourism, which is responsible for buildings. In addition to the Law on Efficient Use of Energy, the Law on Spatial Planning and Construction of 2013 is also relevant for the transposition and implementation of Directive 2010/31/EU. A set of rulebooks was adopted in May 2013. However, the energy performance certification system is not finalized due to the absence of a national tool for energy performance calculation and certification of buildings. The supporting technical assistance programme designed to develop a building stock inventory and define reference buildings, develop national software for energy performance calculation and certification of buildings, and provide further education and capacity building in this area was delayed due to a long tendering process. Consequently, the obligation for building certification was postponed to January 2016.

The adoption of the Rulebook on Labelling of Energy-Related Products, which will transpose the Energy Labelling Delegated Acts, is still pending.

The key State body for the implementation of energy efficiency policy in Montenegro is the Ministry of Economy. Within the Ministry, the Directorate for Energy Efficiency is the leading body for the implementation of national energy efficiency policy. No specialized agency for energy efficiency exists in Montenegro.

b. State of Compliance

1. Energy Services Directive 2006/32/EC

The Directive 2006/32/EC was already transposed by the Law on Energy Efficiency of 2010. The adoption of the new Law on Efficient Use of Energy in December 2014 further improved implementation by setting clearer procedures for measurement and verification of energy savings, establishing a new register

of large energy consumers, improving energy performance certification procedures, defining energy-related products and obligations for market players, and setting clearer procedures for inspection and penalties, *etc.* It includes also provisions from the Energy Efficiency Directive 2012/27/EU, namely on energy services, energy management, as well as inventory, plans and dynamics of renovation of central government buildings. The exemplary role of the public sector is promoted well by the Law and the second *EEAP*. This is compliant with Directive 2006/32/EC.

2. Energy Labelling Directive 2010/30/EU

With regards to labelling, the Law on Efficient Use of Energy of 2014 transposed key requirements of the recast Directive 2010/30/EU. However, the adoption of the Rulebook on Labelling of Energy-Related Products, which will enable full compliance with the Labelling Directive and Delegated Acts, is still pending.

3. Energy Performance of Buildings Directive 2010/31/EU

The requirements of Directive 2010/31/EU are transposed in general through the Law on Efficient Use of Energy and further implemented through the set of rulebooks adopted in May 2013. The implementation of certain requirements (*i.e.* certification of buildings and inspection of heating and air conditioning systems) is delayed as the entry into force was postponed until January 2016.

c. Conclusions and Priorities

The adoption of the new Law on Efficient Use of Energy enabled a more efficient implementation and further development of by-laws in the field of energy efficiency.

The priority should be the adoption of the missing secondary legislation. The approval and implementation of a Rulebook on the Methodology for Determining the Level of Energy Efficiency in Public Procurement of Goods and Services is linked with the Rulebook on Labelling of Energy-Related Products. Passing of both Rulebooks through Ministerial approval should be done as soon as possible. These regulations will help stimulate markets for energy efficient goods and services in Montenegro.

Transposition of the new Labelling Delegated Regulations should also be prioritized in accordance with the Ministerial Council Decision of September 2014.

The implementation of the system for certification of energy performance of buildings and inspection of heating and air conditioning systems should start without any further delay.

Montenegro should improve statistical data collection and its system for calculation of energy efficiency indicators and savings, as well as monitoring of *EEAP* implementation. The methodology and platform developed is a step forward. Nev-

ertheless, Montenegro still needs to develop the system for its implementation. Adequate resources, both human and financial should be dedicated to improve the situation in this area.

In order to achieve the indicative energy savings target, significant financial resources should be mobilized, in addition to public budget financing. It is necessary to develop further

the models for public private partnership in the field of energy efficiency, including ESCO enabling framework.

Finally, the institutional set-up must be strengthened, either by strengthening the capacity within the Ministry of Economy and local authorities or by establishing a specialised energy efficiency agency.





9.7 Environment

a. Sector Overview

1. Environmental Impact Assessment Directive

Environmental impact assessment in Montenegro is governed by the Law on Environmental Impact Assessment of 2005 (as amended in 2010, 2011 and 2013) and the Decree on Projects Subject to Environmental Impact Assessment adopted in 2013. The Decree defines projects for which a mandatory environmental impact assessment is required (List 1) and those that have to undergo a screening procedure (List 2). Both lists are aligned with Annex I and Annex II of the Environmental Impact Assessment Directive.

One environmental impact assessment related to the energy sector was carried out in Montenegro during the reporting period. It concerned the construction of overhead power lines. In total, the environmental impact assessments for two Projects of Energy Community Interest (the 400 kV overhead line SS Bajina Basta (SER) – SS Pljevlja (MNE) – SS Visegrad (BIH) and the *Ionian-Adriatic Pipeline*) were concluded so far in Montenegro.

2. Sulphur in Fuels Directive

The Sulphur in Fuels Directive was transposed in Montenegro by the Law on Air Quality and the Regulation on the Limit Values of Polluting Substances in Liquid Fuels of Petrol Origin, which stipulates the thresholds of 1% of sulphur content by mass for heavy fuel oil and 0.1% for gas oil. Montenegro has neither domestic crude oil production nor installations for the refining of oil products.

3. Large Combustion Plants Directive

Montenegro has one single unit lignite-fired plant falling under the scope of the Large Combustion Plants Directive with a rated thermal input of 516 MW.

The Large Combustion Plants Directive has been partially transposed by the Law on Air Quality and the Regulation on Limit Values for Emission into the Air from Stationary Sources.

Montenegro's "Energy Strategy Development by 2030" adopted in July 2014 takes the Decisions of the Ministerial Council of 2013 into account, although only by providing a general reference to the Energy Community environmental acquis.

b. State of Compliance

1. Environmental Impact Assessment Directive

Montenegro has transposed the requirements of the Environmental Impact Assessment Directive into national law and is consequently in a position to effectively implement them.

2. Sulphur in Fuels Directive

Montenegro has transposed the requirements of the Sulphur in Fuels Directive into its national law and is therefore in a position to fully implement its provisions in practice.

3. Large Combustion Plants Directive

The emission limit values for new plants are almost fully harmonized with those of the Directive by the Regulation on Emission Limit Values from Stationary Sources. However, the Regulation provides that plants which are put into operation until its entry into force are allowed to exceed the emission limit values by 250% until 31 December 2025. Furthermore, the definition of combustion plants is not compliant with the one in the Directive.

As Montenegro has only one plant falling under the scope of the Directives, the option to adopt a *National Emission Reduction Plan* is not applicable. While no formal request has been made so far to trigger its application, it is likely that the only large combustion plant in Montenegro will make use of the optout provision provided by Decision 2013/05/MC-EnC, meaning that it would be able to remain in operation for a maximum of 20,000 operational hours between 1 January 2018 and 31 December 2023.

c. Conclusions and Priorities

Montenegro should intensify its efforts to fully transpose the relevant requirements of the Large Combustion Plants and Industrial Emissions Directives into national law. Furthermore, the operator of the only large combustion plant in Montenegro must decide whether or not to apply for the opt-out provisions and notify the authorities by the end of 2015.



9.8 Competition

a. Sector Overview

1. Competition Law

Montenegro adopted a Competition Law in 2012. The provisions of the Law regarding the prohibition of cartels and the abuse of dominance correspond to Articles 101 and 102 TFEU. The Law applies to undertakings performing activities of public interest and to those to whom the right to perform a particular activity was conferred by an act of a competent public body in accordance with Article 106 TFEU. The Agency for Competition Protection (ACP), established in 2013, is entrusted with the enforcement of competition law.

The Government of Montenegro adopted three block exemption regulations in November and December 2014 related to different specific sectors of the economy, but not concerning the energy sector. In the reporting period, the ACP has not decided on any competition cases in the energy sector. There has also been no inquiry or review of the energy sector.

2. State Aid Law

State aid in Montenegro is governed by the Law on State Aid Control adopted in 2009 and amended in 2011. State aid legislation covers support granted for performing activities of public interest and contains conditions under which such support is not considered State aid. The authority in charge of enforcing State aid law is the State Aid Control Commission (SACC) composed of five members appointed by the Government. The work of the SACC is prepared by the Ministry of Finance both procedurally and substantively. The SACC still has no power to order recovery of unlawfully granted aid and can only propose measures of recovery to the Government or the competent local authority.

According to Montenegrin legislation, State aid rules established by the EU bodies, including case law of the European Courts, are directly applicable in Montenegro after being published in the Official Gazette. The Ministry of Finance issues a list of these rules translated into Montenegrin language in its Rulebook on the List of State Aid Rules. In the reporting period, Montenegro adopted the new European Commission Guidelines on State Aid for Environmental Protection and Energy 2014 - 2020 in this way in January 2015.

No case of State aid in the energy sector was assessed or decided by the SACC during the reporting period.

b. State of Compliance

Articles 18 and 19 of the Energy Community Treaty have been transposed into Montenegrin legislation, but the enforcement of both competition and State aid law is at an unsatisfactory level

1. Competition Law

There has been no case of applying competition law to the electricity or gas sector in the past three years, except for a review of a merger more than two years ago. Therefore, more intense enforcement of competition law is needed in order for Montenegro to fully comply with its obligations under the Energy Community Treaty.

2. State Aid Law

As already reported in the previous Implementation Report, the Montenegrin Law on State Aid has several weaknesses and needs to be amended so that it fully complies with the EU acquis, especially as regards the definition of State aid and the independence of the SACC. The enforcement of State aid law in the energy sector also needs to be initiated.

c. Conclusions and Priorities

Competition law is formally in line with the EU acquis, but its enforcement has been at a very low level for the past several years. Montenegro's transposition of EU acquis by means of publication of original EU legislation and case law translated into Montenegrin language ensures its complete and timely formal transposition into domestic legislation. The new Guidelines on State Aid for Environmental Protection and Energy were transposed into Montenegrin legislation only six months after the beginning of their application in the EU. However, amendments of primary legislation are still needed in order for the Law to be completely compliant with the acquis. The priority in the following period should be initiating enforcement of both competition and State aid law in the energy sector.



9.9 Statistics

a. Sector Overview

The legal basis for the production and dissemination of official statistics and the organizational framework is the Law on Official Statistics and the Official Statistical System from 2012. It appoints the Statistical Office of Montenegro (MONSTAT) as the central body responsible for development of the statistical system and the programme of statistical surveys. The Law allows MONSTAT access to all relevant administrative data. The Energy Law from 2011 defines additional transparency and reporting requirements for stakeholders in the energy sector.

The "Development Strategy of Official Statistics 2014 - 2018" identified key areas which require improvement, including energy statistics. Key energy indicators are published in the "Annual Statistical Yearbook".

b. State of Compliance

1. Annual Energy Statistics

MONSTAT collects and publishes energy balances containing annual data on production, import, export, transformation, consumption and distribution of electricity, coal, oil products and firewood in Montenegro. The methodology and formats are harmonized with *IEA/EUROSTAT* standards.

After the first annual survey on firewood consumption, MON-STAT revised its renewable energy statistics. The survey on consumption of energy in services is currently conducted with the technical assistance project of the Secretariat. The project is expected to be finalized by the end of 2015 and should provide more accurate and comprehensive consumption data.

Annual questionnaires are communicated timely to *IEA* and *EUROSTAT*, in compliance with the *acquis*.

2. Monthly Energy Statistics

Data for monthly statistics are collected from traders of oil products and producers of electricity and coal. MONSTAT collects monthly data from a web application in the Ministry of Economy. Monthly reports on electricity and solid fuels are prepared and submitted to *EUROSTAT*, but not published yet. MONSTAT is working on developing short-term monthly statistics, including monthly oil statistics, with the plan to start submission of *Joint Organisations Data Initiative (JODI)* oil data to *United Nations Statistics Division (UNSD)* during 2015 to be represented in the global *JODI* database.

3. Price Statistics

Price statistics are established for electricity supplied to industrial end-users and households. Prices, reported per consumption bands and broken down per cost driver, are communicated to and subsequently published by *EUROSTAT*. In this regard, Directive 2008/92/EC is implemented.

c. Conclusions and Priorities

Montenegro established a functional statistical system capable of implementing the requirements of the *acquis*.

Regarding implementation of Directive 2008/92/EC, methodologies and procedures for price statistics will need continuous checking for adequacy with market opening and entry of new suppliers.

The system of continuous data collection should be permanently improved, particularly information on final consumption and information obtained from sample surveys.

MONSTAT will also have to establish quality reporting on energy statistics.



9.10 Open Infringement Cases

There are currently no open dispute cases against Montenegro.







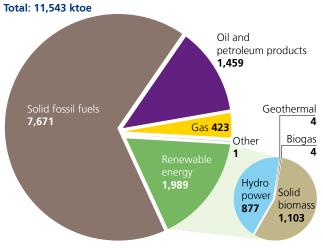
10 SERBIA

10 Serbia

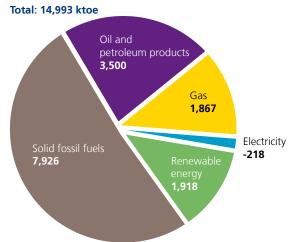
Serbia looks back on another successful year of reforming its energy sectors and thus has become one of the most constant and reliable Contracting Parties in terms of implementation. Having transposed the Third Package even before the expiry of the deadline set a high standard for the other countries and pushed the Energy Community forward as a whole. Besides its success in domestic reforms, the Serbian transmission system

operator *EMS* must now also engage on fair and equal terms in regional integration schemes such as the *Coordinated Auction Office in South East Europe* and the relations with *KOSTT* of Kosovo*. The big leap made in the gas sector by finally starting the unbundling of *Srbijagas* at least in legal terms must be followed up by ensuring full transparency and respect for the non-discrimination principle.

Energy mix in primary production 2013 in ktoe



Gross inland consumption 2013 in ktoe



Source: EUROSTAT



4

Serbia

10.1 Electricity

| 10.1 210 | ectricity | | | |
|--|-------------------|---|---------|------------|
| Description of data [unit] | | | 2013 | 2014 |
| Electricity production [GWh] | 37,537 | 32,151 | | |
| Net imports [GWh] | 2,152 | 3,180 | | |
| Net exports [GWh] | 4,475 | 1,021 | | |
| Total electricity supplied [GWh] | 35,214 | 34,310 | | |
| Gross electricity consumption [GWh] | | | 35,007 | 34,130 |
| Losses in transmission [GWh] | 1,013 | 948 | | |
| Losses in transmission [%] | 2.44% | 2.44% | | |
| Losses in distribution [GWh] | | | 4,486 | 4,215 |
| Losses in distribution [%] | | | 14.9% | 14.4% |
| Consumption of energy sector [GWh] | | | 1,510 | 1,303 |
| Final consumption of electricity [GWh] | | | 27,998 | 27,664 |
| Communication at the COM/L | Industrial, trans | sport, services and other non-residential sectors | 13,851 | 13,862 |
| Consumption structure [GWh] | Households (re | sidential customers) | 14,147 | 13,802 |
| Net maximum electrical capacity of power | plants [MW] | | 6,998 | 7,005 |
| Coal-fired | | | 3,827 | 3,846 |
| | out of which: | multi-fired | 0 | 0 |
| | Gas-fired | | 277 | 249 |
| | out of which: | multi-fired | 277 | 249 |
| | Oil-fired | | 0 | 0 |
| | Nuclear | | 0 | 0 |
| Net maximum electrical capacity | Hydro | | 2,886 | 2,897 |
| of power plants [MW] | | small hydro | 43.4 | 54.2 |
| | out of which: | pumped storage | 614 | 614 |
| | Other renewak | Other renewables | | 12.62 |
| | | wind | 0.5 | 0.5 |
| | | solar | 2.45 | 7.22 |
| | out of which: | biomass | 0 | 0 |
| | | biogas | 4.4 | 4.9 |
| | 380 kV or mor | 380 kV or more [km] | | 1,614 |
| | 220 kV [km] | | 1,884 | 1,884 |
| | 110 kV [km] | | 5,814 | 5,877 |
| Horizontal transmission network [km] | HVDC [km] | | 0 | 0 |
| | Substation cap | Substation capacity [MVA] | | 27,370 |
| | Number of inte | Number of interconnectors | | 22 |
| | Interconnectin | g capacities [MVA] | n/a | n/a |
| | Total | Total | | 3,605,448 |
| Electricity customers | out of which: | non-households | 396,057 | 396,539 |
| Electricity customers | Eligible custom | ners under national legislation | 396,057 | 396,539 |
| | Active eligible | customers | 26 | 55,972 |
| Internal market | Electricity supp | Electricity supplied to active eligible customers [MWh] | | 10,156,000 |
| Internal market | Share of final o | consumption [%] | 7.99% | 36.71% |
| | | | | |

Source: Ministry of Energy and Mining of Serbia

a. Sector Overview

Serbia is the first Contracting Party that transposed the Third Package by adopting a new Energy Law in December 2014.

The Law requires that the bulk of the necessary secondary legislation is to be passed within one year.

The vertically integrated undertaking *Elektroprivreda Srbije* (*EPS*)

performs generation, distribution and supply activities. In July 2013, legal unbundling of distribution system operators from supply was completed. In November 2014, the Serbian Government adopted a programme for *EPS's* reorganization. In the first phase finalized on 1 July 2015, *EPS* was reorganized into three legal entities. Six electricity production subsidiaries and the subsidiary that carried out coal production were merged into the parent company, while four electricity distribution subsidiaries were merged into the distribution company *Elektrodistribucija Beograd* to form a subsidiary *EPS Distribution*. The company *EPS Supply* continues to operate as a separate legal entity within *EPS*. In the second phase, *EPS* will be transformed into a joint-stock company until 1 July 2016.

The transmission system operators *Elektromreza Srbije* (*EMS*) of Serbia and *KOSTT* of Kosovo* signed an Inter-TSO Agreement on network and system operation management in September 2014, which was meant to close the long-standing dispute between the two operators. The Agreement was negotiated under the auspices of the Secretariat and with the support of the European Commission. The Inter-TSO Agreement and its technical annexes implement the operational part of the Framework Agreement signed by both parties in February 2014. However, both Agreements are not applied in practice.

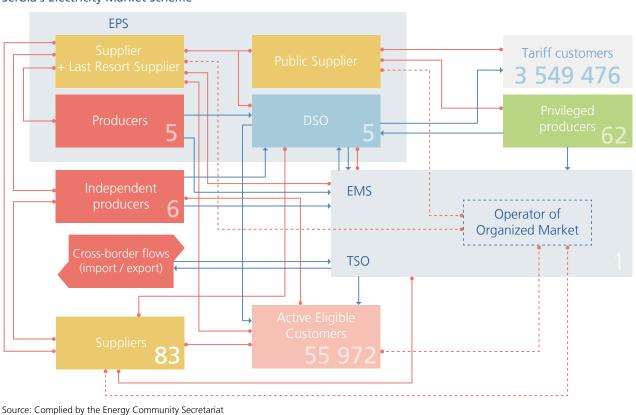
EMS has improved the mechanisms for cross-border capacity allocation with neighbouring system operators, but still has not made progress in joining the regional capacity allocation platform or using its services.

According to the new Law, all customers are free to choose their supplier. Regulation of electricity prices is limited to universal service for households and small customers only. Following a public tender procedure, the Government appointed *EPS Supply* as a supplier of last resort.

In 2014, 40 suppliers were active in the electricity market, mainly in the resale and cross-border trade, while seven suppliers were supplying final customers.

As of 1 May 2015, *EMS* and *CGES* commenced a common mechanism for exchange of balancing energy from a manually activated frequency restoration reserve based on the common merit order list.

A joint-stock company *SEEPEX*, with 75% of the shares owned by *EMS* and 25% by *EPEXSPOT*, was registered in July 2015. *SEEPEX* is expected to become operational in November 2015.



Serbia's Electricity Market Scheme

Refer to the market schemes legends on page 248 for a more detailed description.

b. State of Compliance

1. Authorisation

The provisions of the new Energy Law on authorisation and tendering for construction of new generation facilities are in line with the *acquis*. Pursuant to the Law, in 2015 the Ministry issued the Rulebook on Energy Permits, regulating in more details the conditions and methods of issuing energy permits. The Ministry is responsible for issuing energy permits and conducting tendering procedures. A decision on the public tender announcement is be issued by the Government upon proposal of the Ministry. Results of the authorisation are monitored by the Ministry which notifies the Government if there is a need to announce a public tender.

2. Unbundling

The provisions of Directive 2009/72/EC concerning ownership unbundling of the transmission system operator are transposed in the new Energy Law. The Law defines that provisions ensuring unbundling shall apply as of 1 June 2016, and a certification procedure shall be performed within two years from the date the Law entered into force. Until the certification procedure is finalized, *EMS*, as a holder of a transmission system operation license at the time of the entry into force of the Law, will continue performing the activity.

Unbundling of the distribution system operator is transposed in line with the Third Package but has not been fully implemented. The legal unbundling was done in compliance with the Third Package requirements. However, the distribution system operator must also functionally unbundle and appoint a compliance officer and adopt a compliance programme, upon prior consent of the Energy Agency of the Republic of Serbia (AERS). The compliance programme must be adopted within one year upon entry into force of the Law.

Having in mind that both *EMS* and *EPS* are fully state-owned companies, supervised by the Ministry of Economy, Ministry of Finance, and Ministry of Mining and Energy in accordance with their particular competences, further measures have to be undertaken in order to ensure separation of control in line with the unbundling requirements of the Third Package.

3. Third Party Access

The third party access to transmission and distribution systems is transposed in compliance with the Third Package. Prices of access to the transmission and distribution systems are determined and published based on the methodologies adopted by AERS. In addition, AERS must adopt a Methodology for Determining the Price of Access to the Closed Distribution System within six months upon entry into force of the Law.

The Law defines that the rules on cross-border capacity allocation shall be developed in compliance with the *acquis*. The Rules on the Allocation of Cross-Border Transmission Capacities are issued by the transmission system operator upon consent of AERS. AERS approved bilateral agreements on joint auctions for cross-border capacity allocations between *EMS* and neighbouring operators *ESO*, *HOPS*, *MAVIR*, *Transelectrica* and *NOS BiH* for 2015. *EMS* must take part in a coordinated capacity allocation platform, in line with the roadmap submitted to the Secretariat in order to end an ongoing infringement procedure.

4. Eligibility

The new Energy Law defines eligibility in line with the *acquis*. All customers are eligible to choose their supplier as of 1 January 2015, including households and small customers.

New Switching Rules were adopted by AERS in 2015, in line with the requirement to harmonize the rules with the new Energy Law within six months upon its adoption.

5. Market Opening and Price Regulation

According to the new Energy Law, as of 1 January 2015, all final customers except households and small customers are obliged to choose their supplier at the electricity market at unregulated price. All customers that do not qualify as small customers, namely those that had an annual consumption over 30,000 kWh in 2014, were obliged to choose their supplier until 1 July 2015 at the latest.

The right to be supplied under regulated prices remains only for households and small customers, who may choose to be supplied by a guaranteed supplier. The price of the guaranteed supplier will be regulated by AERS, based on the Methodology for Determination of the Price of Electricity for the Guaranteed Supplier. AERS is obliged to publish the first report on the need for further regulation of this price until 1 May 2017. Upon the assessment of AERS that the need for further regulation of the price ceases to exist, the Ministry shall conduct a public tender procedure for choosing a guaranteed supplier. Within six month of the appointment of the guaranteed supplier, AERS must abolish further regulation of the electricity price. In practice, EPS Supply continues to perform the function of guaranteed supplier under prices regulated by AERS until and if a guaranteed supplier is designated on the basis of a public tender procedure.

6. Balancing and Imbalance Settlement

The rules on balancing and imbalance settlement are transposed and implemented in line with the Directive's requirement for a market-based and non-discriminatory approach. Methodologies were further defined by the Market Rules amended by *EMS* in November 2014. The amendments were mainly aimed at providing incentives to balance responsible parties to be balanced as close to real time as possible.

The new Energy Law defines that prices of ancillary services,

namely primary regulation, voltage regulation, black start and islanding are regulated by AERS, where prices of reserve needed for secondary and tertiary regulation may be regulated, depending on the assessment of AERS of the need for full or partial regulation, depending on the competition level, development of the regional market and cross-border capacities. In practice, AERS adopted a Decision on Prices of Ancillary Services where a separate price for each ancillary service is defined. Based on the regulated prices, *EMS* procures ancillary services from *EPS*.

7. Customer Protection and Protection of Vulnerable Customers

Mechanisms for customer protection and protection of vulnerable customers are strengthened by the new Energy Law in conformity with the Third Package. The Law defines last resort supply, in the duration of up to 60 days, for final customers that are not entitled to guaranteed supply in the case that the supplier goes bankrupt, has its supply license expired or revoked, or if the customer fails to choose a new supplier. Following a tendering procedure, in May 2015 the Government designated *EPS Supply* as a supplier of last resort for a one-year period. Conditions and price of last resort supply are published on the website of *EPS Supply*.

The new Law strengthens obligations of suppliers and AERS with regard to customer protection and quality of supply. In case of dispute among energy entities and between the energy entity and a system user, which is resolved pursuant to the Law on Mediation, AERS must provide professional assistance to the parties in dispute and all available data needed for the mediation procedure.

The new Energy Law defines that an electricity customer is entitled to be supplied under special conditions, due to its social status or its health condition, if the household lives in one residential unit with a single metering point where the consumption of electricity is measured, and who consumes the maximum quantity of electricity in line with the Government's Decree defining in more details criteria for obtaining the status of an energy vulnerable customer. In line with the Law, funds for energy vulnerable customers are provided from the State budget.

c. Conclusions and Priorities

Following the adoption of the new Energy Law largely compliant with the Third Package, secondary legislation must be passed as soon as possible in line with the deadlines stipulated by the Law. This concerns in particular licensing, including a certification procedure, which had to be passed by the Ministry already.

The process of *EPS* restructuring must be completed in a way that ensures the full unbundling of the distribution system operator in line with the Energy Law. The unbundling of the transmission system operator must be finalized in line with the deadlines stipulated by the *acquis*.

EMS must join a capacity allocation platform.

To facilitate competition in the electricity market and streamline its integration, *EMS* should finalize the process of setting up a power exchange and continue its efforts on developing regional balancing cooperation.





10 2 Gas

| | | | 2013 | 2014 |
|--|-------------------|---|---------|------------------|
| Natural gas production [Bcm] | | | 0.4680 | 0.4670 |
| Imports flows [Bcm] | | | 1.8240 | 1.3930 |
| Exports flows [Bcm] | | | 0.0000 | 0.0000 |
| Stock changes [Bcm] | | | -0.0780 | 0.1420 |
| Total supply [Bcm] | | | 2.2140 | 2.0020 |
| Gross consumption of natural gas [Bcm] | | | 2.2140 | 2.0020 |
| Consumption in energy sector [Bcm] | | | 0.5920 | 0.5100 |
| Available for final consumption of natural gas [I | Bcm] | | 1.6220 | 1.4920 |
| leteres and the interest in th | Total | | 5.2378 | 5.2378 |
| Interconnectors' capacity [Bcm] | | out of which bidirectional | | 0 |
| Storage working capacity [Bcm] | | | 0.45 | 0.45 |
| Length of transmission network [km] | | | 2,398 | 2,423 |
| Length of distribution network [km] | | | 15,839 | 16,363 |
| | Total | | 261,015 | 261,262 |
| | | Non-households | 12,009 | 12,288 |
| Natural gas customers | | Eligible customers under national legislation | 12,009 | 12,288 |
| | out of which: | Active eligible customers | 55 | 60 |
| | | Households | 249,006 | 248,975 |
| Internal market | Gas supplied to | Gas supplied to active eligible customers [Bcm] | | 0.8000 |
| Internal market | Share of total of | Share of total consumption [%] | | 40% |
| Final consumption of natural gas per sector [Bcm] | | | 2.1920 | 1.9820 |
| Consumption structure [Bcm] | Energy transfor | Energy transformation | | 0.0180 0.4710 |
| | Industry and co | Industry and commercial customers | | 1.3140 |
| | Households | Households | | 0.1790 |
| | | | | |

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

a. The Gas Market in Serbia

Serbia was the first Contracting Party to transpose the Third Energy Package into national legislation even before the deadline. The Energy Law adopted in December 2014 governs the natural gas sector. In terms of secondary law, the acts predating the adoption of the Law are still valid, with a principle transition period of one year, the exception being the Ministry of Mining and Energy's Rulebook on Energy Permits which was aligned with the new Law.

The Law establishes the ownership of the public enterprise *Srbijagas* on the natural gas transport network and natural gas distribution network, owned so far by the Republic of Serbia. The distribution system operator also acquired ownership over the distribution network that it had constructed from its own funds or acquired through a legal transaction.

The other legal acts governing the gas sector are the Government's Decree on Conditions of Natural Gas Delivery and Decree on Protection of Vulnerable Customers. Beside these

the Rulebook on Energy Licenses developed under the previous Gas Law is still in force. The by-laws adopted by the national regulatory authority in Serbia (AERS) governing the gas sector adopted in the previous years (on the basis of the 2011 Energy Law) are still in place and have not been updated after the new Law entered into force. These include methodologies to determine connection costs for transportation and distribution systems, pricing methodologies for access to transmission and distribution systems and for public supply as well as a rulebook on supplier switching. AERS approves final tariffs calculated by the natural gas undertakings on the grounds of its methodologies.

The 2014 Ministerial Council decided that, by failing to implement the requirements of legal unbundling of its two transmission system operators for natural gas *Srbijagas* and *Yugorosgaz* and to ensure their independence in terms of organisation and decision-making from other activities not relating to transmission, the Republic of Serbia failed to comply with Article 9 of Directive 2003/55/EC. The Council obligated Serbia to undertake promptly the necessary actions to fully implement

the unbundling of *Srbijagas* by 30 June 2015 in cooperation with the Secretariat.

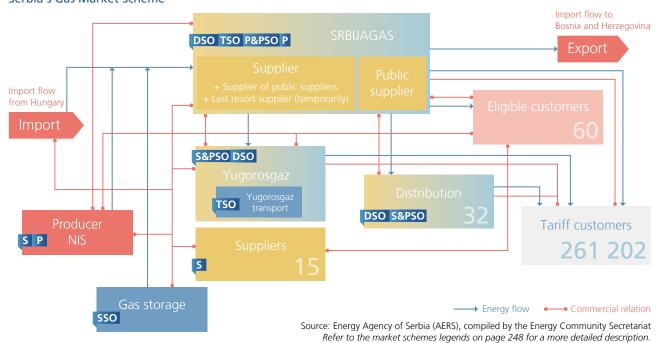
In June 2015, the Serbian Government adopted decisions on the establishment of the limited liability company *Transportgas Srbija* and the limited liability company *Distribucijagas Srbija*, together with the articles of association. These companies were subsequently established.

AERS gave consent to the *Yugorosgaz Transport* Grid Code and also to its compliance programme which sets measures to exclude discriminatory conduct.

For the first time, 28 distribution system operators, including the biggest one, *Srbijagas*, adopted Distribution Codes, thus allowing for real market opening on the retail level. These Codes implement transparency obligations in the development of distribution systems and its maintenance, regulate technical connection conditions for customers and other system operators and access to the systems.

The methodologies for access to storages have been developed and adopted by AERS.

Serbia's Gas Market Scheme



b. State of Compliance

1. Authorisation

The provisions of the new Energy Law on authorization are transposed in line with the *acquis*. The Energy Law requires both a license for performing an energy activity (issued by the regulatory authority) and an energy permit for construction (issued by the Ministry of Mining and Energy). The Ministry of Mining and Energy adopted the Rulebook on Energy Permits in 2015 regulating in more details the conditions and methods of issuing energy permits. The rules laying down authorisation procedures for construction and operation of gas facilities and for performing supply of natural gas are objective, non-discriminatory and made public. No refusals to grant an energy permit or an energy licence to a natural gas undertaking have been notified to the Secretariat. However, provisions requiring such notification are not included in the new Energy Law, which is not compliant with the *acquis*.

2. Unbundling

The Law transposes properly the *acquis'* requirement for unbundling of transmission system operators. Their certification is under the responsibility of AERS according to rules, which are yet to be developed by the Ministry.

The Law envisages all three models of unbundling. The Law requires unbundling for storage and distribution operators, if they are part of a vertically integrated undertaking, from activities not related to storage and distribution.

The Law sets the deadline for unbundling of 1 June 2016, while stipulating that a certification procedure shall be performed within two years as of the date of entry into force of the Law, *i.e.* until 31 December 2016.

Despite the high level of transposition, unbundling is not yet implemented in practice. *Srbijagas*, at this moment, holds licenses for and performs the activities of transmission system

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operation and supply of natural gas in Serbia. Despite being legally unbundled, both *Srbijagas* and *Yugorosgaz* are not functionally unbundled within the meaning of Article 9 of Directive 2003/55/EC. Both companies have not adopted nor do they apply compliance programmes as required by the Law and the Gas Directive.

As all retail undertakings in the Serbian gas sector serve less than 100,000 final customers, unbundling of distribution system operators factually does not take place according to the Law which allows for such exemption.

3. Third Party Access

The Energy Law requires non-discriminatory network access to the transmission and distribution system and storage facilities, as well as to upstream pipelines, as a principle rule. Detailed Rules on Access to the Transmission Network were included in the Network Codes of *Srbijagas* and *Yugorosgaz Transport*.

The procedures for the exemption of new gas infrastructure from third party access are defined in line with Directive 2009/73/EC.

The Energy Law further stipulates provisions on third party access services offered by transmission system operators and on capacity allocation as general obligations of transmission system operators. This is elaborated in more detail in the Network Codes of *Srbijagas* of 2013 and *Yugorosgaz Transport* of 2015 which, *inter alia*, ensure transparency in maintenance and define connection and access rules, including capacity allocation, congestion management and balancing. Secondary

trading and interruptible capacity are offered as a means of congestion management.

Banatski Dvor, the storage operator, has not yet adopted a storage code, as required by the Law.

The regulatory authority approves network tariffs based on its methodologies defined and published in advance. The Methodology for Determination of the Price for Access to Natural Gas Transportation System introduces an entry-exit tariff system which transposes the corresponding requirements of the Third Energy Package.

A majority of distribution system operators adopted their Grid Codes, allowing real opening of retail markets.

Nevertheless, the Network Codes of *Srbijagas* and *Yugorosgaz Transport* empower the companies to agree or disagree on any transfer of capacity rights and do not allow for capacity rights transfer on a monthly and daily basis which runs counter to the *acquis'* request to the system operators to facilitate such trade.

Furthermore, both Network Codes do not transpose the obligation to offer unused capacity on the primary market at least on a day-ahead and interruptible basis properly, thus breaching the congestion management procedures.

4. Eligibility

The right to freely choose a supplier in the market is guaranteed to all customers as of 1 January 2015, which is in line with the gas *acquis*.

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The Unbundling of Srbijagas

Although the Second Package unbundling requirements for gas transmission system operators should have been implemented by 1 July 2007, Serbia had missed this deadline substantially. The Ministerial Council in 2014 declared that Serbia was in breach of the Treaty by failing to comply with the gas unbundling rules and called on Serbia to rectify this breach by 30 June 2015. Moreover, the European Commission conditioned the opening of the Energy Chapter in the EU accession negotiation process on the successful rectification of this case. Following intensive efforts by the Secretariat, 2015 saw decisive steps in ensuring Serbia's compliance.

In December 2014, Serbia adopted a new Law on Energy. Simultaneously, the Government adopted a Decree on the Principles for the Restructuring of *Srbijagas*. However, the real breakthrough came on 19 February 2015 at a meeting between the Serbian Minister in charge of energy and the Secretariat. This is when a comprehensive Action Plan for the unbundling of *Srbijagas* was agreed. *Srbijagas* prepared a roadmap with two phases of its restructuring. The first phase entailed establishing a holding company with legally unbundled transmission and distribution system operators by 30 June 2015. The Secretariat was involved in the subsequent process of preparation of the founding acts of the new companies and assessed compliance with the gas *acquis*.



In June 2015, the Government adopted decisions on the establishment of a limited liability company *Transportgas Srbija*, a transmission system operator, and a limited liability company *Distribucijagas Srbija*, a distribution system operator, together with the articles of association. The Ministry and the Secretariat agreed to work very closely on the next steps in ensuring full legal and functional unbundling.

After this date, only households and small customers have the right to be supplied by a public supplier under regulated prices. The new Law sets stricter criteria for small customers defining them as final customers with annual gas consumption less than 100,000 cm and connected to the distribution system. The small customers represent a 1% market share at the moment.

Switching Rules were adopted in 2012 in line with the Law and with the *acquis* and must be aligned with the new Law within six months after the Law's entry into force.

5. Market Opening and Price Regulation

The wholesale market in Serbia is based on the purchase contracts between public suppliers and the supplier of public suppliers, *Srbijagas*, and on bilateral contracts between suppliers and producers. *Srbijagas* procures natural gas under long-term oil–indexed contracts from the Russian company *Gazprom*, the exclusive supplier to the Serbian market, through the vertically integrated company *Yugorosgaz*. *Yugorosgaz* is in the ownership of *Gazprom* (50%), *Srbijagas* (25%) and *Central ME Energy and Gas Vienna* (25%).

The average import gas price in 2014 (the border Hungary-Ukraine) was 388 USD per 1,000 cm or *approx*. 28.64 EUR/ MWh. On top of this price, a transit fee via Hungary is added with the average level of 46.77 USD per 1,000 cm in 2014.

In 2014, only three companies were engaged in the wholesale market. The wholesale price of gas sold to public suppliers was regulated until September 2013. Ever since, the price is set according to a formula which was part of the tendering procedure when *Srbijagas* was appointed as supplier of public suppliers and is cost-reflective. AERS approves the gas prices for energy supplies provided by public suppliers based on methodologies defined and published in advance.

In practice, in 2014, 60 eligible customers (the majority of them being customers connected to the transmission system and only one customer connected to a distribution system) accounted for 41% of the gas quantities sold to end-customers. At distribution level, only one customer switched the supplier and purchased some 0.2% quantities sold on the open market.

In retail gas supply, *Srbijagas* is also the dominant market player, accounting for some 66% of total natural gas sales in 2014, followed by a public supplier *DP Novi Sad* (2.9%). *Yugorosgaz* comprised 2.1% of the market. The other suppliers made up for less than 2% of the retail market.

Srbijagas was also appointed as a supplier of last resort (for a maximum of 60 days) for customers not supplied by the public supplier.

Together with the supplier's (including public supplier's) choice

to purchase gas on the market, the new Law retained the concept of a so-called supplier of public suppliers "until a competitive natural gas market is established in the Republic of Serbia", with no clear benchmark when this might happen or who would be in charge to assess if this happened. This concept and lack of a proper benchmark for its phase-out effectively postpones the establishment of such a competitive market.

6. Balancing

The balancing regime, including a tolerance level and an indexed imbalance fee, is theoretically in compliance with Article 21 of Regulation (EC) 715/2009. A virtual point for trade is envisaged in Serbia. The Network Code defines the necessary information to be published by *Srbijagas*. The *Yugorosgaz Transport* code does not provide for provisions on commercial responsibility of system users as well as the obligation of operators to publish information on balancing status at the level available to the operators (it is the intention for *Yugorosgaz* to receive this information from *Srbijagas* via the so called *'interoperability'* agreement, but this should be a core task of the transmission system operator).

In practical terms, the balancing rules are still not being applied.

7. Security of Supply

The provisions on monitoring and reporting required by Directive 2009/73/EC and the provisions related to security of supply required by Directive 2004/67/EC were included in the Energy Law. Other provisions were transposed by the Decree on Conditions for Natural Gas Delivery which lays down the roles and responsibilities of market players in the event of disruption and shortages of natural gas supplies. Serbia is currently developing a Preventive Action Plan and an Emergency Plan, together with risk assessment, thus transposing essential provisions required by Regulation (EU) 994/2010.

8. Customer Protection and Protection of Vulnerable Customers

The Energy Law sets a high standard for customer protection in line with the Third Energy Package. In addition, the Government adopted a Decree on the Protection of Vulnerable Customers. The Decree identifies criteria and the manner of protecting vulnerable customers. In essence, they receive price discounts on gas supply for which the companies are compensated from the State budget since 1 January 2014.

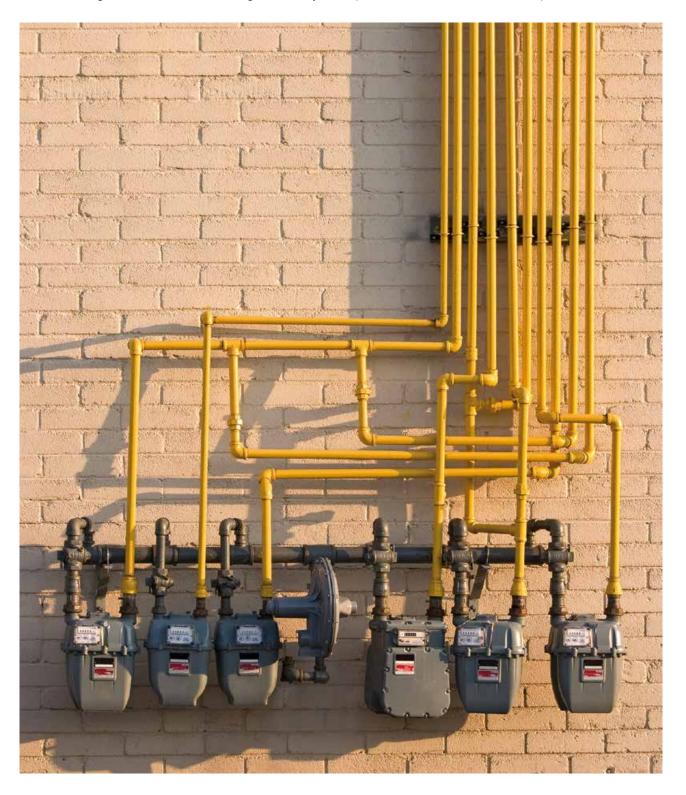
The provisions of the Third Package governing vulnerable customers are implemented in Serbia. What is still missing in terms of customer protection is the designation of single contact points to provide customers with the necessary information concerning their rights and the implementation of intelligent metering systems.

c Conclusions and Priorities

This reporting year was in many aspects a game changer in Serbia's gas market development. The main achievements are transposing the Third Package into national legislation, finally rectifying the breach of the Second Package related to the lack of *Srbijagas* unbundling, completing the remaining secondary legislation, moving forward with the implementation of some elements of Regulation (EU) 994/2010 as regards security of

supply and more responsive companies towards regional and European gas initiatives.

Once the breach has been rectified, Serbia will set a solid legal foundation to deliver ample and more diverse supplies of affordable gas to be sold on a real competitive and open market in the future. The reaction of the market itself is vital in this regard. Serbia will have to unbundle its transmission system operators in accordance with the adopted Law.





10.3 Regulatory Authority

a. Organisation, Competences and Assessment of Independence

The Energy Agency (AERS) is the single authority for regulating the energy sector of Serbia, as required by the Third Energy Package. AERS is headed by a Council consisting of a President and four members with a term of five to seven years. The President of the Council is elected for seven years. Two members of the Council are elected for six years and two other members for five years. Thus a rotation scheme in terms of the Third Package is in place. All terms are renewable once.

Appointment of Council members follows one of the most transparent procedures among the Contracting Parties, including public announcement of job vacancies, legal definition of selection criteria and short-listing by a selection committee of independent experts appointed by the Parliament.

Dismissal of Council members is by law limited to cases of conflict of interest or conviction for a criminal act and thereby uncritical in terms of potential political intervention. Also, an explicit legal provision exists requiring that before a dismissal decision is taken, the relevant Council member must be granted the right to be heard.

Serbia is the only Contracting Party that has transposed the Third Package for all sectors including regulatory competences. AERS is by law set up as independent institution. Establishment of AERS is solely based on legislation meaning that the authority cannot be liquidated by act of another public institution. The independence criteria stipulated in Articles 35(4-5) and 37(16) of Directive 2009/72/EC and Articles 39(4-5) and 41(16) of Directive 2009/73/EC are met.

AERS is legally distinct and functionally independent from any other public entity. AERS takes binding decisions autonomously and independently. This is supported by a legal prohibition for top management to execute political functions, have interest in regulated utilities or have an employment relationship with the energy sector including sanctions (dismissal) in case of non-compliance. AERS's decisions are open to judicial review including a legal requirement for AERS to duly substantiate its decisions. Also, AERS publishes its decisions.

AERS has autonomy in defining its Annual Work Programme as well as in setting up and using its Annual Budget. The requirement for the regulator's Annual Budget to be adopted by the Parliament should per se not be necessarily considered an undue intervention in independence but has led in the past to a cut in staff salaries. Management is in principle independent in organizing AERS' internal structure. The regulator's statutes, however, require approval by the Parliament which is a rare case among the Contracting Parties. Also, according to the new Law on the Maximal Number of Employees in the Public Sector adopted in July 2015, the employment of additional staff is subject to a Decision of the National Assembly Committee for Administrative and Budgetary Affairs. The number of new employees is also indirectly subject to approval by the Parliament approving of the regulator's Annual Budget. Staff salaries have been originally comparable to the private industry and higher than those of the public sector. Due to a conservative policy of salary increase in comparison to the (regulated) industry as well as introduction of certain salary limits applicable to civil servants, the competitiveness of the regulator's salaries has decreased. The Secretariat is of the opinion that staff salaries should be solely decided by the regulator's management.

AERS provides accountability of its activities by presenting its Annual Report to the Parliament but does not face the need for approval of its Annual Report or sanctions in case of dissenting opinions.

On the regional level, AERS is one of the most active participants in the Energy Community Regulatory Board (ECRB), including chairmanship of the Electricity Working Group.

b. Conclusions and Priorities

Although granted by law, genuine financial independence of AERS needs to be put in place by not intervening in staff and/ or salary levels. Staff salaries should be competitive with salary levels of the regulated industry. AERS must become more proactive in opening the electricity and gas markets now that the new Energy Law is in place.



10.4 Oil

a. Sector Overview

In Serbia, oil production was around 1.16 mt in 2014, 3.7% lower than in 2013. Import of crude oil was around 1.58 mt, 9.6% lower than in 2013. Crude oil exports were around 3 kt, the same as in 2013. As regards the domestic production of petroleum products, the volume of 3.07 mt of petroleum products processed in 2014 constitutes a decrease by 3.8% compared to 2013. The estimated export of petroleum products increased by 6.2% compared to 565 kt in 2013. The estimated import of petroleum products increased by 27.1% compared to a level of around 787 kt in 2013. The overall consumption of petroleum products in 2014 was 2.78 mt, a decrease of 4.5% compared to 2013.

In 2014 Naftna Industrija Srbije (NIS a.d.) invested around EUR 200 million in exploration and production of oil and natural gas, mainly in 3D seismic exploration and drilling exploration wells, as well as concession rights. The oil and gas production volume in 2014 stood at 1.59 million toe, a 3% decrease compared to 2013. The drop in the production volume was primarily caused by the reduction of the investment programme.

The new Energy Law covering also the oil sector was adopted in December, 2014. According to this Law, the Directorate of Energy Reserves as an administrative body within the Ministry of Mining and Energy has been partially established. Moreover, the Law creates the legal basis for the introduction of a system for monitoring the quality of petroleum products in 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. Secondary legislation related to monthly oil data reporting, Annexes I – IV of the Directive including the introduction of an emergency oil stockholding fee, was adopted by the Government in October 2014. Almost all basic preconditions for the establishment of oil stocks are now in place. The long-term plan of gradual forming and maintaining of the compulsory reserves over the period of ten years, the mid-term plan and the yearly programme of gradual establishment and maintenance of emergency stocks of crude oil and petroleum products were adopted by the Government in June 2015, as the only outstanding documents. These documents define not only the roadmap and long/mid-term strategy on how to reach the final goal but also define what else is needed to make the system operational in practice.

b. Conclusions and Priorities

Now that everything for establishing emergency oil stocks is transposed, it is the opportune moment to start with the implementation and operation of the emergency stockholding system in Serbia.



Serbia

10.5 Renewable Energy

a. Sector Overview

1. State of Play, Legislation and Promotion of Renewable Energy

Under Directive 2009/28/EC, Serbia committed to a binding 27% target of energy from renewable sources in gross final energy consumption by 2020, compared with 21.2% in 2009.

In June 2013, the Government adopted the *National Renewable Energy Action Plan (NREAP)* describing the policies and measures to achieve a 27.3% share, thus going beyond the binding 27% target for 2020. It envisages increases of renewable energy shares in electricity to 36.6% from 28.7%, for heating

and cooling to 30% from 28.7% and for the transport sector to 10% from 0% in 2009. The renewable energy needed to meet the 27% target is estimated at 2,563.6 ktoe and should come from an additional 1,092 MW of renewable energy capacities in electricity, 149 ktoe of energy consumption from renewable sources used for heating and 246 ktoe of renewable energy in transport. Currently, investment in renewable energy remains minimal.

The legal framework for renewable energy is split among several laws and by-laws. The Energy Law adopted at the end of 2014 sets the main framework for renewable energy, partly transposing Directive 2009/28/EC, including the transport sector.

2. Electricity from Renewable Sources

As regards the promotion of energy from renewable sources, Serbia applies a feed-in tariff model since 2009, updated in 2011 and 2013. Generators of energy from renewable sources are considered privileged producers. This applies to HPP below 30 MW and wind and solar PV up to certain capacity limits. According to the NREAP, Serbia plans to develop only 500 MW in wind until 2020 and introduced an intermediate cap of 300 MW until the end of 2015. For solar PV, there is an overall cap of 10 MW until 2020, out of which 7.2 MW were already installed by the end of 2014. The feed-in tariff is established for a period of 12 years. The feed-in tariff is adopted in EUR/MWh and indexed with the inflation rate in the Eurozone. Privileged producers are also exempted from balancing responsibilities and balancing costs during the entire period of 12 years. The feed-in tariffs are paid by the state-owned electricity incumbent EPS Supply which is under an obligation to purchase all renewable electricity generated by privileged producers under power purchase agreements. The guaranteed purchase price in the form of a feed-in tariff is being passed on to customers through a surcharge applied to all electricity end-users. For 2015, the renewable energy surcharge levied on end-users has been increased to 0.093 RSD/kWh (ca. 0,001 ¢EUR/kWh) from 0.081 RSD/kWh in 2014.

Amendments to the Law on Construction and Planning were adopted in December 2014 and introduce requirements for establishment of one-stop shops for spatial planning and construction licenses, and approval procedures at state, regional and local levels.

Several regulations were passed in 2015, such as the Rulebook on Energy Permits, the Rulebook on Available Renewable Energy Capacities per technology which are available due to expiration of privileged producer status awarded for some renewable energy producers and two other Rulebooks regulating the training of energy managers and certified energy consultants. The new by-laws are complemented by the existing ones related to; the conditions for issuing energy permits; acquiring the status of a privileged producer; incentive measures for privileged power producers; the method for calculation and allocation of funds collected to remunerate the privileged power producers; the amount of feed-in tariffs for different technologies; power purchase agreements; guarantees of origin; requirements for biofuels (from 2006).

According to the Energy Law, investors are guaranteed network access and priority dispatch for the electricity produced from renewable sources. Developers are now entitled to build the connection to the grid, calling for a tendering for construction works if they choose so. They have the right to deduct the respective cost of construction from the total connection costs that are calculated in accordance with a methodology adopted by AERS.

Amendments to the Transmission Grid Code mostly related

to grid connection for renewable energy producers were approved by AERS in June 2014. The Methodology for Cost of Connection to the Transmission System was amended in 2014. The transmission system operator, *EMS*, issues decisions on calculation of the costs and tariffs which are approved by the regulator and available online. The costs of grid access are transparent. The five Distribution Grid Codes were also amended in 2014. Amendments to the Law on Construction provide for a definition of the connection point and allow investors to obtain a separate construction permit for this particular facility.

EMS has been appointed as the issuing body for guarantees of origin. However the system for issue, transfer and cancellation of guarantees of origin has not been implemented yet.

Serbia was the only Contracting Party planning to use the cooperation mechanisms and transfer excessive renewable energy to an EU Member State within the framework of the Directive's cooperation mechanisms under Article 9 (joint projects between EU Member States and third countries). However, the fulfilment of the agreement between Italy and Serbia for the joint development of 10 small hydropower plants is questionable as the agreement has not been ratified by the Italian Government.

3. Renewable Energy in Heating and Cooling

The new Energy Law provides an obligation for the local self-government units to set incentive measures for heat produced from renewable sources and to establish a register of the privileged heat producers with annual reporting requirements. However, the deadlines for issuing of the respective by-laws are not defined by the Energy Law. Currently, support measures for renewable energy in the heating and cooling sector from renewable sources are not foreseen to be introduced, which means that Serbia will continue to rely on coal for heat production in contradiction with the *NREAP*.

Concrete steps to develop district heating infrastructure to accommodate the development of heating and cooling production from large biomass, solar and geothermal facilities have not been taken so far. The use of geothermal or solar thermal is not given the proper consideration at the moment despite existing potential.

4. Renewable Energy in Transport

Serbia's *NREAP* includes the 10% target in transport. The Energy Law of 2011 envisages the adoption of sustainability criteria for biofuels by a separate law. A working group was established in 2014 but without significant progress so far.

Furthermore, a Law on Incentives in Agriculture and Rural Development, adopted in 2013, already covers energy crops sustainable for biofuels production, which are eligible for financial incentives to farmers. The total budget available for such incentives as well as the types of supported crops will be defined by the Government on a yearly basis. However, compliance

with the sustainability criteria defined by Directive 2009/28/EC has not been made a precondition for eligibility for incentives.

The lack of an adequate legal framework and incentives has influenced the development of biofuels in a negative way as their domestic production, previously used for transport, has been directed to to other sectors.

b. State of Compliance

The Energy Law provided the chance to fully transpose Directive 2009/28/EC. Unfortunately, only principle provisions were introduced, leaving the implementation to secondary legislation.

1. National Renewable Energy Action Plan

The *NREAP* adopted by the Government has been notified to the Secretariat by the deadline of 30 June 2013. Serbia thus complied with the first binding obligation under the Ministerial Council's Decision of 2012. With the adoption of the *NREAP* by the Government, Serbia also complies with the obligation to adopt a binding 27% share of renewable energy in 2020. The *Progress Report on Promotion of Renewable Energy* for 2012 - 2013 has been submitted to the Secretariat.

2. Support Schemes

Support schemes for various renewable energy technologies are adopted. Financial conditions in the contracts remain to be agreed and finalized to ensure investor confidence in renewable energy projects in Serbia.

3. Cooperation Mechanisms

Cooperation mechanisms as described in Directive 2009/28/EC and as adapted by Ministerial Council Decision 2012/04MC-EnC are partially transposed by the new Energy Law. A complete framework will need to be adopted if Serbia plans to make use of the cooperation mechanisms to reach the 2020 target.

4. Administrative Procedures

Requirements for streamlining, simplification and coordination of procedures for authorization, licensing and network connections and introduction of one-stop shops were introduced with the amendments to the Law on Construction and Planning adopted in December 2014. The amendments remain to be tested in practice. Despite all progress in adapting the legal and regulatory framework or assistance provided to the potential investors in renewable energy, very few renewable energy projects are currently under construction. Serbia is currently not entirely compliant with Article 13 of Directive 2009/28/EC.

5. Access to and Operation of the Grids

Currently, the Energy Law does not guarantee the transmission and distribution of electricity or gas produced from renewable sources. It contains priority access and priority dispatch for electricity from renewable sources unless the security of the supply or operations of the distribution or transmission system are jeopardised.

The Transmission and Distribution Grid Codes have been reviewed to implement requirements for producers of renewa-



ble energy related to connection and operation of the grids. Currently, there is no model agreement for grid connection to the distribution and transmission networks for renewable energy producers. Serbia does not fully comply with Article 16 of the Directive.

6. Guarantees of Origin

In January 2014, the Government adopted Rules on Issuing, Transfer and Cancellation of Guarantees of Origin. The Rules fail to provide to final customers information on the share or the quantity of energy from renewables in the supplier's mix, in accordance with Article 3(6) of Directive 2003/54/EC and Article 15 of Directive 2009/28/EC. *EMS* as the issuing body for guarantees of origin has to start the implementation of an accurate, reliable and fraud-resistant system in accordance with EU practice. Currently, Serbia is not compliant with Article 15 of the Renewable Energy Directive.

7. Renewable Energy in Transport

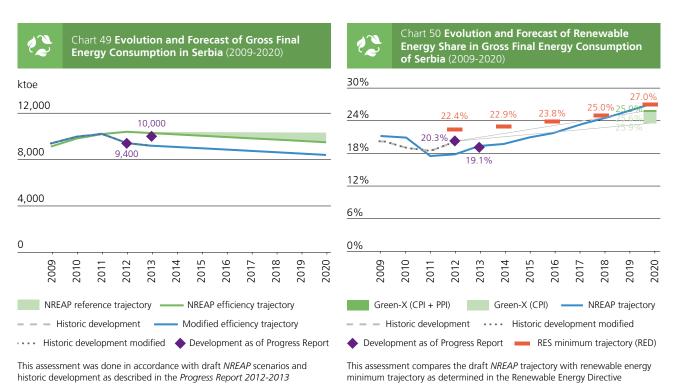
The actual share of energy from renewables in transport is close to 0%. Serbia has not even achieved the biofuels targets set previously by the "Energy Development Strategy Action Plan 2007 - 2012" (namely 2.28% in 2012). This is directly related to the wide gaps in the legal framework. Even measures already required by the old Directive 2003/30/EC such as monitoring,

promotion and reporting requirements have not been established in Serbia. Furthermore, there is no certification scheme defined or relevant body established as required by Directive 2009/28/EC. In this situation, Serbia does not only violate Energy Community law. Producers using Serbian stock may also be prevented from entering the EU biofuels market.

c. Quantitative Assessment of the Progress towards National Renewable Energy Trajectory

Until 2011, the actual gross final energy consumption (GFEC) developed very similarly to the planned trajectory of the *NREAP* but on average 2% below the trajectory. In 2012 that gap widened, resulting in an 11% difference between the actual and the planned GFEC.

No modifications have been made to the historic *EUROSTAT* data and the data reported in the *Progress Report on Promotion of Renewable Energy* was consistent with energy balance of 2012 and 2013. In the years 2011 and 2012 the renewable energy share of Serbia was above its *NREAP* target, and even though the renewable energy share decreased slightly to 19.1% in 2013, it was still in line with its target. According to the modelling results with current policies and planned policy initiatives the renewable energy target in 2020 will be increased to 25.9% in the best case, below the *NREAP* target of 27%, which means the target will be missed by 1% in 2020.



Source Study on the Assessment of the National Renewable Energy Action Plans and the Progress in Promotion of Renewable Energy in the Energy Community, by ECN et all, 2015

d. Conclusions and Priorities

In the reporting period, Serbia has made some progress in upgrading its renewable energy framework, at the level of primary and secondary legislation. However, Serbia is not on track to meet its 2020 targets. It is to be noted that the impact of the legislative framework on the actual deployment of renewable energy in the last years was minimal. The new renewable energy capacities put into operation reached only 23 MW since the adoption of the Renewable Energy Directive in 2012. Administrative, permitting and grid connection procedures and commercial agreements have to be further coordinated and simplified to ensure a conducive investment environment.

Despite significant demand for heating and cooling and its potential contribution to the target's achievement, the adoption of a proper framework for promotion of renewable energy in heating and cooling is not being considered. This approach needs to be changed urgently to ensure renewable energy plays its role in heating and cooling sectors and to set Serbia on track to meet the 2020 renewable energy targets.

Finalization of the legislative and regulatory framework to ensure full compliance with Directive 2009/28/EC should be the focus in the upcoming months. This includes the introduction of sustainability criteria and a certification system for liquid biofuels, where Serbia failed to make any progress for the second year in a row.





10.6 Energy Efficiency

| Energy Efficiency Action Plan (EEAP)* | | | | | | |
|--|----------------|---|--|--------|---------|-----|
| Period covered by EEAP | | 2010 – 2018 | | | | |
| Overall energy savings target - Directive 2006/32/EC (ktoe / % / year) | | 752 / 9 / 2018 | | | | |
| EEAP status | | 2 nd EEAP adopted and published on 21 October 2013 | | | | |
| Achieved energy savings 2010 – 2012 | | | 102 ktoe (1.22%) | | | |
| Key institution(s) in charge | | | Ministry of Mining and Energy; Ministry of Construction, Transport and Infrastructure; other state and local authorities | | | |
| Main data and energy efficiency indicators** | | 2010 | 2011 | 2012 | 2013*** | |
| Total primary energy supply (TPES) ktoe | | 15,536 | 16,185 | 14,462 | 15,063 | |
| Energy intensity (TPES/GDP) toe / 1,000 USD | | 0.56 | 0.57 | 0.52 | 0.49 | |
| TPES/Population toe/capita | | 2.13 | 2.23 | 2.00 | 2.10 | |
| Total final energy consumption (TFEC) ktoe | | 9,479 | 9,778 | 8,593 | 8,985 | |
| | Residential | % | 33% | 32% | 36% | 32% |
| Share of TFEC by sector | Services | | 10% | 11% | 10% | 9% |
| | Industry | | 25% | 28% | 28% | 28% |
| | Transport | | 23% | 20% | 20% | 22% |
| | Others | | 1% | 1% | 2% | 2% |
| | Non-energy use | | 8% | 8% | 3% | 7% |

^{*} Source: Energy Community website / 2nd EEAP of Serbia

a. Sector Overview

There is a clear indication that the final energy consumption in Serbia significantly dropped in 2012 as a consequence of the double dip recession, but increased in 2013, while the gross domestic product resumed growth in 2013, after contracting in 2012. The positive trend is reflected in the decrease of energy intensity in 2013, and thus decoupling of the economic growth from energy demand growth.

In March 2013, the Law on Efficient Use of Energy was adopted in Serbia. It transposes key provisions of Directives 2006/32/EC, 2010/30/EU and 2010/31/EU and includes rules on energy management, labelling of energy-related products, energy efficiency requirements in energy production, transmission and distribution, financial mechanisms for energy efficiency, the establishment of an Energy Efficiency Fund and the promotion of the energy services market.

In January 2015, the Ministry of Mining and Energy adopted several rulebooks to promote the energy management system and effective implementation of energy efficiency policy by the public sector, *i.e.* a Rulebook on Implementation and Content of Training Programmes for Energy Managers, Amount and Payment of Training Fees and Procedure of Taking Exams for Energy Managers and a Rulebook on the Authorization of Organizations for Conducting Training for Examination of Energy

Managers or Energy Advisors.

The Law on Public Procurement of 2012, amended in 2015, introduced provisions on energy efficiency as a selection criterion in public procurement and on procurement of energy services. The Law on Efficient Use of Energy introduced the concept of energy services and ESCOs and outlined a model contract. The Rulebook Determining a Model Contract for Energy Services for Implementation of Energy Efficiency Improvement Measures for Public Sector Users was developed and published in May 2015. It consists of ESCO contract templates for energy efficiency investments in buildings and street lighting. First projects in the public sector have already been identified and ESCO tenders are in preparation with the support of the *Regional Energy Efficiency Programme*. Rulebooks and guidelines for determining the energy efficiency criteria in the public procurement were drafted.

In October 2013, the second *Energy Efficiency Action Plan (EEAP)* was adopted by the Government. It represents a comprehensive strategic document for the implementation of energy efficiency policy in the end-use sectors for the next three-year period (2013 - 2015), with projections for 2018. The *EEAP* sets an intermediate indicative energy savings target of 398 ktoe (4.7%) in 2015. It provided an analysis of the implementation of the first *EEAP* and reported on the achieved energy savings in the period 2010 - 2012, amount-

^{**} Source: International Energy Agency

^{***} Indicators calculated by the Energy Community Secretariat based on preliminary energy balances for 2013

ing to 102 ktoe (1.22%). A Rulebook adopted in April 2015 regulates the manner and deadlines for submitting the data necessary for monitoring the implementation of the *EEAP* and the methodology for monitoring, verification and evaluation of the implementation effects of the *EEAP*.

In October 2013, the Government introduced a new financing instrument through the Decree on the Establishment of a Budgetary Fund for Energy Efficiency and the Regulation on Conditions for the Distribution and Use of the Fund in January 2014. Based on a public call for projects, the Ministry issued several decisions to finance energy efficiency projects from the Budgetary Fund.

In October 2013, the Ministry of Mining and Energy adopted the Decree on Labelling of Energy-Related Products and, during 2014, adopted a set of rulebooks to transpose Directive 2010/30/EU and the delegated regulations.

The Law on Construction and Planning of 2009, as amended in 2013, follows the structure and the content of Directive 2010/31/EU and constitutes the legal basis for further introduction of norms and standards on energy efficiency in buildings. Rulebooks on Energy Efficiency of Buildings (2011) and on Conditions, Content and Manner of Issuance of Certificates of Energy Performance of Buildings (2012) were already adopted. The Central Registry of Energy Certificates is functioning as a web-based and publicly available platform. The Institute for Standardization is gradually adopting a set of European Committee for Standardization (CEN) standards dealing with energy performance of buildings. The Serbian Chamber of Engineers organizes trainings and examinations of experts in this field. Other provisions such as inspection of heating and air conditioning systems, training and accreditation of experts and energy audits are part of the Law on Efficient Use of Energy. A Regulation for Inspection of Heating and Air Conditioning Systems was drafted in March 2015. Its approval is pending.

Implementation of energy efficiency policy in Serbia is being carried out by the Department for Energy Efficiency in the Ministry of Mining and Energy.

b. State of Compliance

1. Energy Services Directive 2006/32/EC

The Law on Efficient Use of Energy transposes the main provisions of Directive 2006/32/EC (definitions, *EEAP* requirements, energy audits, minimum energy efficiency requirements in generation, transmission and distribution of electricity, new financing mechanisms and obligations of the public sector). The second *EEAP* was adopted by the Government in October 2013. The calculation of the national indicative energy savings target is not fully in compliance with Article 4 of the Directive,

as it is not based on the average annual amount of consumption for the most recent five-year period, but on data on the final inland energy consumption in 2008 due to statistical data constraints. The Ministry of Mining and Energy drafted a comprehensive package of secondary legislation to enable the full implementation of Directive 2006/32/EC.

2. Energy Labelling Directive 2010/30/EU

Directive 2010/30/EU and Delegated Acts were fully transposed with the adoption of the Decree and Rulebooks on the Labelling of Energy-Related Products in 2014.

3. Energy Performance of Buildings Directive 2010/31/EU

The Law on Construction and Planning, the Law on Efficient Use of Energy, the Rulebook on Energy Efficiency of Buildings and the Rulebook on Conditions, Content and Manner of Issuance of Certificates of Energy Performance of Buildings transposed core provisions of Directive 2010/31/EU. However, the full transposition and implementation of certain provisions, for example on inspection of heating and air conditioning systems, will be achieved only after the adoption of secondary legislation on the basis of the Law on Efficient Use of Energy.

c. Conclusions and Priorities

Serbia made a significant step towards the full transposition of the energy efficiency *acquis* with the adoption of secondary legislation on energy management, monitoring and reporting on the *EEAP*, labelling of energy-related products and ESCOs. However, more needs to be done in the near future for full implementation.

The first priority for Serbia is the finalisation and adoption of the comprehensive set of secondary legislation based on the Law on Efficient Use of Energy (on public procurement, inspections, update on regulation for energy performance of buildings and certification, etc.). Further transposition of the Labelling Delegated Regulation should continue, in accordance with the Ministerial Council Decision of September 2014. This will support the implementation of the second *EEAP* and the achievement of the energy savings target.

The institutional capacity of public institutions responsible for energy efficiency should be strengthened in the area of policy-making in the Ministry of Mining and Energy, and at the implementation (state and local) level, as well as in other institutions involved in implementation of the *EEAP* and energy efficiency legislation. The decision to abolish the Energy Efficiency Agency in 2012, in spite of the recommendations made by the Secretariat, raises concerns regarding the capacity for implementation of energy efficiency policy.



10.7 Environment

a. Sector Overview

1. Environmental Impact Assessment Directive

Environmental impact assessment in Serbia is governed by the Law on Environmental Impact Assessment of 2004, as amended in 2009. The list of activities requiring an environmental impact assessment is transposed by the Decree on the Lists of Projects Subject to an Environmental Impact Assessment, adopted in 2011. Following the entry into force of the new Environmental Impact Assessment Directive (2011/92/EU) in the EU, Serbia started revising the Decree on the Lists of Projects according to Annex I of the new Directive (projects for which an environmental impact assessment is mandatory). This exercise, however, has been put on hold.

During the reporting period, 21 environmental impact assessments in the energy sector were carried out. One of the projects concerns the construction of a gas distribution pipeline (Uzice-Čajetina-Zlatibor), one the storage of petroleum products (Smederevo - Directorate for Commodity Reserves), one a wind farm (Krivaca in the municipalities Golubac and Kecevo), one the treatment of waste water at a thermal power plant (Nikola Tesla B), one the construction of overhead cables (SS Rudnik 5 –KO Kostolac, SS Rudnik 3 – SS Rudnik 5 and KO Klicevac – KO Kostolac, assessed together), one the reconstruction of a district heating plant (Jug) and fifteen small hydropower plants. None of them concerns a Project of Energy Community Interest. In total, the environmental impact assessments for ten Projects of Energy Community Interest were concluded so far: (combined heat and power combined cycle gas turbine plant in Pancevo; thermal power plant Kolubara B, thermal power plant Nikola Tesla B3; hydropower plants Ibarske (10 HPPs); 400 kV OHL SS Kragujevac – SS Kraljevo; 400 kV OHL SS Bajina Basta – SS Kraljevo / 400 kV OHL SS Obrenovac – SS Bajina Basta; 400 kV OHL SS Resita (ROM) - SS Pancevo (SER); interconnection pipeline CRO-SER (Slobodnica-Sotin-Bačko Novo Selo); and interconnection pipeline SER (Niš-Dimitrovgrad) to BUG).

2. Sulphur in Fuels Directive

The provisions of the Sulphur in Fuels Directive are transposed through the Rulebook on Technical and Other Requirements for Petroleum-Derived Liquid Fuels.

3. Large Combustion Plants Directive

Serbia has nine thermal power plants falling under the scope of the Large Combustion Plants Directive with a total of 21 units and a total rated thermal input of 13,943 MW. 18 units are fired by lignite while three are running on natural gas. Furthermore, a total of 23 combustion plant units are operated in different industrial sectors.

Currently, emissions of large combustion plants are addressed by the Regulation on the Emission Limit Values of Polluting Substances to Air adopted in 2010 and amended in 2011. This Regulation partially transposes the Large Combustion Plants Directive and contains detailed technical requirements for large combustion plants, including emission limit values and monitoring standards. In September 2014, a legal gap analysis of existing Serbian legislation in comparison to Chapter III of the Industrial Emission Directive was carried out and a transposition plan was developed as follow-up. The plan provides for a two-step transposition of Chapter III of the Industrial Emission Directive into national legislation, firstly by transposing the provisions of the Large Combustion Plants Directive by a new Regulation (to be adopted in the course of 2015) and then Chapter III of the Industrial Emissions Directive by mid-2017 via amendments to the new Regulation.

The implications of implementing the Large Combustion Plants and Industrial Emissions Directives were reflected in the scenarios of the draft "Energy Development Strategy of Serbia by 2025" with projections until 2030.

Finally, Serbia is preparing and planning to adopt a *National Emission Reduction Plan* under Article 4(6) of the Large Combustion Plants Directive, as adapted by the Decision of the Ministerial Council. In December 2014, a Parliamentary Committee hearing was carried out on the draft plan. While no formal requests have been made so far to trigger its application, it is likely that certain large combustion plants in Serbia will make use of the opt-out provision provided by Decision 2013/05/MC-EnC.

b. State of Compliance

1. Environmental Impact Assessment Directive

Overall, Serbia has reached a high level of transposition and environmental impact assessments are carried out in accordance with the provisions of the Directive.

2. Sulphur in Fuels Directive

With regard to the implementation of the Sulphur in Fuels Directive, the Secretariat in 2013 launched an infringement procedure against Serbia. While the Rulebook on Technical and Other Requirements for Petroleum-Derived Liquid Fuels contains a description of different types of heavy fuel oil, it is not in line with the definition set out by the Directive. Furthermore, the maximum sulphur content of certain categories of heavy fuel oil (HFO-S and HFO-T) are above 1% by mass which constitutes a breach of the Directive. As regards sampling and analysis, the Secretariat concluded that the standards referred to by the Serbian legislation cannot be considered as equivalent to the ones required by the Directive.

In the meantime, Serbia has addressed one of the shortcomings related to the transposition and implementation of the Sulphur in Fuels Directive, namely by banning HFO-T. Other breaches, *i.e.* those related to the definition of fuels, HFO-S as well as sampling and analysis still persist, although an article of the recently adopted Energy Law establishes a legal basis for the creation of monitoring systems for the quality of liquid fuels. In order to address these shortcomings, the Secretariat is currently preparing a Reasoned Opinion against Serbia.

3. Large Combustion Plants Directive

The emission limit values of the Decree on the Emission Limit Values of Air Pollutants are aligned with those of the Large Combustion Plants Directive. During the last reporting period, Serbia continued with important steps in order to prepare for the implementation of the relevant provisions of the Large Combustion Plants and Industrial Emissions Directives. In August 2015, a public consultation was launched on a draft Regulation on Limit Values for Emissions of Pollutants into the Air from Combustion Plants. The Regulation, if adopted according to the comments provided by the Secretariat, will transpose the relevant provisions of the Large Combustion Plants and Industrial Emissions Directives. These efforts form a reasonable

basis to ensure that the provisions of both Directives (as adapted by the Decision of the Ministerial Council) are implemented by the deadline set by the Treaty, *i.e.* 31 December 2017.

c. Conclusions and Priorities

In general, Serbia has made significant efforts on its way to reach compliance with the Energy Community environmental acquis, an ambition that should be maintained in the future.

In terms of priorities, Serbia should ensure that the provisions of the Environmental Impact Assessment Directive are applied in practice, with particular regard to the provisions on public participation and access to justice.

Serbia must achieve complete transposition into national legislation and effective implementation of the Sulphur in Fuels Directive. This concerns in particular the provisions in the Rulebook on Technical and Other Requirements for Petroleum-Derived Liquid Fuels related to HFO-S and the monitoring rules. Despite minor achievements such as the creation of the legal basis for monitoring systems, most of the Secretariat's concerns remain valid.

Serbia must continue its efforts for the preparation of implementing the Large Combustion Plants and Industrial Emissions Directives. In this regard, the adoption of the amendments to the Decree on the Emission Limit Values of Polluting Substances to Air and the *National Emission Reduction Plan* are of primary importance. Furthermore, operators of combustion plants need to bear in mind the deadline of end-2015 should they want to subject their plants to the opt-out rules.





10.8 Competition

a. Sector Overview

1. Competition Law

Competition law in Serbia is governed by the Law on Protection of Competition adopted in 2009 and amended in 2013. The provisions of the Law on the prohibition of cartels and the abuse of dominance follow the wording of Articles 101 and 102 TFEU. The Law in principle applies to undertakings entrusted with the operation of services of general economic interest in line with Article 106 TFEU. Competition law in Serbia is enforced by the Commission for Protection of Competition.

There have been no amendments of competition legislation in the reporting period. The Commission for Protection of Competition already published its fourth report on the sector inquiry into the wholesale and retail oil and oil derivatives market in Serbia in December 2014. As stated in the report, the import market for oil and oil derivatives is highly concentrated, while the market of production of oil derivatives consists of one undertaking only. The report also states that the wholesale and retail prices of petroleum products are formed freely on the market. The recommendations in the report include a revision of the legal framework, especially as regards the minimal technical, ecological and safety standards, as these requirements could lead to additional expenses and obligations for the market participants and could thus amount to barriers to entry for new participants to the market.

The Commission for Protection of Competition has not yet undertaken any investigation of the gas or electricity markets. It has also not identified any infringements of competition law in the energy sector so far. During the reporting period, the Commission for Protection of Competition has continued its activities on the alignment of several pieces of secondary legislation with the EU *acquis*. This secondary legislation concerns four block exemption regulations applicable to different sectors of the economy as well as the adoption of the Regulation on Notification of Concentration.

2. State Aid Law

State aid in Serbia is governed by the Law on State Aid Control adopted in 2009. The Law prohibits State aid which distorts or threatens to distort competition on the market. State aid legislation applies to services of general economic interest. The body in charge of the enforcement of State aid law in Serbia

is the Commission for State Aid Control. The Commission is assisted by a Department of State Aid established within the Ministry of Finance.

The Regulation on the Rules for State Aid Granting was amended in October 2014. The amended provisions concern the rules on *de minimis* aid. Aid below RSD 23 million during three consecutive fiscal years is to be considered *de minimis* aid, which corresponds to the threshold of EUR 200,000 prescribed by EU legislation. *De minimis* aid must not be notified to the Commission for State Aid Control. The provisions of this Regulation concerning the State aid for energy saving and for the production of energy from renewable resources correspond to the European Commission's Guidelines on State Aid for Environmental Protection of 2008, which are now out-dated and replaced by the new Guidelines on State Aid for Environmental Protection and Energy 2014 - 2020 adopted in April 2014.

During the reporting period, the Secretariat received a complaint claiming that the public enterprise Elektroprivreda Srbije (EPS) has received State aid without the approval of the Commission for State Aid Control. The aid was granted in the form of a transfer of property and several State guarantees for a loan used for the construction and improvement of the efficiency of the TPP Kolubara B. In April 2015, the Commission concluded that the Law on State Aid Control did not apply to State aid granted before January 2010 and that the provisions of the Law on aid to public enterprises were not applicable before January 2012. For this reason, the Commission for State Aid Control concluded that all of the measures but one fell outside of its competence as they were granted before January 2012. The Commission assessed the one remaining measure under the special provisions of the Regulation on the Rules for State Aid Granting and concluded that the measure constituted State aid. However, when determining whether such State aid was allowed, the Commission reckoned that Serbia, as the grantor, had a right to be repaid if the guarantees were activated. In addition, the Commission for State Aid Control took into account the fact that EPS was in charge of ensuring safe and regular power supply to tariff customers as a service of general interest, which includes measures for developing capacities for the production of coal. According to the Commission, the State aid also contributed to increasing the efficiency of the thermal power plant and to lowering its impact on the environment. Finally, the Commission found that the measure benefited all citizens and allowed it as necessary for the execution of a project of special importance for the Republic of Serbia.

b. State of Compliance

Articles 18 and 19 of the Treaty have been transposed into Serbian law, but their enforcement remains at a low level.

1. Competition Law

The Law on Competition is largely in line with the *acquis* on competition. The implementation and application of competition law in the energy sectors have to be improved. Since the establishment of the Commission for Protection of Competition there has been not a single case of applying competition law to the electricity and gas sectors except for reviewing a few mergers.

Furthermore, although the inquires of the Commission for Protection of Competition are generally useful for obtaining information on the situation in the oil and oil derivatives market in Serbia, there have been no follow-up activities that would ensure that the recommendations of the inquiry report are complied with in practice. Also, since the Commission for Protection of Competition found that certain markets were highly concentrated or monopolistic, conducting a deeper analysis would be useful in order to establish whether there have been individual infringements of competition law on these markets.

2. State Aid Law

The legislation on State aid is generally in line with the *acquis*. The new Regulation on the Rules for State Aid Granting introduces thresholds for *de minimis* aid corresponding to the ones of the EU. The Regulation also eliminates non-compliance with the EU *acquis* with regard to the notification of *de minimis* State aid, as reported in the previous Report. The independence of the State aid enforcement authority remains questionable as it is closely linked with the Ministry of Finance and chaired by the representative of the same Ministry. The unit within the Ministry itself is also responsible for processing notifications on State aid and preparing the decisions of the Commission for State Aid Control on granting and recovering of State aid.

Upon request for information from the Secretariat, the Commission for State Aid Control reviewed a State aid measure granted in the area of energy, concerning the TPP Kolubara. In doing so, the Commission for State Aid Control disregarded the Altmark criteria and provided no explanation of how the State aid measure contributed to executing a project of special importance to Serbia except for a general justification based on the State aid measure's benefits for citizens. The conclusion of the Commission for State Aid Control that there was not even potential expenditure of the State due to the fact that Serbia had a right to get reimbursed for the guarantees of loans is not in line with settled EU case law. Moreover, the position of the Commission for State Aid Control that the Law on State Aid Control was not applicable in the period when the rest of the State aid measures referred to in the Secretariat's request for information were granted, runs contrary to the obligation of Serbia to ensure the respect of the rules on State aid stemming from the Energy Community Treaty as from 2006 and to ensure their applicability to public undertakings as from 1 July 2007.

c. Conclusions and Priorities

Although Serbia's legislative framework is largely in line with the EU legislation, the enforcement of both competition and State aid law is at a very low level. There have been no cases of application of competition law in the energy sector since the establishment of the enforcement authorities. The Commission for Protection of Competition must become more active in reviewing competition law infringements by undertakings operating on the energy markets. It is also advisable that the Commission for Protection of Competition undertakes an inquiry into the electricity and gas sectors in addition to the inquiry into the oil market.

In the area of State aid, the enforcement is slightly better as the Commission for State Aid Control reviewed a State aid measure in the reporting period. It is advisable, however, that the Commission follows the rules for the assessment of State aid strictly rather than to allow State aid only because it is in the general interest. In order to improve its independent decision-making, its competences should be separated from the Ministry of Finance.



10.9 Statistics

a. Sector Overview

The Official Statistics Law establishes the legal framework for the organization, production and dissemination of official statistics. Its implementation is supported by secondary legislation including the "Strategy for Development of Official Statistics", which aims at harmonisation with international standards. The central body is the Statistical Office of the Republic of Serbia (SORS), with some competencies kept by the Ministry in charge of energy.

The Energy Law supports the collection of official statistics by obliging undertakings in the energy sector to provide the necessary data at the request of the Ministry of Mining and Energy. The Ministry has yet to adopt a rulebook on the content of energy balances required to further harmonize data definitions and methodologies used for compiling planned energy balances with reporting requirements for energy statistics following from the *acquis*.

The Programme of Official Statistics 2011 - 2015 and the Annual Plan for Official Statistics for 2015 envisage completion of annual collections data by covering all positions (supply and consumption) in annual energy balances for renewables and all structural data on the production.

b. State of Compliance

1. Annual Energy Statistics

SORS collects, compiles and disseminates annual energy statistics comprising supply, transformation and consumption of solid fuels, gas, oil, oil derivatives, electricity, heat and renewable energy. The data are collected from regular annual surveys from companies operating in the energy sector, including traders, from administrative sources and from surveys in industry, transport and construction.

Data is available on the web page of SORS and in the form of five questionnaires communicated to *IEA* and *EUROSTAT*. Annual energy statistics are published by *EUROSTAT*.

The acquis related to annual statistics is implemented.

2. Monthly Energy Statistics

SORS is responsible for disseminating monthly data. The Ministry developed a web application (IMIS database), operational since January 2014. SORS has access to the database in order

to produce monthly reports. With this system in place, the Annexes C and D of Regulation (EC) 1099/2008 will be implemented. SORS plans to start with the implementation of Annex C. After its complete implementation, SORS will start the implementation of Annex D of Regulation (EC) 1099/2008.

An electricity and coal data collection system is established. SORS is ready to begin electricity and coal monthly reporting and dissemination of data from January 2015 in September 2015. Data which requires a questionnaire for oil and oil products will be provided through the implementation of the Regulation on the Methodology of Data Collection and Processing and Calculation of Average Daily Net Imports, the Average Daily Consumption and the Amount of Required Reserves of Oil and Oil Derivatives. SORS is expected to begin submitting the questionnaire for oil and oil products during 2015. Currently the reporting system for gas is not complete enough to prepare monthly gas questionnaires of required quality. Input of missing data in the database is the only obstacle to finalize activities on a monthly gas reporting system.

Serbia is still not in full compliance with the *acquis* as regards monthly reporting, although it is close to achieve this.

3. Price Statistics

SORS is responsible for price statistics. The submission of data to *EUROSTAT* began in 2014. 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 household per consumption band are submitted to *EUROSTAT*, as well as price breakdown per component and level of taxation.

Price system reporting is established in accordance with the acquis.

c. Conclusions and Priorities

Serbia has to finalize activities on monthly data and their dissemination in the requested format. The priority is the full implementation of Annex C of Regulation (EC) 1099/2008 in 2015, and then Annex D of Regulation (EC) 1099/2008.

The system of continuous data collection should be completed and permanently improved.

In view of market opening, methodologies and procedures for price statistics will need continuous checking for adequacy.



10.10 Open Infringement Cases

a. Relations Between EMS and KOSTT

Case ECS-3/08 was opened already in September 2010. Subsequently, the Secretariat issued a Reasoned Opinion on 7 October 2011. The case was initiated by a complaint from the operator of the electricity transmission system located in Kosovo*, KOSTT. In the Secretariat's assessment, the lack of compensation to KOSTT for costs incurred as a result of electricity transit on the network operated by it violates Article 3 of Regulation (EC) 1228/2003 in cases where the electricity flow originates or ends on the system operated by the Serbian EMS. Moreover, revenues resulting from the allocation of interconnection on the interconnectors with countries adjacent to Kosovo* seem not to be used for one of the reasons stipulated by Article 6 of Regulation (EC) 1228/2003. Since the end of 2013, the subject matter of this case has been subject to intense negotiations between KOSTT and EMS mediated by the Secretariat. On 12 February 2014, a legally binding Framework Agreement governing the operational and commercial relations between both transmission system operators was signed. An operational Inter-TSO Agreement was signed in September 2014. Unfortunately, these agreements are not fully implemented. A Service Provision Agreement also signed in September 2014 has not been prolonged upon its expiry. Negotiations on an Inter-TSO Compensation (ITC) and Interim Congestion Management Agreements have stopped.

b. Non-Participation of EMS in Regionally Coordinated Capacity Allocation

On 20 January 2011, the Secretariat sent an Opening Letter to, *inter alia*, Serbia in Case ECS-6/11. The Secretariat is concerned that *EMS* of Serbia has not yet adopted a common coordinated congestion management method and procedure for the allocation of capacity to the market, according to their obligation from the Ministerial Council Decision 2008/02/MC-EnC. The Secretariat entered into discussions with Serbia for participation in the *Coordinated Auction Office in Southeast Europe* (SEE CAO). On 15 July 2015, *EMS* sent an application to the SEE CAO for use of its services and negotiations are ongoing.

c. Non-Compliance with the Sulphur in Fuels Directive

On 11 February 2013, the Secretariat sent an Opening Letter to, *inter alia*, Serbia in Case ECS-4/13. The Secretariat comes to the preliminary conclusion that Serbia has not yet transposed and implemented the requirements of Directive 1999/32/EC as required by Article 16 and Annex II of the Treaty. Directive 1999/32/EC aims to reduce emissions of SO₂ resulting from combustion of heavy fuel oils and gas oils. The Secretariat is currently preparing a Reasoned Opinion against Serbia in this case.

d. Lack of Unbundling in the Gas Sector

On 24 October 2013, the Secretariat sent an Opening Letter in Case ECS-9/13 to Serbia in which it took the view that Serbia failed to comply with its obligations under the Energy Community Treaty related to the unbundling of two vertically integrated gas undertakings. The Secretariat believes that the two transmission system operators licensed in the country, Srbijagas and Yugorosgaz, do not comply with this requirement. Having taken into account the reply of the Government to the Opening Letter, the Secretariat sent a Reasoned Opinion to Serbia on 24 February 2014 reiterating its view expressed in the Opening Letter. Due to the continued failure to rectify the identified issues of non-compliance within a time limit of two months, on 23 April 2014, the Secretariat submitted a Reasoned Request to the Ministerial Council seeking its Decision on Serbia's failure to comply with gas unbundling rules of the Second Energy Package. On 23 September 2015, the Ministerial Council decided that Serbia failed to comply with the gas unbundling rules of the Second Energy Package. Serbia was given until 30 June 2015 to rectify the breach.

In August 2015 two different companies, transmission system operator *Transportgas Srbija* and the distribution system operator *Distribucijagas Srbija* have been established but have not been licensed by AERS yet. Despite being legally unbundled, both *Srbijagas* and *Yugorosgaz* are not functionally unbundled within the meaning of Article 9 of Directive 2003/55/EC. Both companies have not adopted nor do they apply compliance programmes as required by the Law and the Gas Directive.





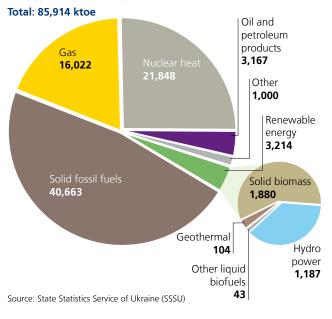
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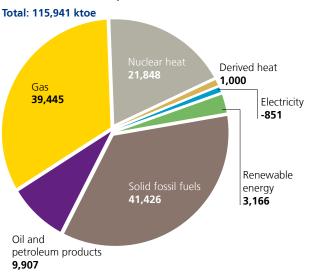
Of all Contracting Parties, Ukraine has made the most striking progress in most areas during the reporting period. In an almost exemplary manner, the authorities and companies in Ukraine grasped the opportunities inherent in reform in general and in the implementation of the Third Package in particular. Starting with the Gas Market Law already adopted and Laws on Elec-

tricity and the Regulatory Authority still under development, Ukraine is indeed in the middle of a thorough reconstruction of its energy sectors in line with European values and rules. As this Report is going to print, however, the reform zeal seems to have slowed down. Ukraine must take care not to revert to stagnation again.





Gross inland consumption 2013 in ktoe





Ukraine 11.1 Electricity

| Description of data [unit] | | | 2013 | 2014* |
|--|-------------------|--|--------------|------------|
| Electricity production [GWh] | | | 176,293 | 165,797 |
| Net imports [GWh] | | | 65 | 178 |
| Net exports [GWh] | | | 9,874 | 8,053 |
| Total electricity supplied [GWh] | | | 166,484 | 157,922 |
| Gross electricity consumption [GWh] | | | 166,484 | 157,922 |
| Losses in transmission [GWh] | | | 4,274 | 4,421 |
| Losses in transmission [%] | | | 2.42 | 2.70 |
| Losses in distribution [GWh] | | | 16,440 | 15,194 |
| Losses in distribution [%] | | | 10.17 | 10.10 |
| Consumption of energy sector [GWh] | | | 0 | 0 |
| Final consumption of electricity [GWh] | | | 145,770 | 138,307 |
| , , , , | Industrial, trans | port, services and other non-residential sectors | 103,643 | 97,284 |
| Consumption structure [GWh] | | sidential customers) | 42,127 | 41,023 |
| Net maximum electrical capacity of power plant: | | · | 54,671 | 54,873 |
| | Coal-fired | | , 25,198 | 25,183 |
| | out of which: | multi-fired | 0 | 0 |
| | Gas-fired | | 9,121 | 9,116 |
| | out of which: | multi-fired | 0 | 0 |
| | Oil-fired | | 0 | 0 |
| | Nuclear | | 13,835 | 13,835 |
| Not mayimum electrical capacity | Hydro | | 5,406 | 5,854 |
| Net maximum electrical capacity of power plants [MW] | .,, | small hydro | 75 | 80 |
| | out of which: | pumped storage | 862 | 1,186 |
| | Other renewab | Other renewables | | 885 |
| | | wind | 1,111 339 | 426 |
| | | solar | 748 | 412 |
| | out of which: | biomass | 24 | 47 |
| | | biogas | 0 | 0 |
| | 380 kV or more | | 18,181 | 18,357 |
| | 220 kV [km] | | | 3,976 |
| | 110 kV [km] | | | 38,152 |
| Horizontal transmission network [km] | HVDC [km] | | | 99 |
| | | Substation capacity [MVA] | | 78,585 |
| | · · | Number of interconnectors | | 53 |
| | | Interconnecting capacities [MVA] | | 5,485 |
| | Total | | | 18,896,261 |
| | out of which: | | | 545,905 |
| Electricity customers | | Eligible customers under national legislation | | 545,905 |
| | | Active eligible customers | | n/a |
| | | lied to active eligible customers [MWh] | n/a n/a | n/a |
| Internal market | , | Share of final consumption [%] | | n/a |
| | 2 | | n/a | |

* For 2014, Crimea not included Source: National Energy and Utilities Regulatory Commission of Ukraine

a. Sector Overview

The electricity sector of Ukraine is governed primarily by the Law on Electricity Industry of 1997 amended in 2015 (Electricity Law) and the Law on Operating Principles of the Electricity Market in Ukraine of 2013 (Electricity Market Law). The authority responsible for energy policy is the Ministry of Energy and Coal Industry.

The relatively recent legal framework aims at gradually abolishing the currently applied "single buyer" model, which is non-compliant, and introducing market-based balancing and a day-ahead market in 2017. It also introduces reforms in respect to third party access, management of cross-border transmission capacities, eligibility for switching the supplier, retail market operation, etc. The Law foresees the establishment of a so-called "Imbalance Allocation Fund" aimed to subsidize house-hold prices, renewable generation and CHP plants through revenues taken from the state-owned nuclear and large hydro generation capacities. The Law however fails to transpose the Third Energy Package.

The transposition of the Third Package commenced in July 2014 when the Secretariat proposed to the Ministry a draft law compatible with the provisions of Directive 2009/72/EC and Regulation (EC) 714/2009. The draft is now under consideration and several rounds of review have taken place within the Ukrainian law-making process in cooperation with the Secretariat, with a view to ensuring its compliance and rapid adoption by the Ukraine Parliament.

The responsible regulatory authority is the National Energy and Utilities Regulatory Commission (NEURC), re-established with its current competences by a Presidential Decree in 2014. The powers of NEURC in the electricity sector relate in particular to licensing, setting of transmission and distribution network tariffs, approval of the regulated costs of generation (except for coal-fired thermal power plants) and setting of regulated prices of electricity in the supply.

The electricity sector of Ukraine in its dominant part does not belong to the *ENTSO-E* synchronous network but is instead connected with the *United Power System (UPS)* of the neighbouring systems of Moldova, Belarus and the Russian Federation. Only the small isolated Burstin Island shares its borders and interconnections with Slovakia, Hungary, Poland and Romania. The transmission system of Ukraine is operated by the state-owned company *Ukrenergo* which also performs central dispatching, balancing of the system and allocation of the interconnection capacities at the borders of Burstin Island.

In February 2015, a new procedure was adopted for performing electronic auctions for allocation of interconnection capacities on the electricity networks in coordinated annual, monthly and daily auctions. Its practical application is expected. It is not yet applied in practice.

A feasibility study for synchronization with *ENTSO-E* started in November 2014 and is expected to be completed by the end of October 2015. The entire preparatory work for synchronization can take around 10 years. The study constitutes the first phase of the synchronization project and its goal is to analyze the measures to be taken in order to overcome possible technical, organizational and legal obstacles.

Distribution of electricity and supply of all non-industrial con-

sumers at regulated prices is performed by 44 vertically integrated public utilities (*Oblenergos*) some of which also operate gas-fired CHP units.

The electricity market in Ukraine is organized around *Energorynok*, a state-owned enterprise which acts as a "single buyer" buying essentially all electricity from generators or traders and selling it for supply and export. This model reduces liquidity, without providing correct price signals. The new Electricity Market Law envisaged its abolishment and introduction of liquid forms of trading in the period before 2017. As a part of this process, on 20 April 2015 two structural units, a market operator trading platform for the day-ahead market and a guaranteed buyer for renewable energy, were created within *Energorynok*.

In February 2015, NEURC approved a decision on gradual increase of electricity prices for households. Five semi-annual increases in electricity prices for households are aimed to effectively achieve cost reflectivity and approach the market level. The customers are divided into three categories depending on monthly consumption. The first increase already took place on 1 of April 2015.

Generation capacities are outdated and deteriorated. Progress in launching new investments is however impeded by the existence of a private monopoly in coal-fired production and limited investment resources stemming from low, regulated electricity prices. The deregulation of nuclear and hydro generation production would be helpful. Maintenance and modernization of the distribution systems suffer from the same shortage of investments in the absence of incentive-based tariffs. Such reforms are envisaged by in the new draft Electricity Market Law.

b. State of Compliance

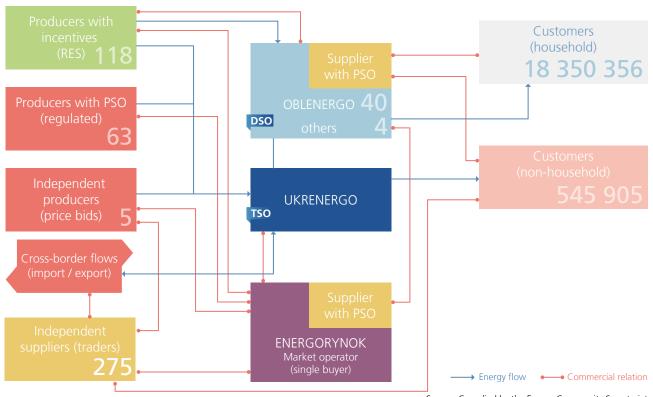
1. Authorisation

According to the Electricity Law, the Ministry of Energy and Coal Industry is in charge of issuing permits for tendering for new generation capacity. The Law falls short of compliance with Articles 7 and 8 of the Directive 2009/72/EC. Apart from a general reference to the Construction Law, the Electricity Law does not include an obligation for non-discriminatory and objective procedures for tendering and publishing the conditions, treatment of refusals or appointment of independent tendering authorities.

2. Unbundling

The transmission system operator *Ukrenergo* is a legally and functionally unbundled state-owned company. The provisions for ownership unbundling from Directive 2009/72/EC are not transposed in the current Electricity Market Law. The Third Package will require a decision on and implementation of the model for ownership unbundling and procedure for certification of *Ukrenergo* as provided by Articles 10 and 11 of Directive 2009/72/EC and Article 3 of Regulation (EC) 714/2009.

Ukraine's Electricity Market Scheme



Source: Complied by the Energy Community Secretariat Refer to the market schemes legends on page 248 for a more detailed description.

The new draft Electricity Market Law envisages the ownership unbundling model to be applied to *Ukrenergo*.

Under the Electricity Market Law, distribution and supply are subject to legal and functional unbundling, which is in compliance with Article 26 of the Directive 2009/72/EC, save for the requirement of compliance programme which is not transposed. In practice, however, distribution is still bundled with regulated supply of electricity within the *Oblenergos*. There is also no obligation for publishing unbundled annual audit reports.

3. Third Party Access

The Electricity Law does not transpose the right of access of customers to the transmission network except for suppliers. The Electricity Market Law includes an obligation to grant regulated third party access to the network, however not in full compliance with the requirements of Articles 32 and 34 of Directive 2009/72/EC as the conditions for exemption, refusal of access and direct lines are missing.

The laws of Ukraine fail to comply with the requirements of the *acquis* on a number of accounts with regard to cross-border capacity allocation and congestion management as required by Articles 16 and 17 and Annex 1 of Regulation (EC) 714/2009. The Law still precludes eligible customers' participation in the capacity auctions which is in breach of Article 32 of the Directive.

In the course of 2013 and 2014, the Secretariat identified a number of shortcomings in the applied procedure for performing auctions for access to the cross-border electricity networks, some of which were rectified in the course of the infringement procedure initiated by the Secretariat. The (new) procedure on electronic auctions adopted in February 2015 brings significant progress by establishing electronic auctioning on multiple time horizons (annual, monthly, daily) capable of coordinated auctions with the neighbouring operators and a high level of efficiency and transparency of the data. The procedure still contains some shortcomings including capacity reservations and priority access, participation limited only to suppliers, dependence on electricity purchased from the wholesale supplier, etc.

4. Eligibility

According to the Electricity Market Law, all non-household customers are eligible since 1 January 2014 and residential customers will become eligible from 1 January 2015. However this Law has never been applied in practice. No regulatory rules for switching of supplier are adopted.

Thus in practice only non-household customers can switch from the regulated supply to an independent supplier. The mandatory sale of production to *Energorynok* effectively prevents more customers from exercising their eligibility rights.

5. Market Opening and Price Regulation

Under the current market structure, only those generation units with installed capacity lower than 20 MW can sell electricity directly to the final consumers. Effectively all the production is supplied or traded through the mandatory pool of *Energorynok*. The price formation is based on a non-transparent bidding mechanism with low liquidity applied to a part of the overall production (the coal-fired thermal power plants) while the rest of the generation is regulated. Taken together with the local monopolies of the *Oblenergos* in the supply, this model essentially forecloses and cross-subsidizes both the wholesale and the retail markets

The Electricity Market Law aims to replace the single buyer by bilateral agreements and day-ahead and balancing markets, as from July 2017. However, the most critical obstacle to effective opening of the electricity market will be the Imbalance Allocation Fund foreseen by the Law, which will effectively curtail the size and volumes of any liquid trading mechanisms and distort the market price signals. It should be abandoned as soon as possible, well before 2030 as envisaged by the Law. The new draft Electricity Market Law provides a new opportunity for compliant and efficient market reforms.

The electricity sector of Ukraine is heavily overregulated. The majority of generation prices are regulated by NEURC, as well as the consumer prices for electricity supply for each public distribution utility. In the wholesale segment, the prices of electricity, sold to Energorynok in particular from the nuclear and large hydro generators, are regulated. Only the coal-fired thermal power plants sell their production through a bidding platform on a daily basis to Energorynok. Energorynok sells on the electricity at the wholesale market price, calculated as weighted average of regulated and non-regulated prices plus different extra charges, to vertically integrated distribution and supply utilities (regulated tariff suppliers) and to the independent suppliers (non-regulated tariff suppliers). End-user price regulation in the public sector is essentially of a social character and does not allow for full transfer of costs. The prices of the independent suppliers are not regulated.

The Electricity Market Law does not foresee immediate liberalization of prices. In the domain of generation, the Law allows for a gradual phase-out of price regulation. Large industrial customers may still exceptionally purchase electricity at regulated prices through a special agreement. The regulated supply services provided by the guaranteed supplier will be available to household and non-household customers. The regulated supply price for customers must be cost-reflective, with the exception of household customers for which the prices will be gradually increased. The decision of NEURC of February 2015 to program gradual increases in electricity prices for households is supposed to contribute to achieving cost-reflectivity.

6. Balancing

Balancing of the electricity system is fully regulated. The imbalances of suppliers and generation units are netted-out, imbalance costs are calculated by *Energorynok* and included into the wholesale market price. Balance responsible parties are the suppliers (utilities) for imbalances above 5% of their nominations in the course of a month. Scheduling of generation is done by *Energorynok* on a daily basis, upon schedules submitted by the regulated generation units and the bids of the unregulated generators. Imbalances are compensated according to the merit order of listed generation units made in advance by *Ukrenergo*, according to economic and technical criteria.

The Electricity Market Law envisages a competitive balancing market to be implemented by *Ukrenergo*. Applying the Law will make Ukraine compliant with the *acquis*. However the currently applied balancing pattern is not in compliance with Article 15 of Directive 2009/72/EC in the treatment of imbalance costs and provision of energy for losses. It also does not provide price signals for the balancing energy, allocation of balance responsibility, or sufficient information and incentives for accurate nominations.

7. Customer Protection and Protection of Vulnerable Customers

The Law does not provide customer protection compliant with the *acquis*. The amended Electricity Law and the Electricity Market Law will essentially transpose Article 3 and Annex 1 of Directive 2009/72/EC related to customer protection.

The protection of vulnerable customers is currently being taken care of by price regulation and funded through cross-subsidies. In order to be brought in line with Article 3(7) of Directive 2009/72/EC, this system needs to be replaced by one targeting only vulnerable customers. There is currently no definition of vulnerability and no adequate support mechanism. The Law on Social Welfare includes a general right to subsidies from the State budget covering a certain percentage of the electricity bills of some categories of customers. However, this is not based on a sustainable and transparent scheme targeted on electricity consumption.

c. Conclusions and Priorities

Adoption of the new draft Electricity Market Law is the first priority. It will provide compliance with the Third Package.

The efforts being made by the Ministry of Energy and Coal Industry, NEURC and *Ukrenergo* in terms of putting the necessary secondary legislation in place need to be intensified and acts of secondary legislation should be promptly developed to allow effective implementation of the draft Law.

The unbundling of transmission and distribution networks is a priority as well. The procedures for certification of *Ukrenergo* will take considerable time and need to start on time. The operation of the new electricity trading platforms will also require a transitional period. Switching of the supplier should be supported by unbundling of the distribution system operation and establishing effective switching rules.

Deregulation of the prices for generation and supply and alleviation of cross-subsidies are absolute priorities. The process, which started with the decision of NEURC on the household supply prices, should be extended to the areas of regulated supply and generation. The mechanisms for subsidization should be limited to the minimum and faded out.

Cross-border trade and market integration need to be addressed as well. NEURC and *Ukrenergo* must make more efforts to rectify the remaining instances of non-compliance in cross-border capacity allocation by applying rules and practices in full compliance with the *acquis*. Coordinated auctions should commence on the Burstin Island's borders.

A process of market integration (with Moldova, in a first instance) should be considered. Cooperation can result in diversification and operational security in both power systems. A priority direction should be future market coupling with increased liquidity and competition. This could accelerate the process of integration with *ENTSO-E*.





Ukraine

11.2 Gas

| | | | 2013 | 2014 |
|--|---|---|---------|-------------|
| Natural gas production [Bcm] | 21.45 | 20.53 | | |
| Imports flows [Bcm] | | | 27.97 | 19.47 |
| Exports flows [Bcm] | | | 0.00 | 0.00 |
| Stock changes [Bcm] | | | 1.10 | 2.49 |
| Total supply [Bcm] | | | 50.52 | 42.49 |
| Gross consumption of natural gas [Bcm] | 50.50 | 42.30 | | |
| Consumption in energy sector [Bcm] | | | 4.40 | 3.80 |
| Available for final consumption of natural gas [Bcm] | | | 46.10 | 38.50 |
| | Total | | 464.20 | 480.60 |
| Interconnectors' capacity [Bcm] | out of which bidirectional | | 1.42 | 17.50 |
| Storage working capacity [Bcm] | | | 30.95 | 30.95 |
| Length of transmission network [km] | | | 38,880 | 38,796 |
| Length of distribution network [km] | | | 296,884 | 296,884 |
| | Total | | | |
| | out of which: | Non-households | n/a | 168,124* |
| Natural gas customers | | Eligible customers under national legislation | n/a | n/a |
| | | Active eligible customers | n/a | n/a |
| | | Households | n/a | 13,305,603* |
| Internal market | Gas supplied to active eligible customers [Bcm] | | n/a | n/a |
| | Share of total consumption [%] | | n/a | n/a |
| Final consumption of natural gas per sector [Bcm] | | | 46.08 | 38.46 |
| | Energy transformation | | 8.30 | 7.07 |
| Consumption structure [Bcm] | Industry and co | mmercial customers | 20.94 | 16.34 |
| | Households | | 16.84 | 15.05 |
| | | | | |

^{*} without Crimea

Source: National Energy and Utilities Regulatory Commission of Ukraine (NEURC)

a. Sector overview

Ukraine made a significant step towards implementation of the Third Energy Package by adopting a new Law on Natural Gas Market. After intensive work and discussions of all stakeholders supported by the Secretariat, the Law was adopted by the Parliament and signed by the President in April 2015. The Law is in line with Directive 2009/73/EC and Regulation (EC) 715/2009, providing the legal basis for unbundling of system operators, deregulation of prices, public service obligations and adequate roles of the regulatory authority and of the Ministry of Fuel and Energy.

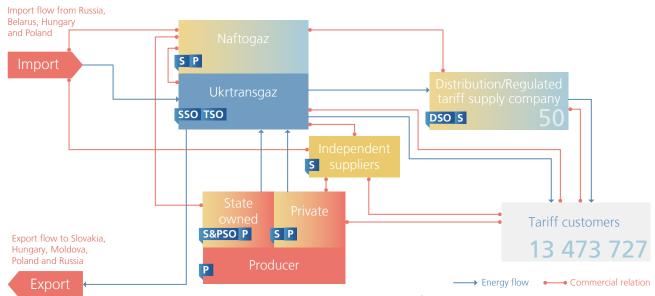
Other pre-existing laws governing the gas sector, the Law on Oil and Gas, the Law on Pipeline Transport, the Gas Metering Law, the Law on Natural Monopolies, the Law on Protection of Economic Competition and the Law on Licensing Economic Activities have to be amended in line with the requirements of the Law on Natural Gas Market. By-laws such as the Government's Regulation on Approval of the Procedure for Identifica-

tion of the Guaranteed Suppliers of Natural Gas, on supplying customers with natural gas, NEURC's Procedure for Accessing the Unified Gas Transit System of Ukraine, methodologies to determine connection costs to transportation and distribution systems and tariff systems for access to transmission and distribution grids have to be replaced by new acts, in line with the Law and Regulation (EC) 715/2009.

The main player in the gas market of Ukraine is *Naftogaz*, the state-owned joint stock company subordinated to the Ministry of Fuel and Energy of Ukraine. *Naftogaz* is a vertically integrated oil and gas company engaged in a full cycle of operations in gas and oil field exploration and production, gas and oil transport and storage and supply of natural gas and LPG to consumers.

Ukraine's gas demand decreased rapidly during the last two decades, from above 70 bcm in 2000 down to 55 bcm in 2010 and with a further decrease to 42.5 bcm consumed in 2014. Demand is met by imports and domestic production.

Ukraine's Gas Market Scheme



Source: National Energy and Utilities Regulatory Commision of Ukraine, Complied by the Energy Community Secretariat

Refer to the market schemes legends on page 248 for a more detailed description.

National production is stable at a level of 20 bcm. *Ukrgazvy-dobuvannya* is the country's largest gas production company owned by *Naftogaz*. *Naftogaz* is also the majority shareholder of *Ukrnafta*, another large gas production company. Independent producers account for 10% of Ukraine's total annual gas output.

Almost all import of natural gas is performed by Naftogaz. The source of Naftogaz's import significantly changed during the last two years. In 2012, Russian gas represented 100% of the imports, while this ratio dropped to 74% (i.e. 14.5 bcm) in 2014. One quarter of gas is now imported from European undertakings. This tremendous change has been triggered by a political and commercial dispute. The 2009 supply and transit contracts between Naftogaz and Gazprom, which also breach Energy Community competition law in several instances, are subject to arbitration between the two companies. The situation escalated in June 2014 when Gazprom stopped all gas deliveries to Ukraine. However, transit to Europe continues to flow without distortions. Despite the fact that supply from Russia has been stopped for half a year - from June to December 2014, underground storages have been filled to a satisfying level due to reverse flows from Poland, Hungary and Slovakia (the last one since September 2014). National demand was additionally fulfilled by domestic production.

The total annual capacity of established reverse flows is 17.5 bcm, which might be increased if reverse flows from the last remaining interconnection – Romania – would be established.

Demand of the winter season, from October 2014 to April 2015, was met by national production, import from the EU and storages, while Ukraine imported only 2.67 bcm from Russia in line with the so-called "winter package" agreed in October 2014 (prepayment mechanisms, flexible ordering schedule,

price of USD 385 per 1,000 cm). The main elements of the agreement, with decreased prices at the level of USD 248 per 1,000 cm, were extended until the end of June 2015. The price of further gas delivery has not been agreed and import from Russia stopped on 1 July 2015.

Currently, *Naftogaz* is the sole owner of the natural gas transmission system operator, the public joint stock company *Ukrtransgaz*, which operates the transmission system, including the transit pipelines passing through Ukraine for supply of Russian gas to Europe, and storage system of huge capacity (30 bcm), which is more than enough to fulfil the domestic market's needs.

Ukrtransgaz has launched negotiations with all neighbouring transmission system operators in order to sign interconnection agreements in line with the Third Package. The greatest progress has been achieved with Hungary. An interconnection agreement between Ukrtransgaz and FGSZ was signed in May 2015. Intensive talks regarding the interconnection agreements with three other operators, are still ongoing. Further, Ukrainian and Polish regulatory authorities and transmission system operators agreed to participate in a pilot project on early implementation of the Capacity Allocation Network Code.

Transparency has been tremendously improved during the last year. *Naftogaz* has established a website (www.naftogaz-europe.com) where data on import, supply, prices, consumption, transmission and transit can be found, as well as other relevant information in regards to undertaken actions and planned steps (all in Ukrainian, Russian, English and Hungarian languages). Further, *Ukrtansgaz* participates in *ENTSOG* and *GSE* transparency platforms, which means that data on transmission and storages are available on a daily basis.

Previously to the reforms starting earlier this year, a step back was made by the Cabinet of Ministers Decree No. 596 of 7 November 2014 on natural gas procurement. This Decree departed from the core principles of the Energy Community Treaty by suspending the open gas market in Ukraine, as it re-established an import monopoly, denied the eligibility of big customers such as industry, district heating and power plants, and affected the activities and independence of the National Energy and Utilities Regulatory Commission and the Antimonopoly Committee. The Ministry's justified these measures with the urgency to safeguard the security of supply and a need to enable a stable income of Naftogaz in order to ensure gas import. The Decree expired on 28 February 2015 and future measures to safeguard security of supply have to be defined in line with the principles of Regulation (EC) 994/2010 transposed by the new Law on Gas Market, i.e. proportionate, transparent, non-discriminatory, based on market principles and not distorting competition.

b. State of Compliance

The new Law on Natural Gas Market is fully in line with Directive 2009/73/EC and Regulation (EC) 715/2009. It will be enforced as of 1 October 2015, and by then all secondary acts have to be prepared to enable a smooth transition from the old to the new Law.

1 Authorisation

The Law of April 2015 requires a licence for transmission, distribution, storage, LNG terminal operation and supply issued by the regulator. Licensing conditions have to be communicated to the Secretariat before their approval. The Secretariat also has to be notified in the cases of refusal which can be conducted only in a non-discriminatory manner and based on the grounds provided in the Gas Law.

2. Unbundling

The unbundling requirements of Directive 2009/73/EC have been transposed by the Law on Natural Gas Market, allowing a choice between ownership unbundling and independent system operator. Certification has to be done by 1 June 2016, in line with the Ministerial Council Decision on the adoption of the Third Energy Package. A compliance programme and a compliance officer have been defined in line with the requirements of Directive 2009/73/EC.

For the time being, *Ukrtransgaz* is a combined transmission and storage system operator, a subsidiary legally unbundled from *Naftogaz* and not engaged in production or supply. However, functional unbundling as required already by Directive 2003/55/ EC has not been implemented.

4

Ukrainian Gas Law - A Showcase of Successful Cooperation

Despite being the newest member of the Energy Community, Ukraine became the second Contracting Party to transpose the Third Energy Package in the gas sector. The Law on Natural Gas Market, transposing Directive 2009/73/EC and principles of Regulation (EC) 715/2009, entered into the force on 8 May 2015.

The development of the Law lasted exactly one year – from the initial draft provided by the Secretariat in April 2014 until the approval by the Parliament in April 2015. The Secretariat's draft had fulfilled its purpose, *i.e.* to trigger discussion on gas sector reforms by Ukrainian stakeholders and enable the timely adoption of the Law. Following the draft's submission to the Ukrainian authorities, cooperation between the Secretariat and Ukrainian stakeholders intensified further with numerous meetings in Kyiv and Vienna, hundreds of e-mails and phone calls and many video conferences. The goal was always the same - to explain the requirements of the EU gas *acquis* and ensure compliance with the Third Energy Package.

While aware of the benefits for Ukrainian gas market players, Ukraine had a number of understandable concerns, if not fears, regarding the huge reforms which lay ahead. In this context, the role of the Secretariat, as promoter and interpreter of the EU acquis, was very important during the entire process – at meetings at the Ministry and the national regulatory authority, public stakeholder events, communication with the media as well as formal sessions of Government and Parliament.

Of course, the Law could not have been adopted without trust



and openness from the Ukrainian side. The short time it took to adopt the Law shows the dedication by Ukraine to adopt the necessary reforms. This dedication has been demonstrated again in the speedy process of developing all secondary legislation required by 1 October 2015. The Secretariat continues to support Ukraine in the drafting and preparation of the secondary gas legislation.

The Law on Natural Gas Market requires unbundling of system operators for storage, LNG terminal and distribution and, in line with Directive 2009/73/EC, allows exemptions for distribution companies with less than 100,000 customers. Those above this threshold have the deadline to unbundle by 1 January 2016. However, most of the 35 distribution companies serve more than 100,000 connected customers and are unbundled from 1 July 2015 in line with the Law and the deadline set by the Protocol on Ukraine's Accession to the Energy Community.

3. Third Party Access

The Law on Natural Gas Market grants the right to connection and third party access under regulated conditions to all system users. The network operators are obliged to publish access tariffs set by the regulator. Access to the storage system can be regulated or negotiated, subject to conditions approved by the regulator. The new Law cancels the difference between national transmission and transit, which existed in the Gas Law of 2010.

Rules for exemption of new infrastructure have been defined in line with Directive 2009/73/EC as adapted by the Ministerial Council, *i.e.* introducing a role for the Secretariat in the procedure. Exemptions of "take or pay" contracts and access to upstream pipelines have been defined in line with Directive 2009/73/EC.

General principles of capacity allocation and congestion management have been transposed by the Law on Natural Gas Market, but full compliance with Regulation (EC) 715/2009 still has to be achieved by the Network Code, which is under development.

At present, *Ukrtransgaz* offers firm capacity only on annual basis in line with the NEURC's Procedure for Accessing the Unified Gas Transit System of Ukraine. It is not compliant with the requirements of Regulation (EC) 1775/2005, due to lack of references to firm or interruptible third party access services and to rights to release non-used capacity on the secondary market. The rules in place also grant priority access to suppliers under public service obligations and companies with long-term capacity contracts. All those violations have to be addressed by the Network Codes under preparation.

4. Eligibility

According to the Law, all customers have the right to choose a supplier and switch the supplier free of charge which is in line with the Energy Community requirements. But in practice the right to switch the supplier for households is difficult to realise because of the lack of secondary legislation in this respect.

5. Market Opening and Price Regulation

The Law on Natural Gas Market foresees a fully open market and deregulated prices, allowing however the Cabinet of Min-

isters to define public service obligations, in line with Directive 2009/73/EC. A Public Service Obligation Decree, currently under preparation, will allow a progressive increase of gas prices for households and heat producers to the market level in two steps by April 2017, as required by the agreement with the *International Monetary Fund (IMF)*.

6. Balancing

The Law on Natural Gas Market sets basic principles on balancing rules and envisages imbalance charges or penalties. The balancing regime is indirectly established by NEURC's Procedure for Accessing the Unified Gas Transit System of Ukraine, for the time being, whereas the balancing costs are socialised among all network users. These rules will have to be changed by the Network Code under preparation.

7. Security of Supply

The Law on Natural Gas Market with regard to security of supply goes beyond Directive 2004/67/EC and introduces many elements in line with Regulation (EU) 994/2010. The Ministry of Energy and Coal Industry is the competent authority responsible for defining rules and a national plan for emergency measures, monitoring security of supply, reporting to the Secretariat and the Security of Supply Coordination Group and cooperating with other Parties to the Energy Community in crisis situations.

The new Law defines the security of supply standards and the notion of protected customers, a list of market and non-market instruments for security of gas supply as well as transparent provisions for reporting and monitoring security of supply.

8. Customer Protection and Protection of Vulnerable Customers

As regards customer protection, a standard gas supply contract, including the obligation on the supplier to provide information, has yet to be approved by the regulator. The new Gas Market Law envisages a minimum content for contracts between service providers and consumers and it specifies that the information shall be provided to consumers in advance and prior to the conclusion of an agreement. The consumers have a right to receive adequate notice of any intention to modify the contractual conditions and to be informed about their right of termination when the notice is given. In addition, it gives consumers the right to a wide choice of payment methods.

A supplier of last resort has been introduced by the new Law, as a measure of customer protection.

For the time being, the notion of vulnerable customer has been defined in Ukraine's general social protection schemes, rather than specifically for the energy sector. The Law on Natural Gas Market tasks the Cabinet of Ministers to determine criteria for defining vulnerable customers, their categories and order as well as volumes of support and special measures to protect customers in case of disconnection by 1 October 2015.

Special laws define a category of individuals who receive state support, particularly for energy. This categorisation is based on the percentage of energy costs in overall income. This in practice means that the lower middle classes benefit the most from subsidies, since the poorest part of the population does not spend much on energy and the percentage of energy costs in their overall (low) income is very low, i.e. below the defined threshold (10 - 15%) for subsidies. The system of subsidies -Social Safety Nets - supported by the World Bank, is currently under revision with the aim to have more citizens with the lowest income included in the support scheme by the next heating season. 1.1 million households are eligible for subsides within the currently running programme, while 3 million households (i.e. 25% of all households) would be eligible for subsides under the redesigned Social Safety Nets. Additionally, in October 2014, the Government introduced a temporary system of subsidies for heating season 2014 - 2015, targeting only bills for gas, heat and hot water. 11,000 households applied for it.

c. Conclusions and Priorities

Improvements in the level of commitment by Ukrainian institutions as well as in the communication with the Secretariat had been visible already in 2013, but the pace of reforms accelerated remarkably during the last reporting period.

After the great achievement of adopting the Law on Natural Gas Market and laying the ground for further reforms, the pace of developing secondary legislation should stay high. The success of Ukraine's reform is crucial for the security of gas supplies in the region and wider Europe and will have a strong impact on European energy policy. The commitment so far suggests an irreversible path of reforms.



Ukraine

11.3 Regulatory Authority

a. Organisation, Competences and Assessment of Independence

The National Energy and Utilities Regulatory Commission of Ukraine (NEURC) is the single authority for regulating gas and electricity. NEURC is headed by six Commissioners and a Chairman. Commissioners are appointed by the President of Ukraine without a transparent procedure, public vacancy announcement or involvement of an independent selection committee. Appointment criteria are defined by law but also include the vague and unspecified requirement of "moral qualities [...] and health conditions". The term of Board members is limited to 6 years, renewable once. A rotation scheme is not in place.

Ukraine has not yet transposed the Third Package with regard to the regulatory authority. In the light of this, NEURC's competences need to be extended to the complete set of regulatory powers and objectives foreseen under the Third Energy Package. Together with the regulator of Bosnia and Herzegovina, NEURC is the only regulatory body that does not have full jurisdiction over the gas sector. Namely, NEURC is not competent for cross-border related activities in gas.

NEURC has suffered from its lack of independence. It is the only regulatory body in the Energy Community whose establishment is not solely based on legislation. Instead, it is established and can be liquidated by act of the President. The President has made use of this legal possibility already twice in the past as a tool for dismissing NEURC's management – undue political intervention in the regulator's independence.

The independence criteria stipulated in Articles 35(4-5) and 37(16) of Directive 2009/72/EC and Articles 39(4-5) and 41(16) of Directive 2009/73/EC are not met. Legislation in principle grants NEURC independence in its activities. However, NEURC's decisions are not final but subject to review by the State Committee for Regulatory Policy of Ukraine. NEURC is also legally subordinated to the President.

A legal prohibition for top management to execute political functions exists but restrictions to having an interest in regulated utilities or having an employment relationship with the energy sector including sanction dismissals in case of noncompliance are not in place.

NEURC does not have financial independence in setting and allocating its Annual Budget and deciding about human resources. NEURC is financed from the State Budget. Fees for licensed activities up to an overall limit defined by the Cabinet of Ministers are transferred to the State Budget. The use of NEURC's budget is subject to decisions of the Ministry of Finance based on the Budget Code. NEURC's staff and management salaries are coupled to those of the public sector.

NEURC complies with transparency standards when it comes to published information. Decisions, decision-making rules and newsletters are published. The regulator also dedicates a special section of its website to public consultations as well as measures to avoid corruption.

The revision of the Law on the Energy and Public Utilities Regulator was initiated in the course of 2015 in close cooperation with the Secretariat with a view to overcome the existing shortcomings in terms of competences and independence of NEURC. The draft Law was approved by the Cabinet of Ministers of Ukraine and submitted to the Parliament, but it has not been adopted yet.

On a regional level, NEURC only partially participates in the Energy Community Regulatory Board (ECRB). Yet, it has to be positively noted that with the discussions on reforming the regulator's legal basis and implementing the necessary independence standards, NEURC has started to increase also its activities in the ECRB and cooperates with European regulators in the ACER Gas Regional Initiative South South East.

b. Conclusions and Priorities

The following changes in law and regulatory practice are key priorities for NEURC in order to comply with the Third Package:

- NEURC's competences need to be expanded to the complete set of regulatory powers and objectives foreseen under the Third Energy Package.
- NEURC needs to be granted full financial independence including autonomy in setting staff salaries.
- NEURC's decisions need to be final.
- NEURC needs to be established by law only and should not be subordinated to the President.
- A rotation scheme for Board members needs to be introduced.
- Independent appointment criteria and a transparent procedure for selection of Board members including a selection committee of neutral experts have to be put in place.



Ukraine

11.4 Oil

a. Sector Overview

Ukraine is increasingly dependent on imports of petroleum products. Crude oil production was around 2.74 mt in 2014, 10.4% lower than in 2013. Crude oil exports are around 41 kt. Imports decreased by 67% to 238 kt in 2014. As regards the domestic production of petroleum products, the volume of 3.37 mt of petroleum products processed in 2014 constitutes an increase by 9.9% compared to 2013. The export of petroleum products decreased by 23.8% to 710 kt. On the other hand, the import of petroleum products increased by 21.4% to a level of around 7.85 mt. The overall consumption of petroleum products in 2014 was 10.08 mt, a decrease of 0.44% compared to 2013.

The Law on Oil and Gas is the main legislative act regulating the oil sector of Ukraine. Currently, Ukraine has no legal framework in place for the establishment of emergency oil stocks. In December 2009, the Government approved a concept for the establishment of minimum stocks of crude oil and oil products in Ukraine for the period up to 2020. However, the Law on

Minimum Oil and Oil Products Stocks drafted and discussed in 2010 was eventually rejected by the Government at the time.

In April 2015, the Cabinet of Ministers adopted an Action Plan which foresees that by December 2015 a legal act on a model for oil stocks will be developed and approved in close cooperation with the Secretariat. The Ministry should have created a working group to coordinate the drafting of this act.

The role of crude oil stocks is central when considering the future stockholding system and the intention of maintaining 60% of emergency oil stocks in the form of crude oil as is suggested by Ukrainian experts. However, the role of domestic refining makes this questionable, as refineries are mostly outdated and require significant investment. Notably, refineries are underutilized and the vast majority of petroleum products consumed in the Ukrainian market are imported. It appears that awareness of the relevance of emergency oil stocks for national security is rising, and an agency-based system fully controlled by the Government is generally viewed as the preferred choice.

The State Statistical Service of Ukraine (SSSU) receives monthly data on quantities sold (retail reporting) from oil companies and data on quantities imported/exported from the customs authorities. SSSU is responsible for reporting monthly oil data for the *JODI* and will assume the responsibility of reporting the monthly oil statistics.

c. Conclusions and Priorities

Ukraine has committed to advancing the establishment of an emergency oil stockholding system, including establishing a legislative framework by 2014. While work on this has been delayed, due to the political events of 2014, such a commitment

remains a valuable basis for going forward.

The issue of oil product quality raises concern given that oil stocks should be established on a long-term basis. Ukraine is strongly reliant on oil product imports primarily through Russia, which do not meet European standards.

The current stagnation in Ukraine is primarily caused by the fact that there is no consensus on how emergency oil stocks should be financed and who is going to establish them. Due to the financial dimension of the project, consensus on these two critical questions among the policy-makers and all relevant stakeholders will be required.



a. Sector Overview

1. State of Play, Legislation and Promotion of Renewable Energy

With the adoption of Directive 2009/28/EC, Ukraine committed to a binding 11% target of energy from renewable sources in gross final energy consumption in 2020 compared with a share of 5.5% in 2009. A simplified *National Renewable Energy Action Plan (NREAP)*, not compliant with the template, was adopted by the Government in October 2014 and submitted to the Secretariat. It is accompanied by another plan that includes the list of measures of regulatory and legal support for renewable energy development in Ukraine, to be implemented in 2015 - 2018. The *NREAP* assumes a 3,8% share of renewable energy in 2009 based on unrevised biomass consumption data in official statistics. Nevertheless, Ukraine in the *NREAP* is planning to reach the 11% renewable energy target in 2020. The *Report on the Progress in the Promotion of Renewable Energy* 2012 - 2013 was submitted to the Secretariat in January 2015.

Until 2014, Ukraine progressed rather slowly in terms of harmonisation of legislation with Directive 2009/28/EC. Several legislative and regulatory acts set the framework for the promotion of renewable energy. The main pieces of legislation are the Electricity Law, the Law on Alternative Energy Sources and the Law on Alternative Fuels. In 2013, the Law on the Electricity Market was adopted which envisages the elimination of the single buyer model, the introduction of bilateral electricity trading and the creation of day-ahead and balancing markets. The Law also creates the Imbalance Settlement Fund to subsidise new renewable energy production and CHP plants.

The main institutions responsible for the implementation of

renewable energy policy are the State Agency for Energy Efficiency and Energy Savings (SAEE) under the auspices of the Ministry of Regional Development, Building and Housing and Communal Services of Ukraine and the National Energy and Utilities Regulatory Commission (NEURC).

2. Electricity from Renewable Sources

The promotion of renewable energy in Ukraine is based on two categories of measures: feed-in tariffs for various technologies and tax benefits. The basis for the feed-in tariffs is the Electricity Law of 2009, as amended several times and the last time in June 2015. It tasks NEURC to approve a feed-in tariff for each generator of electricity from renewable energy sources per type of source and per power plant until 1 January 2030.

The amendments to the Electricity Law in 2014 introduced a "green" tariff for electricity produced from biomass of animal origin, components of industrial or household waste, biogas and small hydropower. A grandfathering clause guarantees that the support scheme relates to the time of commissioning of the plant, while the power purchase agreement is signed afterwards. This creates an unpredictable framework for investors. The State guarantees that for the duration of the green tariff application all electricity produced will be purchased at the green tariff by the wholesale market operator Energorynok.

The regulator is also mandated to revise the feed-in tariffs calculated in EUR based on the exchange rate of the national currency on 1 January 2009. The regulator failed to revise the feed-in tariffs for existing installations between August 2014 and January 2015 to account for currency devaluation. Upon legal action by renewable energy producers courts ordered

compensation for the losses incurred. Compensations have not been paid yet.

Temporary emergency measures in the electricity market have been imposed during August 2014 until April 2015 by monthly resolutions of the Cabinet of Ministers. Based on these acts, feed-in tariffs for electricity produced from renewable sources have been *de facto* reduced by NEURC decisions in 2015 by 10 - 20% for February 2015 and by 50 - 55% for March 2015, for the existing renewable energy producers as well as for new ones.

The tariffs are based on "green coefficients", ranging currently from 1.08 for wind to 3.33 for solar PV (depending on capacity) for installations commissioned before the end of 2019. These coefficients will gradually decrease over the next 15 years. Private households are allowed to sell the electricity produced from solar PV installations below 30 kW directly to energy suppliers at feed-in tariffs. These measures are included in the amendments to the Electricity Law adopted in June 2015.

In June 2015, Parliament adopted amendments to several Ukrainian Laws on the promotion of renewable energy with the aim to ensure competitive conditions for electricity produced from renewable energy sources. It increased the "green tariff" for electricity generated from biomass and biogas to 10% and

introduced the proper term "biomass" according to Directive 2009/28/EC. At the same time, it decreased the "green tariff" for solar by about 45% depending on capacity. Due to the infringement action initiated by the Energy Community Secretariat, the Ukrainian Parliament voted to remove the so-called "local content clause" in the Electricity Law of Ukraine in June 2015. Conditioning the eligibility for feed-in tariffs for investments in renewable energy on the fulfilment of minimum shares of goods and works of Ukrainian origin has been replaced by entitlements of the investors fulfilling certain local content quota to a bonus on top of the existing feed-in tariff.

Other support for renewable energy take the form of tax incentives. However these have been severely cut in the last year due to the crisis.

Authorisation and licensing procedures in Ukraine are carried out by many bodies of different levels. Licensing of heat and electricity production is performed by NEURC.

Transmission grid infrastructure development is envisaged in the Ten-Year Network Development Plan of the *Unified Energy System of Ukraine (UES)*. The UES Development Plan shall be reviewed each year by the transmission system operator and agreed with the Ministry of Energy and Coal Industry, the NEURC and the energy efficiency agency SAEE, and afterward



approved by the Cabinet of Ministers of Ukraine. Investment programmes of distribution system operators are approved by NEURC on an annual basis. An obligation of renewable energy integration and development was introduced in the new draft of the Electricity Market Law.

The amendments to several Laws adopted in June 2015 also abolished rules on splitting the connections costs 50:50 between the network operator and the applicant for connection. The electricity producer will cover full costs related to grid connection. Wind and solar power producers are obliged to nominate their schedule on a day-ahead basis to the network operator. However, balance responsibility is not assigned to renewable energy producers. The current legislation provides for guaranteed access of renewable energy producers to local electricity networks and priority dispatch of renewable energy.

The creation of a certification system based on guarantees of origin for electricity produced from renewable sources was established by a Government Decree issued in July 2013, appointing SAEE as the issuing body for guarantees of origin. Guarantees of origin are not being issued in Ukraine due to lack of technological capacity and funds. In the future, it is envisaged that the market operator *Energorynok* will become the issuing body for guarantees of origin and implement the mechanism for issuing, transfer and cancellation of these certificates.

3. Renewable Energy in Heating and Cooling

In 2014 and 2015, a programme to incentivise the replacement of gas with biomass used by households for heating was applied. Biomass used for heating reached 1,880 ktoe in 2013 compared with 1,473 ktoe in 2009 in the official energy balances. However, the basis for 2020 renewable energy target calculation was 2,937 ktoe biomass energy consumption in 2009 based on the "Biomass Consumption Survey Study" performed for the Energy Community. In the draft Law on Energy Efficiency in Public and Residential Buildings, provisions on promotion of energy from renewable sources in heating and cooling are transposed.

Several tax exemptions for the import of renewable energy installations or tax reduction for renewable energy companies introduced by the Tax Code of Ukraine in the past years were abolished in 2014.

4. Renewable Energy in Transport

The framework for renewable energy in the transport sector consists of the Law on Energy Savings, the Law on Alternative Energy Sources, the Law on Alternative Fuels, and the Order Arranging Production and Use of Biogas. Ukraine is a significant exporter of raw materials for biofuel production to the EU. The exports of rapeseed, for example, increased 60 times over a five-year period. Some small production (but not national consumption) of bioethanol has been reported for 2012 (384 t).

With the commitment to reach the 10% renewable energy

share in transport in 2020, Ukraine must increase domestic consumption of biodiesel and bioethanol. The renewable energy share in transport was 0.62% in 2013 which increased to 1.28% in the 1st quarter of 2014. The biofuels target for 2013 is still a voluntary 5% share of the total fuel volume in 2013, but becomes a mandatory 5% in 2014 and 2015, and a mandatory 7% starting from 2016.

Currently, renewable targets for the transport sector are defined only for one type of fuel, bioethanol. The *NREAP* envisages biodiesel production in the long term as well as usage of renewable electricity and biogas. The main incentive instrument for biofuels is tax exemption. Pursuant to the Tax Code, there are several tax incentives applicable to the biofules sector. Most importantly, there is a zero profit tax for biofuels producers. Excise tax exemptions apply to bioethanol used for blending with petrol or for production of biofuels. Furthermore, 80% of the profit is not taxed if it comes from sales within Ukraine of own bioethanol production, as a measure to increase domestic biofuels production and national consumption. This may be considered protectionist.

b. State of Compliance

Despite significant progress in terms of newly installed solar and wind capacities, Ukraine still has to complete the legislative and regulatory framework in accordance with Directive 2009/28/EC.

1. National Renewable Energy Action Plan

Ukraine submitted the *NREAP* with delay. Subsequently, the Secretariat has closed the infringement procedure initiated in 2014. The binding targets following from Directive 2009/28/EC have not yet been transposed in the legal framework. The *Report on the Progress in Promotion of Renewable Energy* 2012 - 2013 has been submitted to the Secretariat.

2. Cooperation Mechanisms

The Directive's provisions on cooperation mechanisms have not been transposed.

3. Support Schemes

The support for the renewable energy producers has undergone significant changes at the beginning of 2015. The acts introduced by of the energy regulator were adopted as emergency measures in the context of the conflict in Eastern Ukraine.

Following the amendments to several laws adopted in June 2015, NEURC shall quarterly index the feed-in tariffs to account for average official EUR-UAH currency exchange rate. A more predictable and stable climate for the promotion of renewable energy will be needed for the future.

The framework is currently not attractive anymore for the development of new renewable projects. Almost all new investment

decisions for new projects have been postponed. The legislative inconsistencies (namely unexpected reduction of feed-in tariffs, cancellation of tax exemptions, *etc.*) are detrimental to the investment climate. This is jeopardizing the fulfilment of the 11% renewable energy target in 2020.

4. Administrative Procedures

The existing national measures are not in compliance with Article 13 of the Directive as not all administrative procedures are streamlined and expedited at the appropriate level. This is mainly due to lack of coordination and communication between authorities. There is no one-stop shop for permits and licenses. Renewable energy developers face several agencies to pass all administrative procedures, and pre-construction procedures may last a very long time.

The revision of local content for renewable energy projects has increased compliance with the *acquis*. The Secretariat has closed the case against Ukraine on this account.

5. Access to and Operation of the Grids

Priority access to the networks and priority dispatch of electricity produced from renewable energy sources applies since 2009. Compensations for curtailments remain to be implemented. Transmission and distribution system operators have to clarify technical specifications for grid connection which currently are unclear. Network operators must develop network investment plans to be approved by the regulator in order to accommodate any further increase of renewable energy. Compliance with Article 16 of Directive 2009/28/EC still remains to be achieved.

6. Guarantees of Origin

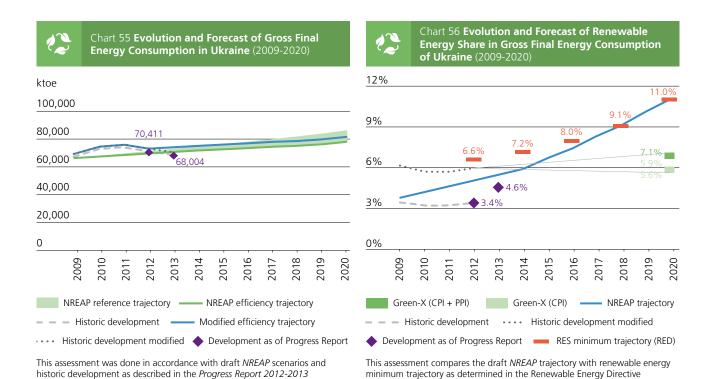
There are still some ambiguities related to the institution in charge of issuing, transfer and cancellation of guarantees of origin. Despite the appointment of SAEE as the issuing body for guarantees of origin and rules on issuing, transfer and cancellation of guarantees of origin in July 2013, the Law adopted in June 2015 envisages the appointment of the market operator to implement a system of guarantees of origin for energy produced from renewable sources. The standard form of guarantee of origin, approved by the Cabinet of Ministers of Ukraine, is not in compliance with the Article 15 of the Directive, because it does not contain all the information required.

Recognition of guarantees of origin issued by other Contracting Parties and the obligation on electricity suppliers to make available information to consumers on the amount or share of energy from renewable sources are missing.

7. Renewable Energy in Transport

Articles 17 to 21 of Directive 2009/28/EC have not been transposed yet. There is no certification scheme defined or relevant body established in line with the requirements of Directive 2009/28/EC. SAEE issues certificates for labelling of alternative fuels, including information on the type of biofuel and blending. Those certificates are not in conformity with the sustainability criteria, as defined by Article 17 of Directive 2009/28/EC. Moreover, requirements for monitoring, reporting obligations and information need to be addressed more consistently in the legislation and enforced.





Source Study on the Assessment of the National Renewable Energy Action Plans and the Progress in Promotion of Renewable Energy in the Energy Community, by ECN et all, 2015

c. Quantitative Assessment of the Progress Towards National Renewable Energy Trajectory

The gross final energy consumption (GFEC) increased in 2010 and 2011, but decreased in 2012 and 2013. In 2013, the actual GFEC was 3.5% below the *NREAP* trajectory.

Reviews of the 2015 energy balance according to the "Biomass Consumption Survey Study" will have a very significant effect on the renewable energy share. The renewable share according to official statistics was 3.4% in 2012, whereas after the review, the renewable share was nearly double, at 6%. The NREAP target for 2012 was 5.1%. However, the modelling results, which started from more optimistic data, do not indicate that Ukraine is on the trajectory for 2020. This implies that Ukraine will fail to meet the binding 11% target in 2020 by more than 4%, requiring alternative policy initiatives to be back on track to 2020.

d. Conclusions and Priorities

Ukraine has a comprehensive framework for the promotion of energy from renewable sources. However, more consistency and coherence is needed to ensure compliance with the requirements of Directive 2009/28/EC in primary and secondary legislation. A revised and complete *NREAP* in accordance with the required template is needed in the light of recent developments to ensure that Ukraine is on track to meet the 11% target in 2020.

An overhaul of the existing legislation to properly transpose and implement the Directive (including the adequate definition of renewable energy) and a predictable, stable and investor-friendly renewable energy framework will help attracting much needed investment in this sector and alleviate dependence on imported energy.

For the promotion of renewable energy in transport, the utmost priority must be establishing a certification system in line with Directive 2009/28/EC. Without meeting the sustainability criteria and having an adequate certification system in place, biofuels production cannot count towards the target and cannot be exported to EU markets.



Ukraine

| С | 11.6 Energ | y Efficiency | | | | | | | |
|------------------------------|--|------------------------|---|---------------------------|----------|---------|--|--|--|
| Energy Efficiency Ac | tion Plan (EEAP)* | | | | | | | | |
| Period covered by EEA | Р | | | 2012 - | - 2020 | | | | |
| Overall energy savings | target - Directive 2006/32 | P/EC (ktoe / % / year) | | 6,501 / 9 | 9 / 2020 | | | | |
| EEAP status | | | Final draft 1st EEAP – las | t submission in April 201 | 5 | | | | |
| Achieved energy savin | gs | | Not elaborated (as this i | s 1st EEAP) | | | | | |
| Key institution(s) in charge | | | State Agency on Energy Efficiency and Energy Saving of Ukraine (SAEE); Ministry of Regional Development, Building and Housing and Communal Services of Ukraine | | | | | | |
| Main data and energ | Main data and energy efficiency indicators** | | | 2011 | 2012 | 2013*** | | | |
| Total primary energy | supply (TPES) | ktoe | 132,429 | 126,557 | 122,661 | 115,940 | | | |
| Energy intensity (TP | ES/GDP) | toe / 1,000 USD | 1.46 | 1.33 | 1.28 | 1.19 | | | |
| TPES/Population | | toe/capita | 2.89 | 2.77 | 2.69 | 2.55 | | | |
| Total final energy co | nsumption (TFEC) | ktoe | 74,007 | 75,852 | 73,107 | 69,558 | | | |
| | Residential | | 32% | 31% | 32% | 34% | | | |
| | Services | | 6% | 7% | 7% | 8% | | | |
| Share of TFEC by | Industry | % | 34% | 35% | 34% | 31% | | | |
| sector | Transport | 70 | 17% | 17% | 16% | 16% | | | |
| | Others | | 3% | 3% | 3% | 3% | | | |
| | Non-energy use | | 8% | 8% | 8% | 7% | | | |

^{*} Source: draft 1st EEAP of Ukraine

a.Sector Overview

There is a clear indication that the final energy consumption in Ukraine declined in 2012 and 2013 while the gross domestic product resumed growth in 2013. The positive trend is reflected in the continuous decrease of energy intensity in 2011, 2012 and 2013, although Ukraine remains by far the most energy intensive economy of all Contracting Parties.

Joining the Energy Community in 2011 Ukraine committed to implement the acquis on energy efficiency by the end of 2012. However the Law on Energy Conservation of 1994 which is not compliant with the acquis, still applies in Ukraine. The Law needs to be significantly amended or, even better, replaced by a modern law compliant with the Energy Efficiency Directive 2012/27/EU. To support Ukraine in fulfilling its commitments, a new Law on Energy Efficiency was drafted by the Secretariat in May 2015. The draft Law would transpose Directive 2012/27/ EU. It also aims at strengthening the role of the State Agency for Energy Efficiency and Energy Saving (SAEE) in monitoring energy efficiency programmes and measures, introducing financing mechanisms, supervising the market of energy related products that are subject to labelling and ecodesign, issuing licences for auditors and buildings assessors, introducing energy obligation provisions for utilities, mandatory renovation of public buildings with 1% per year, etc. A working group consisting of Ukrainian authorities and experts and the Secretariat will be officially created and tasked to elaborate the document further. The Law is planned to be adopted in 1st quarter of 2016.

In April 2015, the Ukrainian Parliament adopted the Law on Introduction of New Investment Opportunities, Ensuring Rights and Legal Interests of Legal Entities to Conduct Large-Scale Thermo Modernisation (the so-called ESCO Law). It was followed by the Law Amending the Budget Code of Ukraine to enable the financing of public investments through an energy services companies mechanism. In addition, two draft Laws on Energy Audit were discussed in the Parliament in November 2014, but were returned to the Government for improvement.

During the reporting period, Ukraine continued to work on its first *Energy Efficiency Action Plan (EEAP)* for 2020. After the long process of inter-service consultations, it is expected to be submitted soon to the Government for adoption The draft *EEAP* was evaluated and assessed positively by the Secretariat.

Ukraine continues its work on transposition and implementation of the Energy Labelling Directive 2010/30/EU. The Technical Regulation on Lamps and Luminaries (transposing Delegated Regulation (EU) 874/2012) was adopted in June 2015 and the Technical Regulation on Energy Labelling of Household Dishwashers (transposing Delegated Regulation (EU) 1059/2010) was adopted in July 2015. Additionally, the Technical Regulation on Energy Labelling of Air Conditioners (transposing

^{**} Source: International Energy Agency

^{***} Indicators calculated by the Energy Community Secretariat based on preliminary energy balances for 2013

Delegated Regulation (EU) 626/2011), Technical Regulation on Energy Labelling of Household Tumble Driers (transposing Delegated Regulation (EU) 392/2012), Technical Regulation on Energy Labelling of Vacuum Cleaners (transposing Delegated Regulation (EU) 665/2013) and Technical Regulation on Energy Labelling of Televisions (transposing Delegated Regulation (EU) 1062/2010) were drafted.

The draft Law on Energy Efficiency in Public and Residential Buildings was prepared by the Ministry for Regional Development, Building and Housing and Utility Services in order to transpose Directive 2010/31/EC, but it did not pass the second reading in Parliament in October 2013. It was reviewed by the Ministry and submitted to the Parliament in December 2014, but its adoption is still pending. A working group to prepare amendments was established in May 2015.

In addition, Ukraine continues to work on technical standards in this area. In the context of Directive 2010/31/EC, standards on the economic evaluation procedure for energy systems of buildings were adopted in April 2015. Standards for methods to express energy performance and for the energy certification of buildings, calculation of energy use for space heating and cooling, a national standard for the overall energy use and definition of energy ratings were drafted but have not yet been adopted.

SAEE is the main institution responsible for the implementation of state policy in the fields of energy efficiency, energy savings and energy from renewable sources in Ukraine. It is coordinated by the Ministry for Regional Development, Building and Housing and Utility Services.

b. State of Compliance

The existing Law on Energy Conservation of 1994 is outdated and does not comply with the *acquis*. Having drafted but not adopted the most important legal acts transposing the energy efficiency *acquis*, Ukraine's state of compliance remains unsatisfactory.

1. Energy Services Directive 2006/32/EC

Ukraine has not adopted national legislation to comply with Directive 2006/32/EC. The draft Law on Energy Efficiency that is being currently discussed would transpose the Energy Effi-

ciency Directive 2012/27/EU. The draft *EEAP* for 2020 would fulfil the requirements of Directive 2006/32/EC, but its adoption is still pending.

2. Energy Labelling Directive 2010/30/EU

Ukraine continues its progress in development and adoption of technical regulations to implement provisions of Directive 2010/30/ EU and its delegated acts. Some of the technical regulations (for air conditioners, household tumble driers, vacuum cleaners and televisions) although drafted have not been adopted yet. Therefore Ukraine does not fully comply with the Labelling Delegated Regulation.

3. Energy Performance of Buildings Directive 2010/31/EU

Despite the progress in drafting and adopting certain standards in the field of energy performance of buildings, the Law that would transpose Directive 2010/31/EU and create a framework for application of the standards has not been adopted yet. Ukraine is not in compliance with the Directive.

c. Conclusions and Priorities

Despite the difficult political situation in 2014 and 2015, Ukraine made some progress in the reporting period by adopting technical regulations and the ESCO support laws. Although a significant number of important legislative acts were prepared, they have not yet been adopted.

The key priorities for Ukraine are the adoption of the Energy Efficiency Law, the Law on Energy Performance of Buildings and the *EEAP* until 2020. The adoption of the missing technical regulations for energy labelling and the regulations for full transposition of the Energy Performance in Buildings Directive should follow.

Furthermore, the cooperation and coordination between authorities with responsibilities in energy efficiency need to be improved. The support from the donors' community in Ukraine is extraordinary, but in some cases better coordination is needed. The status of SAEE as the leading national body for implementation of energy efficiency policy should be enhanced in order to enable effective working methods, monitoring and coordination.



Ukraine

11.7 Environment

a. Sector Overview

1. Environmental Impact Assessment Directive

Despite several pieces of legislation (Law on Environmental Protection and Law on Ecological Expertise) in place, there is no coherent legislative framework in Ukraine governing environmental impact assessment. The Law on Environmental Protection sets out general rules on the monitoring of emissions and other impacts on the environment, while the Law on Ecological Expertise determines the rules by which a natural or a legal person is entitled to deliver an expert opinion on environmental matters.

The Resolution on the List of Activities and Objects Which Pose Increased Environmental Danger of 2013 covers the energy activities listed in Annex I and II of the Environmental Impact Assessment Directive. These activities are, however, not linked to a systematic procedure like the one required by the Environmental Impact Assessment Directive.

With the aim of bringing national legislation into compliance with the Espoo Convention and Directive 2011/92/EC, a draft Law on Environmental Impact Assessment was developed in 2014. It was however never considered by the Parliament. In 2015, a draft law on the Implementation of Some EU Directives on Environmental Impact Assessment and a new draft Law on Environmental Impact Assessment were introduced and registered in the Verkhovna Rada in May and June 2015, respectively. The scope of projects covered by the latter draft is almost entirely harmonized with those covered by Annexes I and II of the Environmental Impact Assessment Directive. Some activities required by the Directive, however, are missing from the list of projects in the case of which a screening is required, such as industrial installations for the production of electricity, steam and hot water (projects not included in Annex I), underground storage of natural gas and carbon capture and storage. The draft Law also includes effective provisions on public participation in environmental impact assessments. The timeline for adoption of the draft Laws is not clear.

2. Sulphur in Fuels Directive

The Regulation on the Requirements for Car Petrol, Diesel, Marine and Boiler Fuel of 2013 governs the issues regulated by the Sulphur in Fuels Directive. The Regulation contains requirements on the sulphur content of liquid fuels such as heavy fuel oil and gas oil. However, its thresholds are significantly higher than those of the Directive.

3. Large Combustion Plants Directive

Ukraine has 147 plants falling under the scope of the Large Combustion Plants Directive with a total rated thermal input of 107,778 MW. Most plants are coal-fired while a number of them are run on natural gas.

Emissions from large combustion plants are regulated by a 2008 Ministerial Order on the Adoption of New Technological Standards for Permissible Emissions of Pollutants. During the reporting period, the Ministry of Energy and Coal Industry was drafting the State Programme on the Consecutive Reduction of the Consolidated Annual Volume of Emissions from Large Combustion Plants as a basis for further negotiations on Ukraine's request for a derogation from the requirements of the Large Combustion Plants and Industrial Emissions Directives.

Based on these negotiations, certain existing plants in Ukraine may be allowed, where proven necessary, to operate for not more than 40,000 operational hours starting from 1 January 2018 and ending no later than 31 December 2033 (opt-out). Furthermore, a *National Emission Reduction Plan* may be applied up to 31 December 2028 for SO_2 and dust and up to 31 December 2033 for NO_x . At the same time, the ceilings for the year 2028 for SO_2 and dust and the ceiling for the year 2033 for NO_x may be calculated on the basis of the relevant emission limit values set out in Part 1 of Annex V of the Industrial Emissions Directive. Until then, the ceilings are likely to be set providing a linear decrease between 2018 on the one hand, and 2028 (SO_2 , dust) or 2033 (NO_x) on the other.

b. State of Compliance

1. Environmental Impact Assessment Directive

Despite the two draft Laws developed with a view to transpose the Environmental Impact Assessment Directive into national law, Ukraine still falls short of compliance with the provisions of the Directive. Consequently, the Secretariat will start infringement action against Ukraine.

2. Sulphur in Fuels Directive

The thresholds for the sulphur content of heavy fuels oil and gas oil stipulated by the Regulation do not comply with those of the Directive and the requirements on the sampling and analysis of liquid fuels do not make reference to the standards required by the Directive. The roadmap adopted by the Regulation only requires the legislator to align the rules on sampling and analysis

by 30 December 2017 which is not in line with the timeframe stipulated by the Treaty. Consequently, the Secretariat is currently preparing a Reasoned Opinion against Ukraine in the open infringement case.

3. Large Combustion Plants Directive

Ukraine has already started aligning its national law with the requirements of the Large Combustion Plants Directive and intends to implement a *National Emission Reduction Plan* under Article 4(6) of the Large Combustion Plants Directive. The State Programme on the Consecutive Reduction of the Consolidated Annual Volume of Emissions from Large Combustion Plants initiated in 2013 should serve as a solid basis for Ukraine's final *National Emission Reduction Plan* (to be submitted to the Secretariat by end-2015). The paper was subject to a public consultation in April 2015 and was finalized in May 2015. Ukraine envisages the inclusion of 79 of its large combustion plants with total rated thermal input of 65.35 GW in the framework of the *National Emission Reduction Plan* with ambitious projections for the reduction of emissions of sulphur dioxide, nitrogen oxides and dust and with the aim of complying with

the requirements of the Industrial Emissions Directive by the end of the plan's implementation period. Specific plant-by-plant measures have been developed according to which these goals could be achieved.

c. Conclusions and Priorities

As regards environmental impact assessment, Ukraine should urgently proceed with the adoption of either of the draft Laws, ensuring compliance with the provisions of the Directive.

Ukraine should also quickly adopt a legislative framework in compliance with the Sulphur in Fuels Directive.

Finally, Ukraine should continue its efforts in aligning its national law with the provisions of the Large Combustion Plants Directive and in adopting its *National Emission Reduction Plan* with a view to the submission deadline of end-2015 to the Secretariat. Furthermore, operators of combustion plants need to bear in mind the deadline of end-2015 should they want to subject their plants to the opt-out rules.





Ukraine

11.8 Competition

a. Sector Overview

1. Competition Law

The Law on Protection of Economic Competition was adopted in 2001 and amended in 2013. The provisions of the Law prohibiting anticompetitive agreements, concerted actions and abuse of monopolistic (dominant) position generally correspond to Articles 101 and 102 TFEU. The Antimonopoly Committee of Ukraine (AMCU) is the body in charge of the enforcement of competition law in Ukraine.

During the reporting period, AMCU approved amendments to the Regulation on Concentration and the Regulation on Concerted Action of relevance for merger control.

AMCU continued its investigations in monopolistic entities active in the distribution of natural gas and electricity. In the area of gas distribution, the inspections covered 88 structural units and 28 gas distribution companies. AMCU considered over 20 cases of potential violations of competition law and issued 60 recommendations to terminate abuses of monopoly (dominant) position. The majority of violations concerned limitations of the access to distribution networks by imposing unreasonable requirements for technical specifications, excessive pricing, delaying the processing of applications, executing agreements, and unjustifiably rejecting the applications for access. According to AMCU, these violations were primarily the consequence of an inadequate legal framework.

With regard to electricity distribution, AMCU conducted investigations in all regions of Ukraine covering 89 separate structural units and 23 companies. AMCU initiated 36 cases of violation of competition rules and issued 33 recommendations requesting from the companies to bring abuses of dominance to an end. The violations were related to access to distribution networks and were mainly of the same kind as the ones found in the gas distribution networks inquiry. After these inspections, AMCU recommended to the National Energy and Utilities Regulatory Commission (NEURC) a review of the regulatory framework in relation to access to both gas and electricity networks. NEURC established permanent working groups including the representatives of AMCU in order to execute these recommendations. AMCU also approached several ministries with a proposal on how to eliminate legislative preconditions that enabled and encouraged infringements of competition rules in relation to gas distribution.

During the on-site inspections, AMCU found that the public company *Lvivoblenergo* had been abusing its monopolistic po-

sition on the market of compulsory technical specifications in the period January 2010 to first half of 2014. *Lvivoblenergo* was setting requirements for the interconnection of metering devices in individual and multi-family houses. According to AMCU, these requirements could lead to an increase in the cost of newly constructed houses which would harm consumers. AMCU stated that the establishment of such requirements had not yet been regulated by law and was possible only due to *Lvivoblenergo*'s monopolistic position on the market. AMCU fined *Lvivoblenergo* with around UAH 400,000 and ordered the elimination of the consequences of the violation. *Lvivoblenergo* complied with this decision.

2. State Aid Law

Ukraine adopted the Law on State Aid for Business Entities in July 2014 after the Secretariat had initiated a case of non-compliance. The institution tasked with enforcing the State Aid Law is AMCU. According to the Law, the prohibition of State aid would enter into force three years after the Law's promulgation, that is, on August 2017. According to the provisions of the Law, existing State aid has to be brought into compliance with the Law within the timeframe established freely by the State Aid Authority in each individual case and only after agreeing with the State aid provider. This provision does not exist in the acquis and will lead to a delay in the implementation of decisions of AMCU. The Law does not apply to aid granted for investments in infrastructure projects using State procurement procedures. This means that many infrastructure projects in the energy sectors could escape the application of State aid rules, which is also contrary to the acquis. The Law prevents AMCU from requiring the recovery of State aid after 10 years following the effective date of the regulatory and legal instrument or an executive order under which such aid was granted.

The AMCU drafted a resolution on increasing the maximum number of employees in order to perform its tasks as a State aid enforcement authority as of 2017. It also submitted an Action Plan on the implementation of certain legislative acts in the area of State aid to the Government. The latter drafted amendments to the Action Plan related to institutional reform of monitoring and control of State aid.

b. State of Compliance

1. Competition Law

Competition legislation generally transposes the competition acquis. AMCU is one of the most active and rigorous enforcers of competition law in the Energy Community. AMCU has

mainly focused on investigating abuses of dominance, such as exclusionary conducts, leading to foreclosing the market and harming consumers. AMCU should advance in the application of competition rules to anticompetitive agreements and practices harming other competitors on the market.

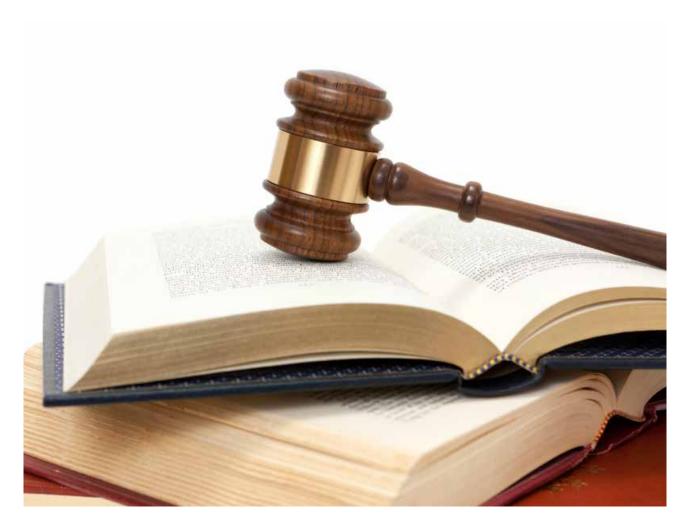
2. State Aid Law

Despite the recent formal transposition of State aid principles into primary legislation, their effective implementation is deferred by several years. Several provisions of the new Law are not in line with the *acquis*. However, AMCU has begun to actively prepare for the establishment of State aid control in Ukraine. Although the AMCU currently lacks the necessary staff for ensuring the successful performance of its tasks in the area of State aid, it has been working on improving its staffing for

the purpose of State aid law enforcement by issuing a resolution and an Action Plan and by submitting them to the Government. AMCU's activities on creating a database of State aid measures in the energy sector are also a positive development.

c. Conclusions and Priorities

AMCU continues to be a positive exception among the Energy Community Contracting Parties as a strong enforcer of competition law. Its application of competition rules should be strengthened in relation to anticompetitive agreements and practices covered by Article 101 TFEU. In order for Ukraine to fully comply with the Energy Community rules on State aid, both Ukraine's legislation and enforcement should be improved and brought into compliance with the EU acquis.





Ukraine

11.9 Statistics

a. Sector Overview

The Law on State Statistics specifies the rights and function of state statistical bodies, creates the organizational structure for official statistics and governs relations between the relevant institutions, including the Ministry of Energy and Coal Industry, the Ministry of Ecology and Natural Resources and the Ministry of Finance. The State Statistical Service of Ukraine (SSSU) is the central statistical institution responsible for production of energy statistics in accordance with Regulation (EC) 1099/2008. The Law imposes obligations on respondents to submit information in the format as defined in the statistical reporting documentation in a timely manner.

The Government adopted the Regulation on Approval of the Development Strategy of the State Statistics until 2017, which tasks SSSU to improve the quality of the state statistics, to develop an integrated and effective national system of official statistics and to bring it in compliance with the Energy Community standards. The concept of energy balance compilation was approved by a Government Instruction from 2007. The SSSU developed a methodological regulation on the design of the statistical surveying of uses of fuel and energy and a methodological regulation on compilation of the energy balance.

Data are collected from administrative sources such as the Ministry of Ecology and Natural Resources, the Ministry for Regional Development, Construction and Housing and Communal Economy, the Ministry of Health Security, the National Ecology Investment Agency and the State Agency for Forestry Resources. Information from the energy sector are also collected and/or required by the Ministry of Energy and Coal Industry, the gas incumbent *Naftogaz*, the *Association of LPG* in Ukraine, the State Customs Service of Ukraine, the National Energy and Utilities Regulatory Commission (NEURC), and the State Agency on Energy Efficiency and Energy Saving of Ukraine (SAEE).

b. State of Compliance

1. Annual Energy Statistics

Annual statistics are compiled in accordance with Regulation (EC) 1099/2008 and 147/2013. SSSU collects data for the energy balance using statistical surveys among producers, traders and distributors of primary and transformed energy, importers and exporters, household surveys, administrative information, evidence-based data and expert evaluation. SSSU developed

procedures to ensure the completeness and quality control of input data, conversion factors of natural units, checking and validation procedures. SSSU publishes balances per product in December at the latest for the previous year and submits joint questionnaires to *IEA*. Consolidated data are published in the "Statistical Yearbook of Ukraine".

Annual statistics are compliant with the acquis.

2. Monthly Energy statistics

SSSU compiles all requested monthly energy statistics and ensures its timely dissemination. SSSU also compiles monthly *Joint Organisations Data Initiative (JODI)* questionnaires on oil and gas and submits to *United Nations Statistics Division (UNSD)*. Thus Ukraine is the first Contracting Party which completed monthly collections and the first to present them regularly in the world *JODI* database.

3. Price Statistics

Until 2013, the energy price statistics system was not established, primarily because the tasks and responsibilities are not officially assigned among the stakeholders. After the adoption of the rules on statistics, SSSU together with NEURC started to work on organizing a data survey on natural gas and electricity prices for industrial and residential users. So far neither SSSU nor any other institution has been officially designated to produce information on electricity and gas prices as required by Directive 2008/92/EC. In this respect, Ukraine does not comply with the *acquis* yet.

c. Conclusions and Priorities

Ukraine established the legal and administrative basis for implementation of Regulation (EC) 1099/2008. The system of continuous data collection should be completed and permanently improved to adapt to changes in the energy sector, having regard to reporting burden and overall cost effectiveness.

To implement Directive 2008/92/EC, the reporting and compilation system for electricity and gas prices, preferably in cooperation with NEURC, should be established without delay with the view for its permanent adequacy check and adaptations to the pending market opening. SSSU will also have to pay due attention to quality reporting on energy statistics.



Ukraine

11.10 Open Infringement Cases

a. Capacity Allocation on Electricity Interconnectors

On 26 February 2013, the Secretariat sent an Opening Letter in Case ECS-1/12 to Ukraine. The Secretariat took the preliminary view that the Auction Rules adopted for the allocation of capacity on the country's electricity interconnectors with its Western neighbours and Moldova, as well as their application in practice by the system operator, fails to comply with Regulation (EC) 1228/2003 and the so-called Congestion Management Guidelines. The Electricity Law adopted in October 2013 and entered into force on 1 January 2014 provides a legal basis for adoption of new Allocation Rules in six months from the entry into force of the Law to be applied from 1 December 2014. However, the existing Allocation Rules adopted on the basis of the 2013 Electricity Law are neither compliant nor followed in practice. The identified non-compliance is also closely linked to the prevailing market model in Ukraine. The new Electricity Market Law, introducing a market model in compliance with the acquis, is under preparation in close cooperation with the Secretariat. If new Allocation Rules based on that Law are adopted in the near future, the Secretariat will not proceed with the case.

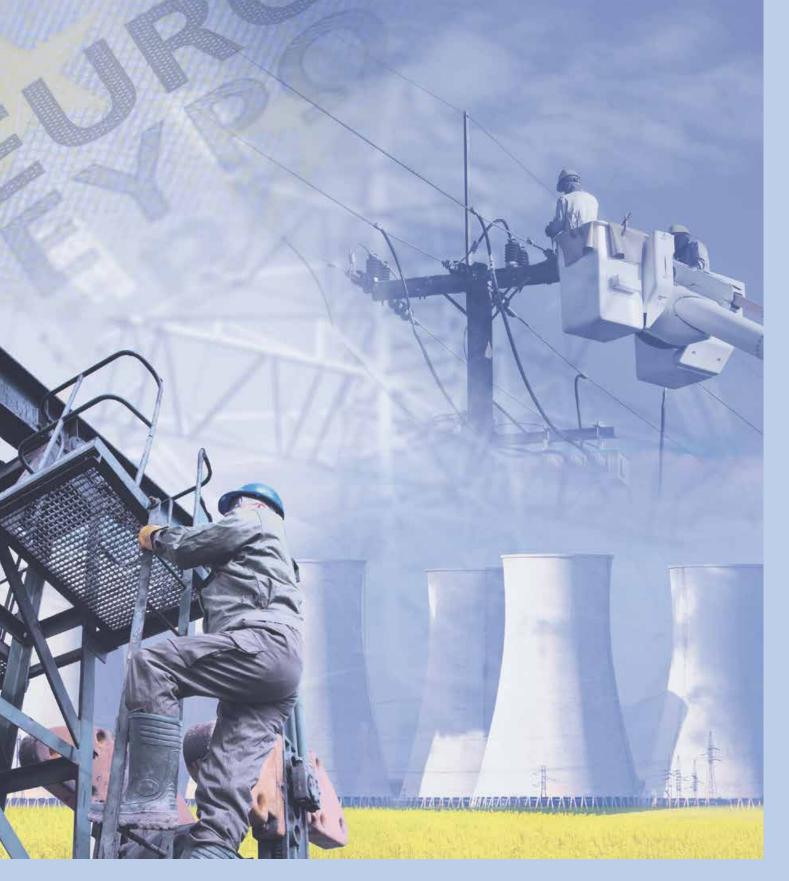
b. Non-Compliance with the Sulphur in Fuels Directive

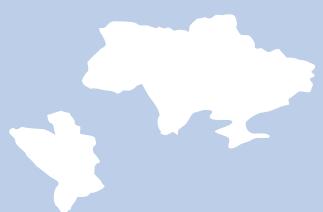
On 11 February 2013, the Secretariat sent Opening Letters to *inter alia*, Ukraine in Case ECS-5/13. The Secretariat comes to the preliminary conclusion that Ukraine has not yet transposed and implemented the requirements of Directive 1999/32/EC as required by Article 16 and Annex II of the Treaty. Directive 1999/32/EC aims to reduce emissions of SO₂ resulting from combustion of heavy fuel oils and gas oils. The Secretariat is currently preparing a Reasoned Opinion against Ukraine in this case.

c. Lack of State Aid Legislation

On 22 April 2014, the Secretariat sent an Opening Letter to Ukraine initiating infringement proceedings in Case ECS-8/14. The Secretariat takes the view that Ukraine failed to fulfil its obligations under the Energy Community Treaty by not adopting legislation prohibiting State aid and enforcing that prohibition as required by Article 1(2) of the Accession Protocol of Ukraine to the Energy Community. On 1 July 2014, a Law on State Aid to Business Entities was adopted but not yet signed by the President. In any event, the new Law will enter into force only three years following its publication. The Secretariat will monitor the implementation of the State aid law before closing the open infringement procedure.







12
INVESTMENT REPORT



12. Investment Report

a. The Investment "Story"

Attracting energy investments lies at the heart of the Energy Community Treaty, as much as the emphasis on energy markets development and integration, free movement of goods, competition and sustainability. Yet, private or public investments remained far below the levels hoped for when establishing the Energy Community. Besides incorporating EU legislation, the Treaty to date does not offer any specific instruments which could help promote investments. This Report provides an analysis of the energy infrastructure investment pattern over the last 20 years and the obstacles faced by the Contracting Parties in attracting investment. It outlines some of the key measures taken by the Energy Community in the investment area to try to overcome these obstacles. This includes the adoption of Projects of Energy Community Interest (PECI).

1. How Much Was Invested Between 1996 to 2014 in the Energy Sector?

The Secretariat documents the investments in the energy sector (including district heating and energy efficiency) from 1996 to 2014 based on data by *International Financial Institutions* as well as bilateral donors, in the six Western Balkan countries, Moldova and Ukraine.

Between 1996 and 2014, the energy investments amounted to *approx*. EUR 7,418 billion and USD 3,786 billion in the six Western Balkan countries, Moldova and Ukraine. Only 45% of the total EUR investments were for new projects, and only 18% of investments in USD. The rest were for rehabilitation projects. The summary per country is presented in the table below.

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Energy Sector Investments in the Energy Community

| | Total energy se | ctor investment | of which rehab | ilitation projects | of which new investments | | |
|------------------------|------------------------|---------------------------|---------------------|---------------------|--------------------------|---------------------|--|
| (In millions) | total nominated in USD | total nominated in EUR | nominated in USD | nominated in EUR | nominated in USD | nominated in EUR | |
| Albania | 432.86 | 747.65 | 268.06 | 532.30 | 164.80 | 215.35 | |
| Bosnia and Herzegovina | 831.97 | 1,109.49 | 831.97 | 363.90 | 0.00 | 745.59 | |
| Kosovo * | 32.50 | 154.37 | 32.50 | 114.47 | 0.00 | 39.90 | |
| FYR of Macedonia | 162.30 | 492.57 | 65.65 | 212.82 | 96.65 | 279.75 | |
| Moldova | 112.00 | 10.00 | 112.00 | 10.00 | 0.00 | 0.00 | |
| Montenegro | 22.80 | 324.50 | 22.80 | 74.00 | 0.00 | 250.50 | |
| Serbia | 83.75 | 1,172.71 | 53.00 | 658.66 | 30.75 | 514.05 | |
| Ukraine | 2,107.92 | 3,407.20 | 2,107.92 | 2,085.20 | 0.00 | 1,322.00 | |
| Western Balkan | 1,566.18 | 4,001.29 | 1,273.98 | 1,956.15 | 292.20 | 2,045.14 | |
| Total Energy Community | 3,786.10 | 7,418.49 | 3,493.90 | 4,051.35 | 292.20 | 3,367.14 | |

Having in mind that the costs for Projects of Energy Community Interest alone amount to *approx*. EUR 14 billion, the past investment record does not look very promising. This picture is even less attractive when one takes into account that economic growth and respectively the energy demand growth was significantly stronger in the years 2000 - 2009, than in the last years.

In October 2013, the Ministerial Council adopted the list of Projects of Energy Community Interest (PECIs).

In the European Union, a special fund, the *Connecting Europe Fund (CEF)*, was created to support similar types of priority infrastructure (Projects of Common Interest, PCIs). However,

in the Energy Community no such fund exists and there is limited specific funding available to support these projects in case there is a financial gap between the financing needs and the capital expenditure and revenues of the project promoters. In the current financial environment in the Contracting Parties, this constitutes a real disadvantage.

b. Investment Challenges

1. Macroeconomic Performance in 2014 and Prospects for 2015

As seen from the table on the next page, the Western Balkan region as a whole stagnated in 2014 with weighted average

growth likely to be not higher than 0.5%. Serbia experienced a sharp economic contraction while Bosnia and Herzegovina stagnated, following devastating floods in the spring of 2014 and the damages to power generation facilities in Serbia. These affected industry and the business sector at large and necessitated substantial electricity imports. Public investment,

traditionally a key growth component in the region, suffered.

The prospects for 2015 indicate recovery in most of the Western Balkans (except for Serbia), but remain negative for Moldova and Ukraine, deeply affected by the energy relations with the Russian Federation.

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GDP Growth in the Energy Community

| Contracting Party | GDP Growth Rate in 2012 | GDP Growth Rate in 2013 | GDP Growth Rate in 2014 | GDP Growth Rate in 2015 (forecast) |
|-------------------|-------------------------|-------------------------|-------------------------|------------------------------------|
| Albania | 1.3% | 0.4% | 2.1% | 3.0% |
| BiH | -1.1% | 1.8% | 0.8% | 2.3% |
| Kosovo* | 2.7% | 3.0% | 2.7% | 3.3% |
| FYR of Macedonia | -0.4% | 3.1% | 3.8% | 3.8% |
| Moldova | -0.7% | 8.9% | 4.6% | -2.0% |
| Montenegro | -2.5% | 3.5% | 1.1% | 4.7% |
| Serbia | -1.5% | 2.5% | -1.8% | -0.5% |
| Ukraine | 0.3% | 0.0% | -6.8% | -7.5% |
| | | | | |

Sources: IMF (WEO April 2015) for Albania, Bosnia and Herzegovina, Kosovo*, former Yugoslav Republic of Macedonia, Montenegro and Serbia, World Bank database for Likraine and Moldova

Public capital expenditure was reduced since the outset of the global crisis and is yet to recover. Further, country analysis shows that this spending item is often playing the role of a fiscal buffer in case of unexpected developments, with projects cancelled or delayed if and when necessary.

Compared to the 2007 - 2011 period, for which reliable data is available, all countries in the Western Balkans with the exception of Kosovo* and Montenegro are planning reduced or at best unchanged public capital expenditure ratios. The sharpest reduction is expected to take place in former Yugoslav Republic of Macedonia with capital expenditure dropping from 8.5% of GDP in 2007 - 2011 to 5% over 2015 - 2017 and likely below 5% over the entire *Instrument for Pre-accession* Assistance (IPA) II Horizon (2014 - 2020). Montenegro would be the only country to maintain a high public capital expenditure ratio (8.5% in 2007 - 2011 vs. 8.8% in 2015 - 2020). As a positive exception in the region, Kosovo*'s capital expenditure is projected to significantly increase, from 4% in 2007 - 2011 to 7.5% in 2015 - 2018 and possibly to 7.3% over the entire period before 2020. Capital expenditure was at 6.3% of GDP in Moldova and at approx. 2% in Ukraine in 2012, and is declining in both countries.

2. The Fiscal Space

Despite further capital expenditure cuts, fiscal deficits in the Western Balkans are expected to have increased by 0.4% of GDP to 4.2% on average in 2014, largely due to faster increases in expenditure (particularly current expenditures) than in revenues.

Increased fiscal deficits and stagnating GDP in the Western Bal-

kans have increased indebtedness. Public debt is estimated to have risen by an additional 3 percentage points of GDP to 52.5% of GDP on average, taking the estimated cumulative average public-debt-to-GDP ratio increase since 2009 to *approx*. 18%. Fiscal consolidation has been slow since recovery started in 2013, leading to worrying debt levels in Albania, Montenegro and Serbia at close to or above 60% of GDP. Debt is close to 40% of GDP in Bosnia and Herzegovina and former Yugoslav Republic of Macedonia and close to 20% in Kosovo*.

On the whole, the region has exhausted its fiscal space and there is limited scope to increase public spending in support of growth. In the face of well-known and considerable needs, fiscal consolidation and smart growth-enhancing spending are required everywhere.

In Moldova, the public debt to GDP ratio was 24.5% in 2012 and 23.8% in 2013, whilst in Ukraine it was 35.3% and 38.4% respectively, which still leaves some fiscal space for public or publicly supported investments.

3. Doing Business – the Investment Climate

Private investors, meeting twice a year with the Secretariat in the Investors' Advisory Panel, have expressed their concerns about functioning of national energy markets, mostly linked to perceived political interference, lack of predictability of decisions of the national regulatory authorities, low regulated energy prices and various corrupt practices.

With regard to the regional energy market, the same concerns were expressed: lack of an open, transparent and competitive market with transparent access to cross-border transmission capacity, lack of regional market operator/market couplings, and continuing preference for corrupt practices in electricity export/import deals dominated by a few preferred traders.

The "Doing Business Report 2014", prepared by the World Bank, indicates that out of 189 countries of operations of the World Bank Group, the Energy Community Contracting Parties are placed on ranks varying from the 25th (former Yugoslav Republic of Macedonia) to 112th (Ukraine), regarding the general ease of doing business. Another very interesting indicator is "protecting investors", for which most Contracting Parties are below the median, with the exception of Kosovo* and former Yugoslav Republic of Macedonia.

When it comes to "dealing with construction permits" the situation is much worse for the large majority of the Contracting Parties. Albania even ranks the lowest at 180. The situation as regards construction permits needed may vary from rank 9 in Montenegro to rank 26 in Moldova.

Having this in mind, the investment environment in the Energy Community must be considered in a broader framework of structural reforms.

Most investors in the Energy Community Contracting Parties have signalled that they are mostly concerned about two categories of risk; political risk and economic risk. Of these, the subcategories that are mostly worrying to investors are policy and regulatory, and market risks respectively.

4. Improving the Energy Investment Process

In order to mitigate the policy and regulatory country risk, Contracting Parties need first to increase predictability and transparency of their legal and regulatory framework. Some of the proposed measures include:

• Increase Transparency

All features needed to reduce the perceived risks are embedded in the *acquis* provisions. Therefore the first and utmost measure to improve the investment climate is to properly transpose the *acquis* under the Treaty and to implement it in its full spirit.

In order to increase the transparency of electricity markets, the Energy Community adopted the new Electricity Market Transparency Regulation (EU) 543/2013 on Submission and Publication of Data in Electricity Markets in June 2015. This is expected to be an efficient tool for the functioning and development of wholesale markets wih a single platform established and operated by *ENTSO-E*.

• Improving Permitting and Licensing Procedures

Apart from market transparency, permitting and licensing remain an area of major concern for energy investors. The table on the next page indentifies the main type of permits required for investments.





Permits Needed for Energy Infrastructure Development

| Albania | |
|--------------------------|---|
| | Development permit |
| | Infrastructure permit |
| Permits | Environmental permit |
| remits | Water permit |
| | Approval of the Council of Ministers (CoM Approval) |
| | Concession |
| Bosnia and Herzegovina | |
| | Energy permit |
| | Connection consent |
| Permits | Environmental permit |
| remits | Urban planning approval or location permit |
| | Concession for use of natural resources |
| | Water management deed |
| Kosovo* | |
| | Authorization for construction |
| | Construction permit |
| 5 | License |
| Permits | Environmental permit |
| | Water permit |
| | Fire permit |
| Former Yugoslav Republic | of Macedonia |
| | Authorization for construction |
| | Investigation of the availability of primary energy source |
| Permits | Concessions |
| | Formal approval for the installation of the measuring station for wind potential |
| | Formal approval for the installation of facilities that might impact the security of aircraft transport |
| Moldova | |
| D | Authorization for construction |
| Permits | Environmental impact assessment |
| Montenegro | |
| | Authorization for construction |
| D | Concession |
| Permits | Building permit |
| | Environmental impact assessment |
| Serbia | |
| | Energy permit |
| | Construction permit |
| | Energy license |
| D | Connection approval |
| Permits | Environmental impact assessment |
| | Water consent |
| | Water permit |
| | Integrated permit |
| Ukraine | |
| | Authorization for construction |
| Permits | Environmental impact assessment |
| | Connection approval |
| | |

A number of measures that need to be taken to improve the permitting and licensing procedures include:

• Streamlining the process and limiting the duration for the permitting procedure

Based on a *United States Agency for International Development (USAID)* Report for Bosnia and Herzegovina, it appears that despite the fact that all permits and other administrative documents in the permitting procedure for the construction of energy infrastructure projects are subject to deadlines that vary between 30 and 60 days and are defined by the relevant law on administrative procedure, the process may take as long as 6 years in reality. The situation is likely to be similar in most Contracting Parties.

• Improving transparency and manageability of the process

Another significant barrier in many countries is that overall information on the permitting procedure for the construction of energy infrastructure projects is not provided institutionally. Potential investors are unable to obtain information in one place regarding investment opportunities, the permitting procedure, competent institutions/bodies and deadlines.

Cooperation between the competent institutions within the same government levels responsible for the permitting procedure for construction of energy infrastructure projects is in most cases insufficient.

The quality of submitted documentation significantly affects the length of the procedure at all government levels. The main reason for delays is considered to be the lack of investors' knowledge of the required standards for the documentation and lack of technical expertise in the country for its preparation.

Inadequate capacity and lack of resources in the institutions involved in the permitting procedure significantly affects also the length of the procedure.

In order to improve the situation, measures to be implemented may include, among others:

- Removing all legal and practical obstacles to swift, non-discriminatory and investor-friendly permitting in consultation with the Secretariat;
- Defining a reference permitting process, *i.e.* the creation of a generic procedure outlining the major milestones and minimum contents of procedures;
- Creating one-stop shop procedures establishing a single authority responsible for a single permitting procedure for the construction and operation at least of PECI projects;
- Integrate spatial planning into the permitting procedure;
- Grant access to land/easement together with the permit to make sure that the project developer may start construction as soon as the permit is enforceable;
- Preparing a communication strategy focusing on the necessity and benefits of energy infrastructure and generation projects in line with the Energy Community's objectives.

Some of the above mentioned barriers will be removed with the implementation of Regulation (EU) 347/2013 on Guidelines for Trans-European Energy Infrastructure with certain adaptations for the Energy Community. The Regulation was proposed for adoption by the Ministerial Council at its meeting in October 2015.



c. Progress Registered by PECIs

The Secretariat, as mandated by the Ministerial Council in October 2013, developed a PECI monitoring system based on inputs from the Western Balkans Investment Framework (WBIF) and the Neighbourhood Investment Facility (NIF), and from

responses to the Secretariat's own questionnaire sent to all PECI project promoters in April and May 2015. Some of them did not respond.

A summary of these monitoring results are presented in the four following tables.

| | PE | CI Electricity G | enera | tior | ı Prog | gress N | lonitoring | | <u> </u> | Apr | # | | | |
|-----|----------------------|--|---------------------------------------|---------------|------------------|-----------------------------|---|------------------------------|--------------------------|-------------------|----------------|-------------|------------------------|--------------|
| No. | Contracting Party | Project | Estimated investment (mil. EUR) | Plant type | Capacity (MW) | Commission- ing year | Project promoter | Conceptual / Basic design | Pre-feasibility study | Feasibility study | E-I assessment | Main design | Investment decision | Construction |
| 1 | ALB | Hydro Power Plant Skavica | 550.00 | HPP | 350.00 | 2015 | National Agency of Natural Resources | Θ | Θ | Θ | Θ | Θ | Θ | Θ |
| 2 | ALB | Wind Park Dajc-Velipoje | 283.00 | WPP | 186.00 | 2015-2020 | Energia Rinnovabile Shkod- er SH.P.K | • | • | • | • | • | Θ | Θ |
| 3 | BiH | Combined Heat and Power Plant KTG Zenica | 300.00 | CHPP | 560.00 | 2017 | KTG Zenica d.o.o | • | • | • | • | • | • | Θ |
| 4 | BiH | Hydro Power Plant Dabar | 177.56 | HPP | 159.15 | 2018 | MH ERS Trebinje (Subsidiar- ies HPPs on theTrebišnjica, HPP Dabar ltd) | • | Θ | • | • | • | • | • |
| 5 | BiH + CRO | Hydro Power Plant Dubrovnik (Phase II) | 175.03 | HPP | 304.00 | Assumed 2019 | HEP Zagreb and MH ERS Trebinje (Subsidiary HPPs on the Trebišnjica Trebinje) | • | Θ | • | Θ | Θ | Θ | Θ |
| | BiH + SER | Hydro Power Plants Upper Drina (HPP Buk Bijela, HPP Foča, HPP Paunci, HPP Sutjeska) | 580.42 | HPP | 223.13 | Assumed 2020-2022 | MH ERS Trebinje (Subsidiary HPP on the Drina Višegrad) | • | • | • | • | Θ | Θ | Θ |
| 6 | BiH + SER | Hydro Power Plants Middle Drina (HPP Tegare, HPP Rogačica, HPP Dubravica) | 870.13 | HPP | 321.45 | Assumed 2020 | MH ERS Trebinje and Public Company EPS Belgrade | • | • | Θ | Θ | Θ | Θ | Θ |
| 7 | KOS | Kosova e Re Power Plant (KRPP) | 1,260.00 | TPP | 600.00 | 2020 | Government of Kosovo | • | • | • | • | Θ | • | Θ |
| 8 | MNE | Hydro Power Plants Lim River | 167.00 | HPP | 93.00 | 2017 | Reservoir Capital Corpo- ration | Θ | • | Θ | Θ | Θ | Θ | Θ |
| 9 | SER | Combined Heat and Power Combined Cycle Gas Turbine Plant in Pancevo, Serbia | 135.00 | CHPP | 140.00 | 2016 | NIS j.s.c. Novi Sad | • | • | • | • | Θ | • | Θ |
| 10 | SER | Thermal Power Plant Kolubara B | 1,300.00 | TPP | 750.00 | 2020 | EPS | • | • | Θ | • | • | Θ | Θ |
| 11 | SER | Thermal Power Plant Nikola Tesla B3 | 1,100.00 | TPP | 744.00 | 2020 | EPS | Θ | • | Θ | • | Θ | Θ | Θ |
| 12 | SER | Combined Heat and Power Plant Novi Sad | 480.00 | CHPP | 270.00 | 2016 | Energija Novi Sad AD | Θ | • | Θ | Θ | Θ | Θ | Θ |
| 13 | SER | Hydro Power Plants Ibarske (10 HPPs) | 346.66 | HPP | 119.00 | 2016-2021 | Ibarske hidroelektrane d.o.o. (IT) and EPS (RS) | • | • | • | • | Θ | Θ | Θ |
| 14 | SER | Hydro Power Plants Velika Morava (HPP Ljubicevo, HPP Trnovce, HPP Svilajnac, HPP Mijatovac, HPP Varvarin) | 352.00 | HPP | 148.00 | 2016-2021 | Moravske hidroelektrane d.o.o. | Θ | • | Θ | Θ | Θ | Θ | Θ |
| | | TOTAL: | 8,076.80 | | 4,967.73 | | | | | | | | | |
| ⊖ N | ot applicable | ⊖ Not reported ⊖ No progress | ToR preparent | ared (| Ongoing | Completed | Technical assistance from | m WBI | F or NIF | | | | | |

PECI Electricity Infrastructure Progress Monitoring

| No. | Contracting Party | Project | Estimated investment (mil. EUR) | Length (km) | Transmi. capacity (MW) | Commission- ing year | Project promoter | Conceptual / Basic design | Pre-feasibility study | Feasibility study | E-I assessment | Main design | Investment decision | Construction |
|-----|---|--|---------------------------------------|----------------|------------------------------|-------------------------|---|------------------------------|--------------------------|-------------------|----------------|-------------|------------------------|--------------|
| 1 👅 | ALB - MAC | 400 kV OHL SS Bitola (MAC) – SS Elbasan (ALB) | 75.20 | 151 | 1,330 MW | 2021 MAC 2018 ALB | OST (ALB) MEPSO (MAC) | • | Θ | • | • | • | • | Θ |
| 2 | CRO - BIH and CRO inter. line reinforcement | 400 kV OHL Banja Luka (BIH) – Lika (CRO) 400 kV OHL Brinje – Lika – Velebit – Konjsko including 400 kV subst. Brinje | 187.00 | 370 | 1,260 MW 1,320 MW | 2022 | HEP OPS (CRO) NOS BIH (BIH) | ⊖ | θ | • | • | Θ | θ | θ |
| 3 | ITA - ALB | 400 kV HVDC SS Vlora (ALB) - Bari West (ITA) | 150.00 | 130 | 1,000 MW | 2014 | National Agency of Natural Resources | Θ | Θ | Θ | Θ | Θ | Θ | Θ |
| 4 👸 | KOS - ALB | 400 kV OHL Tirana (ALB) - Pristina (KOS) | 84.90 | 246.9 | 1,330 MW | 2016 | KOSTT/OST | • | Θ | • | • | • | • | • |
| 5 👸 | MOL - ROM | OHL Balti (MOL) and Suceava (ROM) | 66.50 | 139 | 1,000 MW | 2019 | SE Moldelectrica | Θ | Θ | • | • | • | Θ | Θ |
| 6 6 | MNE - SER - BIH and MNE inter. line rein- forcement | 400 kV OHL SS Bajina Basta (SER) - SS Pljevlja (MNE) - SS Visegrad (BIH) 400 kV OHL Pljevlja - Lastva (MNE) | 183.30 | 358 | 2,000 MW 1,320 MW | 2022 2016 | JP Elektromreža Srbije (SER), NOS BiH and Elektroprenos (BIH), and CGES (MNE) | • | • | • | • | • | • | Θ |
| 7 | SER | 400 kV OHL SS Kragujevac - SS Kraljevo | 25.00 | 55 | 1,000 MW | 2019 | JP Elektromreža Srbije | Θ | • | • | • | • | • | Θ |
| 8 🖥 | SER | 400 kV OHL SS Bajina Basta - SS Kraljevo 400 kV OHL SS Obrenovac - SS Bajina Basta | 100.00 | 226 | 1,000 MW 2,000 MW | >2020 (1) 2025 (2) | JP Elektromreža Srbije | • | • | • | • | Θ | • | Θ |
| 9 | SER - ROM | 400 kV OHL SS Resita (ROM) - SS Pancevo (SER) | 50.00 | 133 | 2,000 MW 1,320 MW | 2015 ROM 2017 SER | JP Elektromreža Srbije Transelectrica Romania | • | • | • | • | • | • | • |
| | 1 | TOTAL: | 921.90 | 1,808.90 | | | | | | | | | | |

⊖ Not applicable ⊖ Not reported ⊖ No progress ● ToR prepared ● Ongoing ● Completed **6** Technical assistance from WBIF or NIF

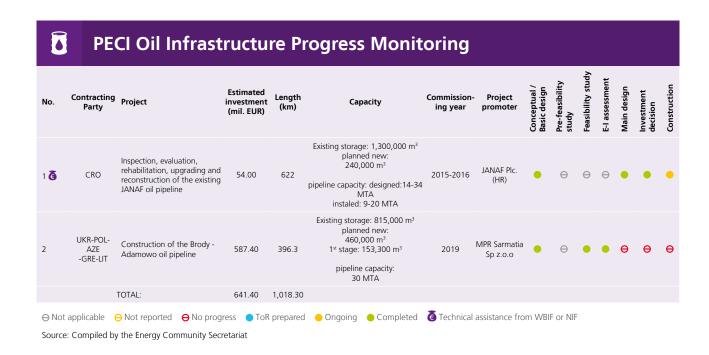


PECI Gas Infrastructure Progress Monitoring

| No. | Contracting Party | Project | Estimated investment (mil. EUR) | Length (km) | Capacity | Commission- ing year | Project promoter | Conceptual / Basic design | Pre-feasibility study | Feasibility study | E-I assessment | Main design | Investment decision | Construction |
|------|------------------------|--|---------------------------------------|----------------|---|--------------------------------|---|------------------------------|--------------------------|-------------------|----------------|-------------|------------------------|--------------|
| 1 🤞 | ALB - MNE CRO - BIH | Ionian Adriatic Pipeline (IAP) | 620.00 | 511 | up to 5 bcm/a | 2020 | Plinacro (HR) | • | • | • | • | • | Θ | Θ |
| 2 | GRE - ALB - IT | Trans Adriatic Pipeline (TAP) | 1,500.00 | 871 | Initial capacity 10 bcm/a; Expansion up to. 20 bcm/a | 2020 | Trans Adriatic Pipeline AG (20% BP, 20% Socar, 20% Statoil, 16% Fluxis, 10% E.ON, 5% Axpo) | • | • | • | • | Θ | • | Θ |
| 3 | ALB | EAGLE LNG Terminal | 700.00 | 112 | 8 bcm/a (capac.) + 10 bcm/a (pipeline) | 2018 | Trans-European Energy B.V., Sh.A (IT) The project sponsor and owner is "Burns" | Θ | • | • | • | θ | Θ | θ |
| 4 🤞 | BIH - CRO | Interconnection Pipeline BiH - CRO (Slobodnica-Bosanski Brod-Zenica) | 94.00 | 146 | up to 5 bcm/a | 2019 | BH-Gas d.o.o. Saraje- vo/Plinacro d.o.o. | Θ | θ | Θ | • | Θ | Θ | Θ |
| 5 | BIH - CRO | Interconnection Pipeline BIH - CRO (Zagvozd - Posušje - Novi Travnik with a main branch to Mostar) Interconnection Pipeline BIH - CRO (Ploce - Mostar - Sarajevo/Zagvozd - Posušje/Travnik) | 98.00 | 187 | 1.5 - 2.5 bcm/a | 2018 HR n/a BiH | BH-Gas d.o.o. Saraje- vo/Plinacro d.o.o. | • | • | θ | • | θ | θ | Θ |
| 6 | BIH - CRO | Interconnection Pipeline BIH - CRO (Lička Jesenica-Trzac-Bosanska Krupa) | 49.20 | 121.5 | 1.0 - 1.5 bcm/a | 2023 | BH-Gas d.o.o. Saraje- vo/Plinacro d.o.o. | • | • | θ | • | Θ | θ | θ |
| 7 🦲 | CRO - CRO | LNG Terminal in Croatia + Pipeline Zlobin-Bosiljevo-Sisak-Kozarac-Slo- bodnica | 939.60 | 426 | 6 bcm/a (capac.) + 10 bcm/a (pipeline) | 2018 terminal 2019 pipeline | LNG Croatia Ltd. Plinacro (HR) | • | • | • | • | • | Θ | Θ |
| 8 | CRO - SER | Interconnection Pipeline CRO - SER (Slobodnica-Sotin-Bačko Novo Selo) | 175.00 | 100 | 6 - 7 bcm/a | 2023 | Plinacro (HR) | • | Θ | Θ | • | Θ | • | Θ |
| 9 🥳 | SER - BUG | Interconnection Pipeline SER (Nis-Dimitrovgrad) to BUG | 114.90 | 169.6 | 1.8 bcm/a | n/a 2016/2017 | JP "SRBIJAGAS" Novi Sad BUG-Ministry of Econ- omy and Energy | ⊖ | Θ | • | • | Θ | • | Θ |
| 10 🧑 | UKR | Modernization of Urengoy-Pom- ary-Uzhgorod Pipeline | 300.00 | 118.88 | 29.2 bcm/a | 2018 | PJSC UKRTRANSGAZ | • | • | • | • | • | • | Θ |
| | | TOTAL: | 4,590.70 | 2,762.98 | | | | | | | | | | |

⊖ Not applicable ⊖ Not reported ⊖ No progress ● ToR prepared ● Ongoing ● Completed 6 Technical assistance from WBIF or NIF





As a general observation, based on the project promoters' own reports, very few projects have reached the status of investment decision, let alone start of construction.

Nevertheless, there was some progress reported in 2014 - 2015 as compared to 2013 - 2014 reflected below:

- HPP Dabar in Bosnia and Herzegovina: This project made progress in 2014 - 2015 as follows: (a) Construction permit for headrace tunnel, intake structure and access tunnels was issued on 31 July 2014; (b) Construction permit for the HPP Dabar preconstruction works was issued on 28 August 2014; (c) Completion of all preconstruction (preparatory) works by end of June 2015; expected to be commissioned in 2018.
- Gas-fired Combined Heat and Power Plant KTG Zenica, 300 MW: This investment made significant progress in 2014 2015, namely: (a) Signed Long Term Gas Supply Agreement with the company MOL Energy Trade International AG in July 2014; (b) Selected the contractor, SEPCO III China, that established its company in Zenica; (c) Main design in final phase by the constructor; the principle outstanding obstacle is the power purchase agreement with the public company Elektroprivreda dd Sarajevo.
- New Kosovo TPP: Some progress registered: ESIA up for public consultation in 3rd quarter 2015; June 2015, Government negotiates with the only company that offered a bid, US-based Contour Global and, subject to negotiations, the Government will award Contour Global the status of preferred bidder. It is expected that the first phase of negotiations will be finalized by the end of July 2015. The planned construction of the power plant is expected to begin by the end of 2016 and the plant to be operational in 2020.

- CHPP Pancevo (SER): The investment decision was taken in the reporting period; the feasibility study was prepared in December 2014 and the basic design in May 2015; the environmental impact assessment is under preparation, and the permit for construction from the Serbian authorities is expected by the end of 2015.
- 400 kV OHL Tirana (ALB) Pristina (KOS): Investment decision taken and construction is progressing on both sides of the border (48% in Kosovo* and 45% in Albania); expected commissioning year is 1st quarter of 2016.
- 400 kV OHL SS Kragujevac SS Kraljevo (SER): The feasibility study and environmental impact assessment report are finalised and submitted to relevant national authority, and waiting for approval. The main design is in progress. This project is proposed for co-financing with EU investment grant under the Western Balkans 6 Initiative "Connecting Systems, Connecting Markets".
- 400 kV OHL SS Bajina Basta (SER) SS Pljevlja (MNE) SS Visegrad (BIH) and 400 kV OHL Pljevlja - Lastva (MNE): The main design started in 2015 with the technical assistance from WBIF and the project is proposed for co-financing with EU investment grant under the Western Balkans 6 Initiative "Connecting Systems, Connecting Markets".
- 400 kV OHL SS Resita (ROM) SS Pancevo (SER): All project documentation is prepared; the investment decision taken, construction started and advancing in Romania; land acquision is in progress in Serbia. This project is proposed for co-financing on the Serbian side with EU investment grant under the Western Balkans 6 Initiative "Connecting Systems, Connecting Markets".

- Trans Adriatic Pipeline (TAP): Full environmental and social impact assessment completed in Greece and Albania in 2015; Single authorisation to construct in Italy was obtained in May 2015. Investment decision taken, no construction started yet.
- Krk LNG Terminal (CRO) and Pipeline Zlobin-Bosiljevo-Si-sak-Kozarac-Slobodnica: The LNG terminal got "strategic" status in Croatia in 2015; this is also nominated as a PCI and in 2014 has received additional EUR 4.9 million funding to prepare additional project documentation; the construction is expected to start by mid-2016 and finish in three years; the connecting pipelines associated with the LNG terminal have also progressed in preparing the feasibility studies and environmental impact assessment reports and the investment decision is expected to be taken in 2016.
- Interconnection Pipeline Nis Dimitrovgrad (SER) Dupnit-sa (BUG): Investment decision taken in Bulgaria (use of EU post-accession funds), but not yet in Serbia; the project on Serbian side is proposed for co-financing with EU investment grant under the Western Balkans 6 Initiative "Connecting Systems, Connecting Markets". This is also nominated as an EU Project of Common Interest.
- Reconstruction, capital repairs and technical re-equipping of the main gas pipeline Urengoy-Pomary-Uzhgorod (UKR):
 This project has made significant progress in the period 2014 2015; The Cabinet of Ministers of Ukraine took the investment decision October 2014; Loan Agreement between Ukraine and EBRD, Finance Agreement between Ukraine and EIB and Project Agreements between EIB, EBRD and Ukrtransgaz were signed in December 2014. Construction works are scheduled to begin in the 2nd quarter of 2016, and the foreseen date of completion is the 4th quarter of 2018.
- Inspection, evaluation, rehabilitation, upgrading and reconstruction of the existing JANAF oil pipeline (CRO): the first phase represented by the undersea pipeline from island Krk to mainland started construction in 2015 and is expected to finish in April 2016; the investment decision for the second phase represented by reconstruction or rehabilitation of connecting oil pipelines to Hungary, Bosnia and Herzegovina and Serbia is expected in 2016.

Other projects have made less significant progress and therefore they are not mentioned in the present Report.

d. Priority Energy Infrastructure in the Western Balkans

One year after the Berlin Western Balkans Summit, the subsequent Vienna Summit on 27 August 2015 was dedicated to connectivity in the energy and transport sectors of the Western Balkans. At the Summit, the Western Balkan countries agreed on four energy investment projects to be proposed for inclusion in the *IPA 2015 Multi-Country Programme*:

- Albania: Albania former Yugoslav Republic of Macedonia Power Interconnection (I): Grid Section in Albania
- former Yugoslav Republic of Macedonia: Albania –former Yugoslav Republic of Macedonia Power Interconnection (II): Grid Section in former Yugoslav Republic of Macedonia
- Montenegro: Trans-Balkan Electricity Corridor (I): Grid Section in Montenegro
- Serbia: Trans-Balkan Electricity Corridor (II): Grid Section in Serbia.

The projects were shortlisted by the Energy Community Secretariat and the European Commission from the Projects of Energy Community Interest (PECIs). The IPA co-financing will be blended with the project promoters' own funds and loans from the International Financial Institutions in order to be implemented with the highest priority. This will be the first time in WBIF history that the IPA Multi-Country Programme will be able to co-finance investments in energy infrastructure with grants of up to 24% of the total investment costs.

In addition, the Western Balkan countries endorsed "a list of soft measures in energy" that cover the pre-requisites to create liquid and harmonised energy markets in the Western Balkans. The list includes measures to address issues such as market opening and phasing-out of price regulation, unbundling, regulator independence, competition, state aid and permitting regimes.

e. Concluding Remarks

Energy infrastructure investments have been significantly slowed down by the double dip recession in the Western Balkans and the gas crisis in Ukraine.

Many of the Projects of Energy Community Interest appear to be on track with the preparation of investment documentation in the form of feasibility and environmental impact assessment studies, detailed design, *etc.*, but very few have reached the status of investment decision.

The new *IPA* methodology adopted in 2015, for using pre-accession funds to co-finance up to 20% of the energy infrastructure investments is expected to relieve the pressure on scarce public budget resources and advance decisions of pursuit of the planned investments.

In addition to this, the adoption and implementation of Regulation (EU) 347/2013 on Guidelines for Trans-European Energy Infrastructure with certain adaptations in the Energy Community will remove some of the permitting and regulatory barriers, and thus stimulate the investments in energy infrastructure.

In order to facilitate PECI implementation, the Secretariat is determined and committed to help the Contracting Parties in removing the legal and regulatory barriers towards greater market integration and setting energy price levels that give investors the right signals. The Secretariat will also continue working with the European Commission to make available additional financial instruments through European and international funds that would support the PECIs.



Glossary

The report makes a reference to the following institutions, treaties, support programmes and energy policy related concepts and measurement units.

1. Abbrevations

| ACER | Agency for the Cooperation of Energy Regulators |
|---------------------|--|
| CEER | Council of European Energy Regulators |
| CEN | European Committee for Standardization |
| CHP | combined heat and power |
| CNG | compressed natural gas (trucks) |
| CPI | current policy initiatives |
| CPI+PPI | planned policy initiatives |
| DSO | distribution system operator |
| ECRB | Energy Community Regulatory Board |
| EBRD | European Bank for Reconstruction and Development |
| EC | European Community |
| EEAPs | Energy Efficiency Action Plans |
| EnC | Energy Community |
| ENTSO-E | European Network of Transmission System Operators for Electricity |
| ERRA | Energy Regulators Regional Association |
| ESCO | Energy Service Companies |
| EU | European Union |
| EUROSTAT | Statistical Office of the European Union |
| GDP | gross domestic product |
| GFEC | gross final energy consumption |
| GIZ | Deutsche Gesellschaft fur Internationale Zusammenarbeit |
| Green-X | modelling tool that develops nationally specific dynamic cost-resource curves for all key RES technologies |
| Green-X (CPI + PPI) | scenarios reflecting current policy initiatives and planned policy initiatives using Green-X model |
| HFO | heavy fuel oil |
| HPP | hydro power plant |
| HVDC | high-voltage direct current |
| IAP | Ionian Adriatic Pipeline |
| IEA | International Energy Agency |
| IFI | International Financial Institution |
| IFI CO | IFI Coordination Office, EU + IFIs, EU funded project |
| IMF | International Monetary Fund |
| IPA | EU's Instrument for Pre-Accession Assistance for countries engaged in the accession process |
| IPPC | Integrated Pollution Prevention and Control |
| ITC | Inter-TSO Compensation |
| JODI | Joint Organisations Data Initiative (APEC, Eurostat, IEA, OLADE, OPEC, UNSD) |
| KfW | Kreditanstalt fur Wiederaufbau |
| LNG | liquefied natural gas |
| n/a | not available |
| MedReg | Mediterranean Energy Regulators |
| NGO | non-governmental organization |
| NIF | Neighbourhood Investment Facility |
| NREAP | National Renewable Energy Action Plan |
| OHL | overhead electric line |

| PCI | Project of Common Interest (EU) |
|---------|---|
| PECI | Project of Energy Community Interest (EnC) |
| PHLG | Energy Community Permanent High Level Group |
| PPA | power purchase agreement |
| PV | photovoltaic |
| RCC | Regional Cooperation Council |
| REEP | Regional Energy Efficiency Programme (managed by EBRD) |
| RES | Renewable Energy Sources |
| SEE CAO | Coordination Auction Office in South East Europe |
| SEEPEX | power market exchange in Serbia |
| SS | substation |
| USAID | United States Agency for International Development |
| UNECE | United Nations Economic Commission for Europe |
| UNDP | United Nations Development Programme |
| UNIDO | United Nations Industrial Development Organisation |
| UNSD | United Nations Statistics Division |
| UPS | Unified Power System |
| TAIEX | Technical Assistance and Information Exchange instrument of the European Commission |
| TAP | Trans Adriatic Pipeline |
| TFEU | Treaty on the Functioning of the European Union |
| TPP | thermal power plant |
| TSO | transmission system operator |
| TYNDP | Ten Year Network Development Plans |
| VAT | value added taxes |
| WBIF | Western Balkans Investment Framework |

2. Definitions on the energy indicators, electricity and gas fact and figure tables

Definitions Energy

| Primary production of energy | Indigenous production of fuel and energy captured directly from natural sources in a usable form. |
|--|---|
| Fuel mix in primary production | Primary production of fuel and energy extracted or produced, including quantities captured directly from natural sources and quantities of recovered, received and recycled products used as primary energy. |
| Gross inland consumption | Calculated amount equal to the sum of primary production including received, recycled and recovered products, international marine bunkers, difference between import and export and difference between opening and closing stocks. Observed gross inland consumption corresponds to the addition of final consumption, distribution losses, transformation losses and statistical differences. |
| Shares of fuel in gross inland consumption | The gross inland consumption broken down per type of energy product, consisting of solid fossil fuels, oil and petroleum products, natural gas, electricity, derived heat, nuclear energy and renewable energies. |
| Final consumption of energy | Total energy consumed in the industry, transport, household and other sectors for all energy uses. It excludes deliveries for transformation and/or own use of the energy producing industries and network losses. |
| Final consumption of energy per capita | Total final energy consumed for all energy uses measured in kilograms of oil equivalent divided by the number of inhabitants in the respective year. |

| Energy dependency | The extent to which an economy relies upon imports in order to meet its energy needs, calculated as net imports divided by the sum of gross inland energy consumption plus bunkers. |
|---------------------------------|--|
| Energy intensity of the economy | The ratio between the gross inland consumption of energy measured in kilogram of oil equivalent (kgoe) and the gross domestic product (GDP) in 1000 EUR at constant prices with reference year 2005. |

Definitions Electricity

| Electricity production [GWh] | Annual domestic electricity production of all generation sets including pumped storage, measured at the outlet of the power plant to the transmission or distribution networks, excluding own consumption of electricity absorbed by the generating auxiliaries and the losses in the generator transformers of power plants. | | |
|--|---|--|--|
| Net imports [GWh] | Amount of electricity supplied from abroad to cover the needs of domestic consumption including energy used to cover network losses (transmission and distribution) – as applicable. (If not available, report the amount of electricity that have crossed the national borders, regardless the customs clearance take place or not). | | |
| Net exports [GWh] | Amount of electricity produced in the country supplied to customers across the national border (If not available, report the amount of electricity that have crossed the national borders, regardless the customs clearance take place or not). | | |
| Total electricity supplied [GWh] | Total amount of electricity supplied by all power stations to the network, reduced for export and increased for imports from abroad. | | |
| Gross electricity consumption [GWh] | Total amounts of electricity consumed by all customers connected to transmission or distribution network, including network losses and electricity consumed by power stations, if supplied from the network. | | |
| Losses in transmission [GWh] | The difference between the amount of electricity entering the transmission network and the aggregated amount of electricity taken from the transmission network, registered at all customers' meter points. | | |
| Losses in transmission [%] | Percentage of total losses in the transmission system (relative to the total electricity injected in the transmission network). | | |
| Losses in distribution [GWh] | The difference between the amount of electricity entering the distribution system and the aggregated consumption registered at customers' meter points. | | |
| Losses in distribution [%] | Percentage of total losses in the distribution system (relative to the total electricity injected in the distribution system). | | |
| Consumption of energy sector [GWh] | Amount of electricity taken from the power network and consumed by the energy industry to support the power plant operation. | | |
| Final consumption of electricity [GWh] | Total consumption of end-users in industry, transport, commercial and public services, agricuture and residential sector. | | |
| Consumption structure [GWh] | Industrial, transport, services and other non-residential sectors Electricity consumed by industry, commercial customers (including small enterprises), governmental institutions and transport sector (public transportation services, transport utilities, private vehicles) including public lighting, excluding network losses. | | |
| (o.m) | Households (residential Electricity consumed by the residential customers (households). customers) | | |

| Net maximum electrical capacity of power plants [MW] | ation of 15 hou | kimum capacities of all stations taken individually throughout a period of oper- irs of continuous running, at the power plant outlet to the network, assuming a solely active power. |
|--|--|--|
| | Coal-fired | Sum of net maximum capacities of all stations powered on solid fossil fuels (coal, lignite, coke, patent). |
| | out of which multi fired: | Sum of net maximum capacities of multi-fired stations using combined solid and liquid fuel or solid fuel and gas. (Multi-fired are units which can burn more than one type of fuel on a continuous basis). |
| | Gas-fired | Sum of net maximum capacities of all stations using natural gas as a fuel. |
| | out of which multi-fired | Sum of net maximum capacities of multi-fired stations using natural gas and solids or liquids. |
| | Oil-fired | Sum of net maximum capacities of all stations using oil or oil product as a fuel, excluding combined oil and gas. |
| Net maximum electrical | Nuclear | Sum of net maximum capacities of all stations using nuclear energy. |
| capacity of power plants [MW] | Hydro, total | Sum of net maximum capacities of all stations using hydro power sources including storage, pumped storage and run-of-river plants of all types and sizes. |
| | Small hydro | Sum of maximum capacities of all small hydro power plants (10 MW or less, connected to a distribution network). |
| | Pumped storage | Sum of net maximum capacities of all "pumped storage" hydro power plants. |
| | Other renew- ables | All existing RES generation capacity excluding hydro (wind, PV, solar, geothermal, biomass-fired, biogas-fired, other). |
| | Wind | Sum of all maximum capacities of all wind farms. |
| | Solar | Sum of all maximum capacities of all solar farms. |
| | Biomass | Sum of all maximum capacities of all biomass farms. |
| | 380 kV or more [km] | Total length of existing power lines on 380 kV or more. |
| | 220 kV [km] | Total length of existing power lines on 220 kV or more – but less than 380 kV (in the transmission or distribution grid). |
| | 110 kV [km] | Total length of existing power lines on 110 kV or more – but less than 220 kV (in the transmission or distribution grid). |
| Horizontal transmission | HVDC [km] | Total length of High Voltage Direct Current lines. |
| network [km] | Substation ca- pacity [MVA] | Sum of the nominal capacities of all substations in the transmission network (working on 380kV, 220kV and 110kV) and HVDC convertors. |
| | Number of in- terconnectors | The number of all interconnection points between the national transmission system and neighboring systems. |
| | Interconnect- ing capacities [MVA] | Sum of the nominal capacities of all interconnectors. |
| • | Total | Total number of final customers of electricity. |
| | Non-house- holds | Number of all non-household customer <i>i.e.</i> natural or legal persons purchasing electricity which is not intended for their own households. |
| Electricity customers | Eligible customers under national legislation | Number of customers eligible to chose supplier, according to the legislation in force, regardless of how many have exercised eligibility. |
| | Active eligible customers | Number of customers who have switched their supplier and are being supplied under market conditions. |

| Internal market | Electricity supplied to active eligible customers [MWh] | Quantity of electricity supplied to active eligible customers. |
|-----------------|---|---|
| | Share of final consumption [%] | Electricity supplied to active eligible customers as a part of final consumption. |

Gas Definitions

| Natural gas production [Bcm] | Amount of indigenous annual production of natural gas (all dry marketable production within national boundaries, including offshore production, measured after purification and extraction of natural gas liquids and sulphur, excluding extraction losses and quantities re-injected, vented or flared.) | | |
|--|---|--|--|
| Imports flows [Bcm] | Amount of natural gas produced outside the national territory that have crossed the political boundaries of the territory for ultimate consumption, whether customs clearance has taken place or not. | | |
| Exports flows [Bcm] | Amount of natural gas produced within the political boundaries of the territory that crossed the boundaries for ultimate consumption outside the national territory, whether customs clearance has taken place or not. | | |
| Stock changes [Bcm] | The difference between the opening stock level and closing stock level for stocks held on national territory. A stock build is shown as a negative number and a stock draw is shown as a positive number. | | |
| Total supply [Bcm] | Amount of natural gas available for consumption calculated as Indigenous production + Imports – Exports + Stock changes. | | |
| Gross consumption of natural gas [Bcm] | Calculated amount of consumed natural gas by all customers, including in energy sector, transformation inputs and conversions, as well as to cover for losses in network). | | |
| Consumption in energy sector [Bcm] | Amounts of natural gas used for own consumption of gas sector for operation and for network losses, and for the transformation to derived energy products (heat and electricity). | | |
| Available for final consumption of natural gas [Bcm] | The quantity of recorded consumption in surveys of end-use sectors (including energy and non-energy use and excluding transformation inputs and consumption of energy sector). | | |
| Interconnectors'capacity [Bcm] | Total | Total annual capacity of all interconnectors. | |
| out of which bidirectional | out of which bidi- rectional | Capacity of bidirectional flow | |
| Storage working capacity [Bcm] | Total working capacity of underground storages (without cushion gas). | | |
| Length of transmission network [km] | Total length of transport network(s). | | |
| Length of distribution net- work [km] | Total length of distribution networks. | | |
| | Total | Total number of final customers connected to transmission and distribution networks. | |
| Natural gas customers | out of which: Non-households | Number of all customers except households, <i>i.e.</i> customers eligible to choose supplier according to the <i>acquis</i> . | |
| | Eligible customers under national legislation | Number of customers eligible to chose supplier, according to the legislation in force, regardless of how many have exercised eligibility | |
| | Active eligible cus- tomers | Number of customers who have switched their supplier and are being supplied under market conditions. | |
| | Households | Number of households customers. | |
| | | | |

| Internal market | Gas supplied to active eligible cus- tomers [Bcm³] | Quantity of natural gas supplied to eligible customers from competitive market under market conditions. | |
|--|---|--|--|
| | Share of total con- sumption [%] | Natural gas supplied from competitive market to eligible customers as a part of total consumption. | |
| Final consumption of natural gas [Bcm] | Total annual consumption of all final customers of natural gas. | | |
| Consumption structure [Bcm] | Energy transforma- tion | Amount of natural gas used for production of electricity. | |
| | | Amount of natural gas used for production of heat | |
| | Industry and com- mercial customers | Amount of natural gas consumed by industry, commercial customers (including small enterprises), governmental institutions and transport sector (public transportation services, transport utilities, private vehicles) excluding network losses. | |
| | Households | Natural gas consumed by the residential customers (households). | |

Energy Efficiency Definitions

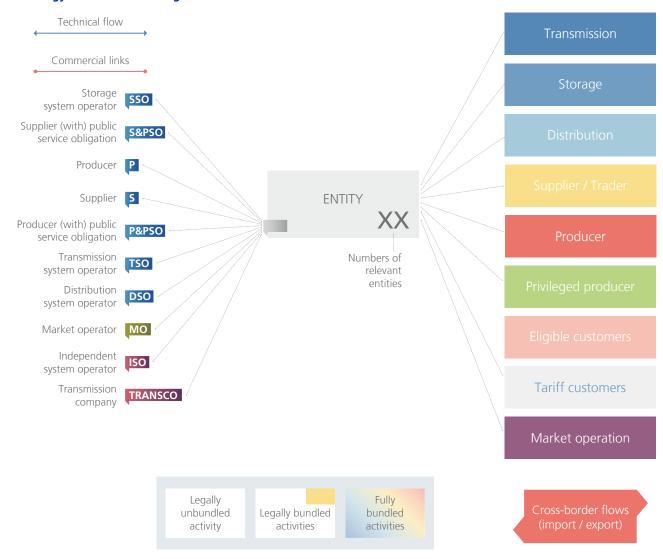
| Period covered by EEAP | year - year | Period set for implementation of the Energy Efficiency Action Plan and achievement of the overall energy savings target, as defined by Di- rective 2006/32/EC on Energy End-Use Efficiency and Energy Services. |
|---|--------------------|---|
| Overall energy savings target - Directive 2006/32/EC | ktoe / % / year | National energy savings target calculated in line with Annex I of Directive 2006/32/EC on Energy End-Use Efficiency and Energy Services. |
| EEAP status | Status of adoption | on of the Energy Efficiency Action Plan (in development/drafted/adopted). |
| Achieved energy savings | ktoe / % / year | Achieved intermediate national energy savings target for the first three-year implementation period. |
| Total primary energy supply (TPES) | ktoe | Amount of total energy necessary to satisfy inland consumption, made up of indigenous production, plus imports, minus exports, minus international marine bunkers and stock changes. |
| Energy intensity (TPES/GDP) | toe / 1,000 USD | Energy efficiency indicator representing ratio of the total primary energy supply divided by the gross domestic product of the country. |
| TPES/Population | toe/capita | Energy efficiency indicator representing ratio of the primary energy supply per head of population. |
| Total final energy consumption (TFEC) | ktoe | Sum of consumption in the end-use sectors: residential, services, industry (including manufacturing and mining), transport, non-energy consumption, and others (including agriculture). |
| | Residential | Residential sector share of total final energy consumption (in %). |
| | Services | Services sector share of total final energy consumption (in %). |
| Share of TFEC by sector | Industry | Industry sector share of total final energy consumption (in %). |
| | Transport | Transport sector share of total final energy consumption (in %. |
| | Non-energy use | Non-energy use sector share of total final energy consumption (in %). |

3. Measurement units

| kilovolt | kV |
|-----------------|-----|
| kilovolt-ampere | kVA |
| kilowatt | kW |
| megawatt | MW |
| Megavolt-amper | MVA |
| gigawatt | GW |
| terawatt | TW |
| kilowatt hour | kWh |
| megawatt hour | MWh |
| gigawatt hour | GWh |
| terawatt hour | TWh |

| joule | J |
|----------------------------|------|
| terajoule | TJ |
| tonne (metric ton) | t |
| kilotonne | kt |
| meter | m |
| cubic meter | cm |
| million cubic meters | mcm |
| billion cubic meters | Bcm |
| kilogram of oil equivalent | kgoe |
| tonne of oil equivalent | toe |

4. Energy Market Scheme Legends



Vertically integrated undertaking

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