Energy Community

ANNUAL IMPLEMENTATION REPORT

ENERGY COMMUNITY SECRETARIAT

1 SEPTEMBER 2013

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2012/2013

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The cover page image of the IR 2013 was provided by courtesy of Serbia, the Energy Community Presidency in 2013. The photograph shows a 110 kV switchgear connecting the run-of-river hydro power plant Djerdap II with the Serbian transmission grid. HPP Djerdap II was built at the river shore of the Danube in 1985. The distance from its junction to the Black Sea amounts to 863 km. Like its upstream counterpart, Djerdap I, the plant was jointly constructed with Romania.

The Secretariat expresses its gratitude to *Elektroprivreda Srbije (EPS)*, *Srbijagas* and *Banatski Dvor*, for the courtesy of providing photos for the IR 2013 publication.

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and several Serbian authorities

1. PREFACE

With this Implementation Report, the Secretariat discharges its monitoring duties under Article 67 of the Treaty. Its focus is on the state of implementation of the *acquis communautaire* under the Energy Community Treaty. The report takes stock of the progress achieved by the nine Contracting Parties in the time period from mid-2012 to mid-2013.

During this period, the Energy Community continued to evolve both in terms of geography and substance. While Croatia terminated its (direct) membership in the Energy Community successfully to join the European Union in July 2013, Georgia applied for full membership in January of that year. On substance, the adoption of the Renewables Directive 2009/28/EC, the Emergency Oil Stocks Directive 200/119/EC and two pieces of EU legislation on statistics significantly broadened the scope of work for both the Contracting Parties and the institutions. At the same time, the implementation deadline for some of the existing *acquis* expired during the reporting period. For other Directives and Regulations, most notably the Third Energy Package and the Large Combustion Plants Directive, the deadlines are approaching. Given the profound impact their implementation will have on the national energy sectors, it is easy to predict that the preparatory work will become more intensive for everybody involved during the next reporting periods. Upcoming challenges such as a coordinated approach to infrastructure development and compliance with the European Union's network codes can be added to the to-do list. .There will be no time for complacency in the upcoming years.

This report has been prepared by all units of the Secretariat, coordinated by its deputy director. Nina Grall, Milka Mumovic, Heli Lesjak and Daniel Stern deserve special thanks for their contribution to editing and compiling the individual texts. The Secretariat will be at your disposal for all comments and questions related to the information contained in this report and the assessments made.

Janez Kopač
Director

2. INTRODUCTION

a. The Energy Community

The Energy Community extends the 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 covers network energy, which includes electricity, gas and oil.

The Treaty establishing the Energy Community was signed in October 2005 in Athens and entered into force on 1 July 2006. As of 1 July 2013, the Parties to the Treaty are the European Union, and eight Contracting Parties, namely Albania, Bosnia and Herzegovina, Kosovo*[1], the former Yugoslav Republic of Macedonia, Moldova, Montenegro, Serbia and Ukraine. Despite Croatia's accession to the European Union on 1 July 2013, the country is still covered by the present report.

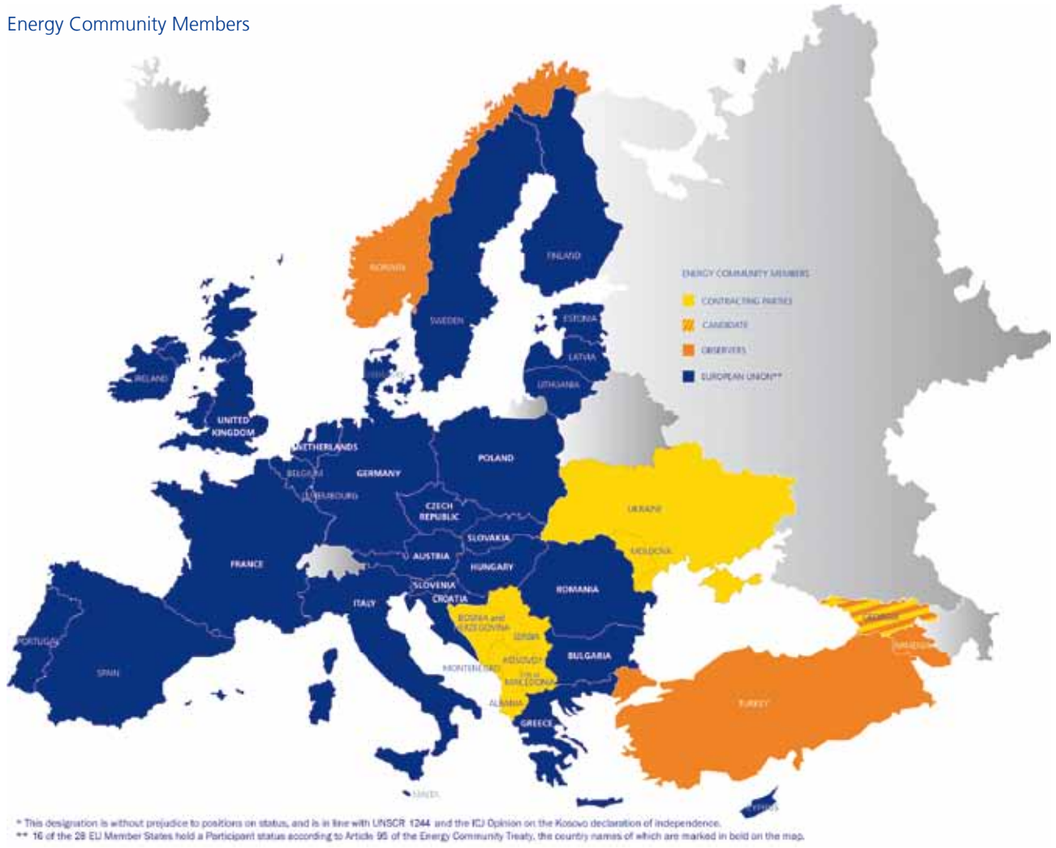
Pursuant to the Article 95, the European Union Member States have the possibility to become a Participant to the Treaty. Following Croatia's accession to the EU, currently 16 Member States have that status, namely Austria, Bulgaria, Croatia, Czech Republic, Cyprus, France, Germany, Greece, Hungary, Italy, the Netherlands, Poland, Romania, Slovakia, Slovenia, and the United Kingdom.

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

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.

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

Energy Community Members



Source: Energy Community Secretariat

The means to achieve the objectives underlying the Energy Community Treaty is integration by law being based on EU rules and principles. The Contracting Parties have committed themselves to the implementation of selected parts of the *acquis communautaire* on electricity, gas, oil, renewable energy, energy efficiency, competition, environment, statistics and security of supply.

Additionally, a unique institutional setup supports the further implementation and development of the *acquis*. The institutions comprise the Ministerial Council as the supreme decision-making body, the Permanent High Level Group preparing its work, the Regulatory Board, Fora for electricity, gas, oil and social issues, and the Secretariat.

Energy Community Institutional Setting

Source: Energy Community Secretariat

b. The Secretariat

The Secretariat of the Energy Community is the only permanent and independent institution under the Treaty. Its roles comprise providing assistance to the Parties and institutions of the Treaty, enforcing the implementation of the Treaty's *acquis* and monitoring the state of implementation.

In accordance with Article 67(b) of the Treaty, the Secretariat shall review the proper implementation by the Contracting Parties of their obligations under the Treaty and submit annual progress reports to the Ministerial Council of the Energy Community.

3. Implementation of the Treaty

Progress made and open issues

3. IMPLEMENTATION OF THE TREATY – PROGRESS MADE AND OPEN ISSUES

1. Over the past years, the Energy Community has developed into a dynamic organization. On many occasions it showed its determination to keep up with the pace set by the European Union in reforming and integrating its internal energy markets. Most of EU landmark legislation of the past years, such as the so-called Third Energy Package or the Renewables and Emergency Oil Stocks Directives were incorporated promptly by the Ministerial Council. The incorporation of others, such as the new Energy Efficiency Directive or the Energy Infrastructure Regulation, is currently being prepared. On a secondary law level, the Network Codes and Guidelines, still under development within the European Union, need to be taken over by the Energy Community promptly in accordance with the commitments made by its institutions and the need to preserve harmonized grid operation throughout wider Europe. The constant evolution of the body of Energy Community law in line with the European *acquis* is important for maintaining the legislative homogeneity without which the single pan-European energy market pursued by the Treaty establishing the Energy Community would become impossible. Full implementation by the Contracting Parties, however, is vital. Without such implementation, the commitments made amount to little more than lip service.

As regards reforming the domestic and regional energy sectors, – the focus of this Implementation Report – the perspective in institutional and bilateral discussions has indeed shifted to Third Package implementation. Plans were prepared by most Contracting Parties and drafting work started in some of them. As important as this is, it cannot hide the fact that the opening of energy markets – the thrust of European energy legislation, and linked to concrete dates by the Second Package – is still far from reality on the eve of Third Package implementation. This goes for both the electricity and gas sectors. The absence of open markets in an environment dominated by the involvement of the State – through control over incumbent utilities, granting of subsidies and regulating energy prices with few exceptions – has been analyzed and deplored on many occasions. The Secretariat's response to the implementation gap includes enforcement, the insistence on changes to the market designs for which the upcoming review of primary legislation provides the opportunity, and a reform of the Treaty's institutional and procedural set-up which currently does not live up to the ambitious goals it pursues.

2. The Treaty evolved as a tool to reform and integrate the electricity and hydrocarbon sectors in the Contracting Parties in accordance with legislation originating in the EU. These sectors are complemented by flanking policies such as energy efficiency, environment, renewable energy, competition and statistics. They are often governed by institutions and legislation different from those in charge of the energy sectors. However, they all deal with key aspects of energy reform in the Contracting Parties, which is why they are fully included in the Secretariat's monitoring, assistance and enforcement activities. At the same time, the structural reform of the market designs for electricity and hydrocarbons is the most pressing task – not only to increase their efficiency, attractiveness and sustainability but also as a precondition to achieve all other objectives expected under the Treaty. Consequently, those two sectors take center stage also in this Implementation Report.

a. As in previous years, the larger part of the past year's activities both within the Contracting Parties and the Secretariat was linked to the electricity sector. In South East Europe, this sector used to be fully integrated within Yugoslavia (with the exception of Albania). Today, the networks form an integral part of the pan-European electricity system operated by *ENTSO-E*. Moldova and Ukraine are at an early stage of their efforts to integrate with that system, and their technical and commercial ties with Continental Europe are currently looser than those of South East Europe. A significant exception to this is the Burshtyn Island in Western Ukraine.

Despite these regional specifics, the characteristics, problems and challenges of the domestic market designs are rather similar. The markets are usually separated into a regulated and a non-regulated segment, with the latter consisting of only few industrial retail customers supplied by either regional traders or the local incumbent. The domestic supplier (still a factual, or in the case of Albania and Ukraine, even a legal monopoly) will normally buy from traders only if and to the extent domestic generation does not suffice to satisfy their demand. Their demand is determined by the bulk of domestic customers which are supplied at regulated prices. This includes households and SMEs, and often also large industries. The relation between the "public" supplier and the incumbent generation company is determined by factual exclusivity. In many countries, they are part of the same vertically integrated and state-owned undertaking.

Most laws envisage full market opening by 2015, and formal eligibility is typically well-transposed. But in reality the larger share of markets in the Contracting Parties cannot be considered open. In some countries, step-wise liberalization programmes were also implemented. Serbia deserves credit here. Too often the public service obligations imposed by the current market designs are excessive. This is visible in features such as the supplier of last resort which essentially replicates the public supplier. The all-embracing price regulation, on the other hand, is still below prices capable of promoting the necessary investment in generation capacity and networks. Regulation of the entire price and volume of domestic generation in particular has brought many utilities to the verge of bankruptcy, discourages investments and does not allow for the liquidity needed to maintain even security of supply.

With the exemption of a few non-regulated customers and situations when domestic generation does not suffice, trading on regional markets is still not developed in the Energy Community. As the incumbent generator sells by default all its energy to domestic and regulated consumers, none remains available for real cross-border trade, especially as the region is alarmingly short of generation capacity. The standard market model is essentially locking-in all domestic generation and leaves space for new entrants only in exceptional situations. Nor is there much demand in other Contracting Parties where the market design is equally introspective and prices are kept low by regulation. The potential for and benefits of a regionally integrated market is very high, in South East Europe probably more than elsewhere in Europe. That it has not become a reality was already deplored in previous years. Besides the market designs, it also lacks institutions such as power exchanges for the day-ahead market, regional balancing markets and, as an absolute minimum, joint capacity allocation mechanisms. The progress made by the project team which, after many delays, is supposed to set up the coordinated auction office by the end of this year, is too minimal to live up to previous expectations. To be fair, highly politicized conflicts such as the dispute between Serbia and Kosovo* over certain aspect of network operation contribute significantly to this regional paralysis. New initiatives for bottom-up market integration such as the Serbian SEEPEX or the Croatian market coupling project need to be supported to the extent they remain open and non-discriminatory.

On national level, strong and independent regulators must not be afraid of intervening in the market in the interest of its opening, even if the intervention concerns state-owned companies[1]. The Third Energy Package will provide regulators with far-reaching tools for that purpose. Under the currently applicable market designs, regulators should propose virtual power plants, market-based procurement mechanisms for the public supplier, abolition of wholesale price regulation and appoint suppliers of last resort with no interest to keep foreclosing the markets etc. The Regional Action Plan for Wholesale Market Opening in South East Europe (SEE-RAP) lists further measures in that respect.

In general terms, it is the notion of public service, as abstract as it may be, which needs to be recalibrated and balanced against market opening. To consider the overall objective of the energy sectors to provide public service through price regulation constitutes a relic from the pre-reform era. The political commitments the Contracting Parties made under the SEE-RAP must now be implemented in the upcoming round of amendments to national legislation in the context of the Third Package. This is likely to be the last chance to do so for several years to come. Without a meaningful reform of entire electricity markets and progress in regional integration, the gap between the Energy Community and the (soon to be coupled) EU wholesale markets will further widen, with significant negative consequences for prices, investments and the security of supply in the Energy Community.

b. The hydrocarbons sector – oil and oil products have been included in the Treaty's definition of "network energy" next to gas since 2008 – is rather different.

c. As far as gas is concerned, the *acquis communautaire* is limited to transportation and downstream markets, and thus all but excludes exploration and production. By far the main source of imports is Russia. Individual contracts signed by the national incumbents with *Gazprom* and not disclosed to the Secretariat to a large extent define and potentially foreclose the wholesale markets. The retail markets, where they exist – Albania, Kosovo* and Montenegro currently have no access to natural gas – suffer from similar over-regulation as the electricity sector, with prices sometimes heavily subsidized and not cost-reflective for the large majority of customers.

The reporting period, however, saw important developments which could lead to changes in the situation. Firstly, the selection of *Trans Adriatic Pipeline (TAP)* as the pipeline project bringing Azeri gas (also) to South East Europe should change the almost exclusive dependence on one gas supplier in the region. The Secretariat, in its opinion on the national regulators' exemption decision, made it clear that it has high expectations in that respect. Moreover, the recent trend of diversification of Ukraine's gas imports through reverse flows is very positive. It shows, among other things, that investor's confidence in well-organized and transparent gas markets established through the implementation of the *acquis communautaire* can indeed boost market entry and security of supply. Obviously, there is still a lot to do in this respect, in particular with regard to unbundling, which is not quite satisfactory yet in several Contracting Parties. The upcoming obligation to implement the Third Package provides a new chance to make up leeway. This goes in particular for Bosnia and Herzegovina, where the legislative framework for the gas sector has remained piecemeal for years. In order to push the development forward, the Secretariat submitted its first-ever Reasoned Request to the Ministerial Council this year.

d. As regards the petroleum sector the requirements imposed by Energy Community Law are rather specific and do not necessarily call for comprehensive legislative reforms. This is understandable considering that the markets are at the same time globally integrated and largely liberalized. General principles as well as the Sulphur in Fuels Directive 1999/32/EC aside the notable exception to this "light treatment" of the oil sector is security of supply. Here, the Energy Community in 2012 followed the EU and International Energy Agency (IEA) standards by adopting Directive 2009/119/EC with an implementation deadline of 2023. The next decade will be characterized by preparing its full implementation. In the meantime, the general principles such as non-discrimination, free movement of goods and competition need to be enforced.

e. The importance of the horizontal policies – environment, the promotion of renewable energy, energy efficiency, competition and state aid as well as statistics and social issues – often pales in comparison with the sector-specific reform obligations. That is not justifiable. Their objectives and practical implementation are crucial for the development of the en-

1 This will require a change in mindset, and a significant increase in real independence form Governments.

ergy sector, and may be beneficial or detrimental, depending on their design. As the case of Bulgaria shows for instance, the manner in which support schemes for renewable energy are applied in a given social climate may have fundamental impacts far beyond the energy sector alone. This example, as well as the general European discussion on the future of renewable energy promotion, also irritates the Contracting Parties who in 2012 agreed to commit to very challenging targets. Here, as in the cases of increasing energy efficiency or reducing emissions from coal-fired power plants and petroleum products under the environmental *acquis*, investments are key. The success of horizontal objectives thus depends again on successful reform – including prices – and integration of the energy market, the core objective of the sectoral policies. The Secretariat supports this process also in the area of social policy by proposing to the Ministerial Council a Community-wide definition of vulnerable customers in the outline of a social strategy. Other areas, most notably the competition and state aid rules with a high potential to help liberalizing markets, suffer from an enforcement problem which is not only a national one but also due to an inadequate institutional design of the Treaty.

3. It has been remarked by many observers that the Energy Community pursues objectives equally – or given the social conditions and the prevailing backlog indeed: more – ambitious than the European Union in the energy sector. At the same time, it was said that the Treaty fails to provide the instruments needed to actually achieve these objectives. In the beginning of 2013, and based on practical experience so far, the Secretariat made an analysis of the weaknesses of the Treaty and its *acquis*. Among others, the inadequacy of the enforcement regime, the limited role of environmental standards, the lack of harmonization measures for market designs and prices and the lack of a possibility for participation of the Energy Community Regulatory Board in Agency for the Cooperation of Energy Regulators were identified. The Secretariat recommended that the Energy Community, to live up to its full potential and create a true pan-European community of shared laws and principles, starts a discussion on how to increase the efficiency of its institutional and legal framework. In response, the Permanent High Level Group in June 2013 expressed both its full support to the continuation of the Treaty beyond 2016, and agreed to recommend to the Ministerial Council the setting up of a High Level Reflection Group which would assess the functioning of the Treaty and propose potential amendments. This process and the state of play of the present Treaty's implementation should be seen in close relation.

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Deputy Director / Legal Counsel

3.1 Electricity

3.1.1 ELECTRICITY– A Regional Overview

a. The *acquis* on electricity

The Contracting Parties committed to implementing the following legislative documents:

1. Directive 2003/54/EC concerning Common Rules for the Internal Market in Electricity sets minimum requirements for the establishment of competitive electricity markets, including public service obligations and customer protection, monitoring of supply, authorisations and tendering of new generation capacity, tasks for transmission and distribution system operators, unbundling of network operation and unbundling of accounts, transparency, third-party access to networks, eligibility and market opening, as well as the independence, scope of responsibilities and instruments for enforcement of the regulatory authority.

According to the Treaty, the deadline for implementation of Directive 2003/54/EC expired on 1 July 2007. Accordingly, the electricity markets in the Contracting Parties were expected to be open to competition for all customers except households from 1 January 2008. Households should become eligible no later than 1 January 2015.

Pursuant to the Accession Protocol of Moldova, the country committed to implement the Directive before the end of December 2009 and to open the electricity market for non-household customers before 1 January 2013. The respective Protocol for Ukraine sets both deadlines at 1 January 2012.

2. Regulation (EC) 1228/2003 on Conditions for Access to the Networks for Cross-Border Exchanges in Electricity, together with the Guidelines on Management and Allocation of Available Transfer Capacity of Interconnections between National Systems set the basic principles of regional market integration. Building on Directive 2003/54/EC, the Regulation lays down rules for the use of interconnectors and for coordinated management of cross-border electricity flows, including compensation of costs, imbalance and network access charges, availability and access to information, capacity allocation and congestion management on interconnections including secondary trading of capacity rights, exemptions for new interconnectors, use of congestion revenues, etc.

According to the Treaty, the implementation deadline for Regulation (EC) 1228/2003 also expired on 1 July 2007. The Guidelines became part of the Energy Community *acquis* by Decision 2008/02/MC-EnC of the Ministerial Council in 2008, and the deadline for application of a common coordinated congestion management method and a procedure for allocation of capacity required thereby was set for 31 December 2009. In the case of Moldova, the Accession Protocol sets the deadline for implementation of the Regulation and the Guidelines to 31 December 2010. Ukraine, in its Accession Protocol, has committed to implement both acts not later than 1 January 2012.

3. Directive 2005/89/EC concerning Measures to Safeguard Security of Electricity Supply and Infrastructure Investment provides a legal framework for the Contracting Parties to develop coherent, transparent and non-discriminatory security of supply policies compatible with the operation of a competitive electricity market. Building on Article 4 of Directive 2003/54/EC (Monitoring of Security of Supply), the Directive indicates necessary measures to safeguard an adequate level of electricity supply, encourage new investments in generation, transmission, distribution and interconnection infrastructure in order to maintain sustainable balance between supply and demand, to set, meet and monitor the quality of supply and network security while contributing to the proper functioning of the regional and internal electricity markets.

The Directive was incorporated into the Energy Community *acquis* by Decision 2007/06/MC-EnC of the Ministerial Council in 2007. The deadline for the implementation of the Directive expired on 31 December 2009. The Accession Protocol for Moldova sets the deadline for implementation of Directive 2005/89/EC at 1 January 2010. Ukraine committed to implement the same Directive by 1 January 2012.

(4) Within the European Union Directive 2003/54/EC and Regulation (EC) 1228/2003 have been replaced by new *acquis* in the framework of the so-called "Third Energy Package". On 6 October 2011, the Ministerial Council in Chisinau adopted Decision 2011/02/MC-EnC on the implementation of Directive 2009/73/EC and Regulation (EC) 715/2009, with a general implementation deadline set for 1 January 2015. Despite the fact that the Contracting Parties' implementation commitments currently still relate to the "Second Energy Package", preparation for the legal and practical amendments necessary to implement the Third Package should have already started in all Contracting Parties to meet the implementation deadline.

b. The Energy Community electricity sector

1. Implementation

In the reporting period 2012 - 2013 the Energy Community electricity sector achieved little progress in the implementation of the Treaty. One feature we can report was the relatively faster advancement of Montenegro and Serbia, compared with the slowing pace of reforms in Albania, the former Yugoslav Republic of Macedonia, Moldova and Ukraine where the policy priorities appeared less focussed or less transparent.

The most important factor that influenced the reform process was the adoption of the Third Package with a deadline of 1 January 2015. Some Contracting Parties started to modify their legal acts targeting its transposition, namely Montenegro, Serbia and Bosnia and Herzegovina (in all jurisdictions). Others, such as the former Yugoslav Republic of Macedonia, are about to start with the drafting. Ukraine declined from attempting to reach the deadline. In its own process of approximation to the EU, Croatia completed the transposition of the Third Package.

Drafting of primary legislation still needed to comply with the Second Package for the electricity sector was not a main focus except in Bosnia and Herzegovina, where the new Electricity law of the Federation of Bosnia and Herzegovina was adopted by the Federal Assembly on 25 July 2013. The act significantly improves compliance with the Energy Community *acquis* in the areas of new capacity authorization, eligibility and third party access to distribution network, and represents a good start for transposition of the Third Package in the legal framework of the Federation. The adoption of the draft legal acts of Albania, Moldova and Ukraine was further postponed, among else due to interfering elections or other political events.

Further steps are still required for full compliance in the area of security of supply as governed by Directive 2005/89/EC which has been somewhat overlooked. The security of supply statements due by September 2013 were timely submitted only by Bosnia and Herzegovina and Kosovo*. The provisions for cross-border capacity allocation and congestion management pursuant to Regulation (EC) 1228/2003 are transposed in their basic format, with a number of elements still missing.

Transposition and implementation of the Third Package remain future priorities in every country.

Most of the Contracting Parties proceeded with the gradual development and application of new secondary rules, with a common priority on facilitating certain aspects of the market, required investments or end-user supply.

1. **Authorisation procedures** for new generation and tendering are important for improving the investment climate, and usually the basic provisions are transposed. Implementation follows a standard pattern – the Minister or the Cabinet of Ministers are responsible for authorisation of the construction and issuing concessions, if required. There are cases where supporting laws, such as a law on concessions or public-private partnership, or a construction law, are applicable, and cases where the regulatory authority is authorised for issuing the construction permits.

The tenders are typically organized by the Ministry. The regulatory authority later licenses the operation.

The existing legal frameworks and administrative practices still fall short of compliance. The implementation fails to ensure efficiency and transparency. A better level of transparency is provided in Albania where an independent company has been established to improve the investment climate, and in the Federation of Bosnia and Herzegovina with the newly adopted Electricity Law.

2. The legal **unbundling** of the transmission system operator is transposed in all jurisdictions. The transmission system operator is usually in state ownership, in some cases (Moldova, Serbia, Ukraine) still not corporatised. In Montenegro the State is a dominant owner (55% of the shares). In Bosnia and Herzegovina an "ISO" model is applied (not according to the Third Package) but in practical terms the unbundling has not been thoroughly implemented which has resulted in problems with the management and investment capacity of the transmission company.

Distribution has not yet been legally unbundled, at least from the supply under regulated prices, in any jurisdiction. This is one of the common tasks to be faced in the next period.

The accounting unbundling is still insufficient in some vertically integrated utilities and in some jurisdictions not even duly enforced (Kosovo*, Albania and Ukraine). Unbundling of regulated from market-based activities is not enforced or implemented in Ukraine.

3. **Third party access** implementation is more advanced in all Contracting Parties, both for the transmission and distribution networks.

Transmission grid codes are developed, adopted by the regulators and publicly available, however not fully implemented in all jurisdictions (Kosovo*, Albania). The general conditions for electricity supply cover the connections and access to the distribution grids. In some cases the access to the network is limited by administrative conditions (Ukraine, Kosovo*). The treatment of the refusal of access and the exemption from third party access still require improvements in all jurisdictions.

Network tariffs for transmission and distribution are determined, approved by the regulator, published and applied in each jurisdiction.

4. The aspects of **eligibility** (criteria, calendar, enforcement, *etc.*) are addressed in all jurisdictions except Ukraine. The definition is generally compliant while the market opening in real terms is adjusted to national circumstances. The applicable calendar for market opening is often linked to the type of network – transmission / distribution (Montenegro); or to the voltage level of the connection to the distribution grid (Bosnia and Herzegovina, former Yugoslav Republic of Macedonia, Serbia), and/or to the level of consumption (Albania). In some jurisdictions, eligible customers are not entitled to regulated prices (former Yugoslav Republic of Macedonia, Serbia) which so far has been applied to large industry customers only. It remains to be seen whether and to what extent it will be applied to the low-voltage commercial customers and households.

Regulated tariffs are still offered, in one way or another to some categories of eligible customers in all Contracting Parties. This in turn prevents effective deregulation of the gen-

eration. Overregulation in the domains of generation and supply is one of the main reasons for the slow progress of the liberalisation of the local electricity markets.

5. **Supplier switching** rules are being gradually applied (Bosnia and Herzegovina, former Yugoslav Republic of Macedonia, Montenegro, Serbia). All contain some form of a "supplier of last resort", under various names, powers and methods of price regulation. No competitive switching has been effectively introduced yet.

Supplier switching is curtailed by the prevention of potential new suppliers from access to the end-customers supply resulting from the generally concentrated and undeveloped wholesale market and lack of access to low-cost generation. The "single buyer" market model is applied in the legal frameworks of Albania and Ukraine; however all Contracting Parties suffer from significant concentration and dominance of state-owned generation and/or supply companies.

6. The conditions for **cross-border transmission** and allocation of interconnection capacity are generally at an advanced degree of compliance – to the level that market-based mechanisms (auctions) are applied on all interconnectors operated as a part of *ENTSO-E* network, for various time horizons. Coordinated bilateral auctions are applied on some borders (Serbia, Croatia).

The capacity allocation rules are being improved (in Albania and Ukraine), capacity reservation is gradually being abolished upon intervention of the Secretariat. The congestion revenue is not always adequately treated and data not always available.

7. The **balancing** rules are developed in the context of the market rules or grid codes. However they are not always adequately applied. In some cases the balancing mechanisms have introduced limited levels of competition (Serbia), but in most cases they have not been developed in the context of market conditions. The balancing of the demand basically remains in the domain of regulated services. In some systems the balancing is still performed implicitly by the transmission operator/dispatcher, and the costs are socialised in the wholesale tariff (Ukraine).

8. Provisions for **transparency** of data are partially available and applied. The availability of information to the market participants is sometimes problematic and, along with the monitoring obligations of the regulatory authorities, requires improvement. The practical implementation nevertheless corresponds to the minimum needs of market participants owed to the limited complexity and dynamics of the relevant transactions. Not all requirements from the *acquis* for transparency and access to information have been fulfilled, which is a challenge for future development.

9. The provisions for **customer protection** are usually transposed to satisfactory level but far from full complying with the requirements from the *acquis*. In particular it is important to apply the specific rules for support of the final customer including contractual obligations and availability of data. They are missing or incomplete in most cases. Universal service is not always recognised or adequately enforced. The rules of the Third Package are targeting a much higher level of compliance in all customer protection aspects.

The aspects of public service are misinterpreted in all jurisdictions. The most common pattern is the treatment of public service as a default condition available in excess and used to justify whatever type of regulation is in question (TSO, DSO, balancing, generation, supply). There is almost no adequate treatment of the exceptional character of public service, or any obligation to report on it.

The treatment of the protection of vulnerable customers is also critical. It is available to a certain extent in all jurisdictions in diverse modes and protection mechanisms, and is in most cases in one way or another not in compliance. There are mechanisms applying cross-subsidies and/or state subsidies (Ukraine). In a growing number of cases the use of funds from the State budget is envisaged. Identification of the vulnerable customers is not always clear and the definition of the support is not always comprehensive or fully adequate.

2. The regional electricity market

The creation of a coherent and convergent regional market, operating on harmonised legal and regulatory rules is a central trigger for attracting investments and increasing market liquidity in the Energy Community. Only if the relatively small individual Western Balkan markets join forces and create a common and competitive trading area, can the benefits for customers and social development be gained from market liberalization materialize.

The path towards a common regional market in the Energy Community strongly orientates around European developments, having in mind the final target of integration into the European and Energy Community markets. In the electricity sector the so-called Regional Action Plan for Wholesale Market Opening in South East Europe (SEE RAP) defines the steps for regional market integration in the 8th Region streamlined with the milestones and actions of the European electricity target model and the four cross-regional roadmaps - capacity calculation, long term capacity allocation, day ahead capacity allocation (market coupling), continuous mechanisms for implicit cross border intraday trading.

The 8th Region was established following a decision by the Ministerial Council of the Energy Community in 2008 with a view to implement a common procedure for electricity congestion management and transmission capacity allocation on a regional level. It covers the Energy Community Contracting Parties and eight neighbouring EU Member States.

Members of the 8th Region

Source: Energy Community Secretariat

Implementation of the SEE RAP faces significant delay related to at least three of the four cross-regional elements:

Regional Action Plan		Deadline
Capacity calculation	Agreement between TSOs on a common capacity calculation methodology	Q4 2011
Forward markets (long term capacity allocation)	Coordinated bilateral explicit auctions implemented on all borders	Q1 2012
	Centralized multilateral coordinated auctions (SEE CAO)	Q4 2012
Day-ahead market (market coupling)	Establishment of PXs or commissioning services from existing PXs	31.12.2012
	Bilateral/ trilateral market coupling in the SEE region (nucleus approach or different regional initiatives)	Q2 2013

The SEE RAP's deadlines related to intraday markets are still ahead of the target of establishing cross-border intraday capacity markets on several borders by mid 2014 and reaching a harmonised regional solution by mid 2015.

In line with the European targets, the SEE RAP foresees the establishment of a SEE Coordinated Auction Office (SEE CAO), targeting harmonization of the allocation and nomination rules for long and medium term transmission rights in the 8th Region and executing multilateral coordinated auctions on all SEE borders as regional one-stop-solution for end of 2014. A so-called Project Team Company in Charge of Establishing a SEE CAO (PTC) has been registered in Montenegro in July 2013 with the scope of preparing the effective operation of the SEE CAO. This included organizational, legal and technical assistance related to the company's set up. The network operators of Albania, Bosnia and Herzegovina, Croatia, FYR of Macedonia, Greece, Kosovo*, Montenegro, Romania, Slovenia and Turkey are shareholders of the PTC.

The original deadline for SEE CAO to auction the annual capacities for 2014 at the end of 2013 will not be met. Instead, SEE CAO is expected to be functional no later than 1 July 2014, starting with monthly allocation periods as the initial step for centrally coordinated forward capacity allocation and complementary to market coupling. A positive development in the direction of a coordinated regional approach was the Serbian TSO, EMS, at the 18th Energy Community Electricity Forum declaring its readiness to enter into joint bilateral auctions, as a first step, with the SEE CAO. Commitment by the Bulgarian network operator is still missing.

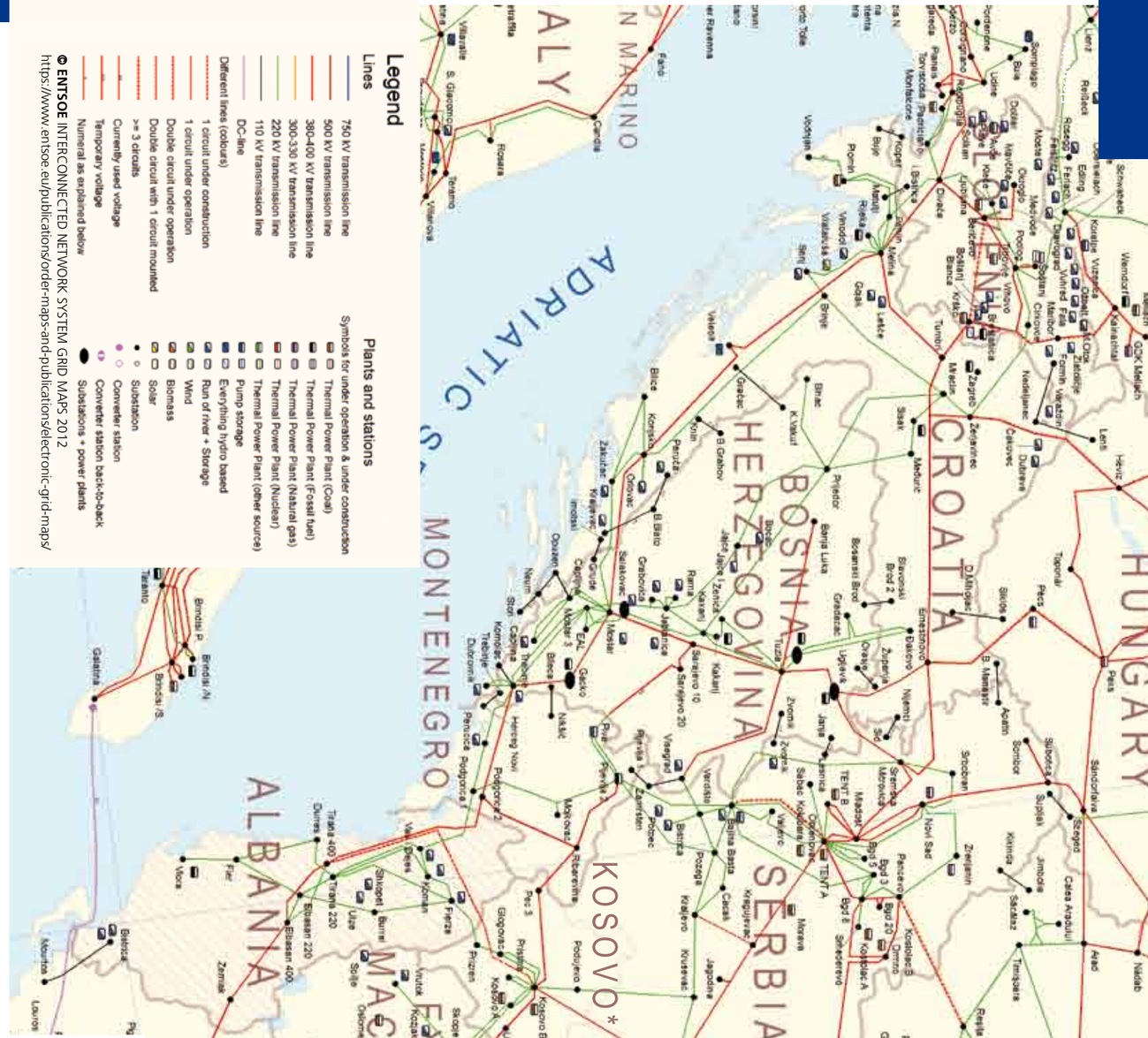
Also, concrete progress has not been made either relating to the choice of a single capacity allocation algorithm as a key requirement for market coupling, nor regarding the establishment of Power Exchanges (PX) or commissioning services from existing PXs. The related deadlines of the SEE RAP have been clearly missed.

However, the support of the 18th Athens Forum for the Serbian SEEPEX as a possible pilot project for the development of market coupling across the Region - that can be extended to other Contracting Parties on a step by step basis – has to be seen as a positive signal towards progress. A comparable initiative has been started in Croatia with the aim of establishing a PX or entering into joint venture agreements by the end of 2013 or early 2014 the latest.

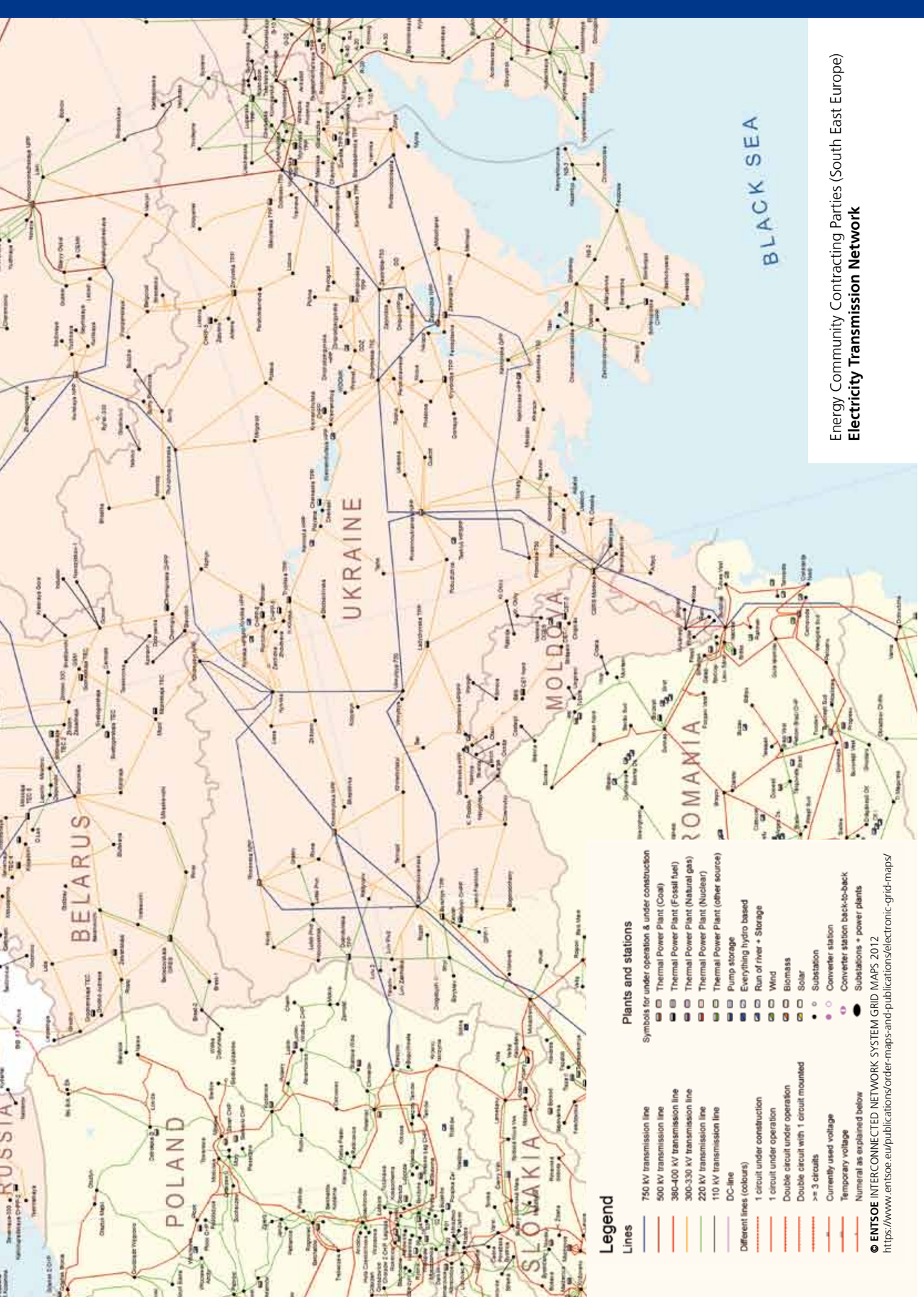
It has to be underlined that delays in progress are strongly home-made and mainly due to lack of serious political commitment: all elements of the SEE RAP can be implemented within the legal framework of the Second Energy Package. The establishment of regionally coordinated congestion management is even explicitly required by Regulation (EC) 1228/2003.

Effective market opening is also hindered by a number of legislative barriers in the Contracting Parties that need to be abolished, in particular relating to public supply, single buyer models, regulated energy prices, market based procurement and trade of electricity and monopoly positions in electricity generation and supply. In addition, un-harmonized VAT establishes an obstacle for regionally coordinated capacity allocation and market coupling.

The lack of a regionally coordinated capacity allocation mechanism remains a key concern also due to the negative effects on market liquidity. Insufficient transmission interconnection capacity with neighboring systems is a core obstacle for limited cross-border trading and the establishment of a regional electricity market. Coordinated capacity allocation and congestion management schemes are therefore essential. Although the TSOs of all Energy Community Contracting Parties, except Moldova, have already introduced market-based capacity allocation mechanisms (based on NTC auctions) for congestion management at their borders, there is still insufficient harmonisation in the 8th Region.



Energy Community Contracting Parties (South East Europe)
Electricity Transmission Network



3.1.2 ALBANIA

Electricity

			2011	2012
Electricty Production [GWh]			4,157	4,722
Net Imports [GWh]			3,268	2,715
Net Exports [GWh]			187	297
Total Electricity supplied [GWh]			7,238	7,140
Gross Electricity Consumption [GWh]			7,238	7,140
Losses in Transmission [GWh]			173	169
Losses in Transmission [%]			2.30%	2.21%
Losses in Distribution [GWh]			2,006	3,178
Losses in Distribution [%]			30.90%	46.38%
Consumption of energy sector [GWh]			27	21
Final consumption of electricity [GWh]			5,032	3,772
Consumption Structure [GWh]	Industrial, transport, services and other non-residential sectors		2,444	1,609
	Households (Residential Customers)		2,588	2,163
Net maximum electrical capacity of power plants [MW]			1,573	1,824
Net maximum electrical capacity of power plants [MW]	Coal-fired			
		out of which: multi -fired		
	Gas-fired			
		out of which: multi -fired		
	Oil-fired		98	98
	Nuclear			
	Hydro		1,475	1,726
		out of which: Small hydro	42	195
		Pumped storage		
	Other Renewables			
		out of which: Wind		
Horizontal Transmission Network [km]	380 kV or more [km]		320	320
	220 kV [km]		1,228	1,228
	110 kV [km]		1,251	1,285
	HVDC [km]		0	0
	Substation Capacity [MVA]		2916	3846
Electricity Customers	Total		1,108,000	1,046,972
		out of which: Non-households	196,440	298,253
		Eligible customers under national legislation	6	7
		Active eligible customers	1	7
Domestic market	Electricity supplied to active eligible customers [MWh]		131,271	596,850
	Share of total consumption [%]		1.81%	8.36%

Source: ERE

a. The electricity sector in Albania

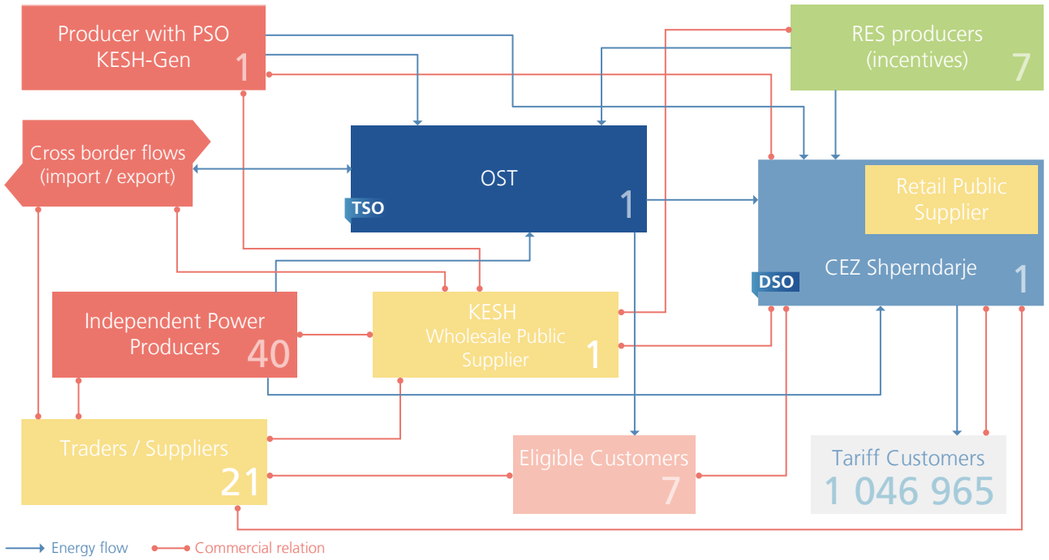
In Albania, the virtually complete reliance on hydro-power, and the low financial liquidity of the electricity sector (caused, inter alia, by an unsustainably high level of losses, a low collection rate, non-payment by the public sector) are obstacles for the sustainable development of the electricity market and security of supply. This situation caused a long-standing and very harmful dispute between the State and its companies, and the privatized distribution and supply company, *CEZ Shperndarje*. The dispute in early 2013 culminated in the revocation of the latter's license by the regulatory authority, an unprecedented event in the Contracting Parties to the Energy Community.

The primary legal act governing the electricity sector in Albania is the Power Sector Law of 2003, as amended several times since. The Law is based on a tight "single buyer" mar-

ket structure, i.e. a legal monopoly for purchase of domestic electricity.

The authority responsible for the primary legislative framework and policy-making in the electricity sector is the Ministry of Economy, Trade and Energy of Albania (METE). The Energy Regulatory Entity (ERE) adopted or approved secondary legislation such as transmission and distribution grid codes, a metering code and transitional market rules reflecting the principles of the outdated model applied in Albania. A Tariff Methodology is in place and applies for the regulation of all public services in the electricity sector. Regulated supply prices have been approved for the period 2012 - 2014.

Albania's Electricity Market Scheme



Source: Energy Community Secretariat

The transmission system operator is legally unbundled in the form of a state-owned company *Operatori i Sistemit te Transmetimit (OST)*. *OST* operates the transmission system and performs central dispatching and electricity market administration. The transmission losses were at a level of 2.2% in 2012.

The electricity system of Albania is interconnected with the neighbouring systems of Greece and Montenegro on 400 kV, and on 220 kV with the system of Kosovo*. The relatively low level of stability of the transmission system in the southern part of Albania, and the missing SCADA functions still undermine the security of network operation and quality of service. The system needs significant improvement in the areas of infrastructure performance and quality of operation in order to reach the requirements of *ENTSO-E* and allow *OST* to join.

Korporata Elektroenergjitike Shquiptare (KESh) is the incumbent generation holding. It consists of *"KESh-Gen"* which operates the large state-owned hydro-generation capacities (1,433 MW) and the only thermal power plant in Albania – the (currently idle) TPP Vlora (98 MW). *KESh* operates as "wholesale public supplier", the single buyer established by the Law and the market model. Private producers operate a total of 196 MW of hydro-power capacity, and contributed 7% of the domestic production of 4,722 GWh in 2012.

There were four electricity traders active in supplying electricity to or through Albania in 2012. Imports of electricity are also carried out, when required, by *KESh* to cover the missing demand, and by the "retail public supplier" *CEZ Shperndarje* to cover the enormous losses in distribution.

On the supply side the market is dominated by the distribution system operator and retail public supplier *CEZ Shperndarje*, dominantly (76%) owned by the Czech energy holding *CEZ*. The Albanian company *CEZ Shperndarje* operates the distribution system and supplies electricity under regulated prices. In 2012 *CEZ Shperndarje* registered 6,852 GWh of electricity supplied. However, the billed consumption was only 3,771 GWh indicating distribution losses in 2012 of more than 45%. Household consumption amounts to 54% of the electricity invoiced by *CEZ Shperndarje*.

The electricity market is thus dominated by two companies operating under regulated prices both in the wholesale and retail segment. Following the Government's Market Model of 2008, the "wholesale public supplier" (*KESh*) produces under regulated costs or procures from the market, and sells to the "retail public supplier" at regulated wholesale prices the whole supply of electricity, including the balancing energy and excluding only the electricity required to cover the distribution network losses. The retail public supplier *CEZ Shperndarje* covers the demand, at regulated prices, of non-eligible customers and eligible customers which have not contracted an alternative supplier. Other than (wholesale) traders, there were no independent suppliers active in Albania in 2012. According to the Market Model of 2008, the wholesale public supplier (*KESh*) also functions as a supplier of last resort.

Pursuant to the Power Sector Law's amendments of 2011, all customers supplied directly from the 110 kV network (regardless of their consumption) as well as the customers with annual consumption greater than 50 GWh (regardless of the voltage level of their connection) are automatically considered eligible. In practice, seven customers comply with these criteria and all have switched from the public supply. They are supplied by traders, independent domestic producers or by *KESh*, to the extent its production exceeds the demand of captive customers. This supported effective opening of the market to the level of 8.4% in 2012.

A subsidy structure ("block tariff") is applied to household customers supplied by *CEZ Shperndarje*. It envisages a reduction of tariffs for consumed quantities below 300 kWh per month, which in practice covered 75% of the households in 2012.

b. Progress made in 2012/2013

A draft of the outdated Power Sector Law has already been under development since 2010. Even though the draft, following interventions by the Secretariat, was widely compliant with the Second Package and ready for adoption in 2011, the events around *CEZ Shperndarje* and other political circumstances prevented it from entering into force. By now, the draft is widely obsolete as it would not transpose the Third Energy Package.

The draft was expected to implement a new market model through phasing-out the function of a wholesale public supplier and supporting supplier-switching by eligible customers thus achieving gradual market liberalisation.

The missing financial consolidation in the electricity sector and the history of disputes over the past two years between *CEZ Shperndarje* and the State companies and institutions, including ERE, led to the revocation of *CEZ Shperndarje*'s distribution and supply licenses in January 2013. The main accusations by ERE are the lack of imports of electricity to cover losses, missing investments, the soaring share of distribution losses and bad debts since privatization and late payments to *KESh* and *OST*.

CEZ Shperndarje, on the other hand, claimed non-cost-reflective prices and tariffs, interventions by public authorities e.g. in tax matters and non-payment of debts by public institutions and the state-owned energy companies. The attempts made by *CEZ Shperndarje* in 2012 to enforce collection of the significant outstanding debts from public institutions and companies by curtailing electricity supply were swiftly intercepted by the Albanian Government on security grounds.

After the revocation of *CEZ Shperndarje*'s licenses, ERE appointed an administrator, who has since begun managing *CEZ Shperndarje*. The mother company *CEZ* initiated arbitration against Albania based on the Energy Charter Treaty's investment protection provisions. The Secretariat offered its assistance by promoting an amicable settlement.

In the aftermath of the forced change in management of *CEZ Shperndarje*, ERE reported improved liquidity in the sector in the first half of 2013, particularly in the settlement of the outstanding debts to and by *KESh* and *OST*, an increase in the collection rate and reduced losses. It is to be noted that in this period, hydrology has improved and production was increased while consumption was reduced, and the State provided financial support. Comprehensive structural measures, large scale investments, further market reforms and effective market opening are still missing.

During the reporting period ERE adjusted the rules for imbalance settlements. The previous Balancing Rules had proved inadequate to integrate independent small hydro-power producers with high levels of volatility, and eligible customers with unreliable forecasts. The amended Rules define balance responsibility, a methodology for determination of the regulated price for balancing energy, as well as rules for nomination and settlement. The finding of an imbalance is based on hourly metering where available, the nominations are checked and confirmed every ten days, while imbalance settlement (including compensation of *KESh* for balancing the system) is done on monthly basis. The persisting application of the monthly settlement of imbalances and strict scheduling obligations (for the eligible customers and independent producers) are still problematic due to the large deviations in the load forecasts and deliverables.

According to ERE, *OST's* practice of capacity reservation at the interconnectors was abandoned after the Secretariat initiated enforcement action in 2011. The new Allocation Rules also introduced yearly and monthly auctions on all interconnections. In the period from September 2012, and in the first half of 2013 *OST* did not perform monthly allocations upon several decisions of ERE aimed to increase imports in support of security of the supply. Annual auctions were suspended during the same period and postponed for the second half of 2013. Daily auctions are not being held due to the technical failure of *OST* to establish the necessary electronic platform. Amendments to the Rules on Interconnection Capacity Allocation are currently under review by ERE. Following the

recommendations of the Secretariat the amended Rules are expected to include daily allocations, the application of "use-it-or-lose-it" and secondary trading of unused capacity, as a matter of priority.

In 2012 ERE adopted several rules which improved transparency and customer protection by setting criteria for the quality of services, handling of customer complaints, imposition of penalties to license holders and the calculation of economic damage. The monitoring practice of ERE has improved in the past several years.

ERE adjusted the tariffs and prices for 2012 and approved new levels of costs for 2013 and 2014 respectively for all types of regulated activities, namely generation (*KESh-Gen*, small HPP, TPP Vlora), for wholesale public supply, for the transmission tariff, for the distribution tariff and for retail supply services per category of customer.

In 2012 ERE also adopted new Connection Rules, including a connection agreement template. Among other aspects the new Rules improve procedures' efficiency, provide standardisation of the equipment, define ownership rights, stipulate rules for limitations, refusals, complaints and disputes, and provide more transparency in the ownership rights.

The project for construction of a 400 kV interconnection line with Kosovo* did not develop significantly and is still in the tendering stage. In the beginning of 2013 Albania contracted the construction of 245 km of 110 kV transmission lines and the rehabilitation of the substations in the southern part of the country in order to reduce losses and increase network stability and security of supply in this region.

c. State of compliance

In the absence of a new Electricity Law, the Power Sector Law of 2003, as amended, remains the primary legal reference for compliance assessment.

1. According to the Power Sector Law, the Government is the responsible authority for **authorisation** and **tendering** for new power generation capacity. The Law sets the main authorisation criteria in an adequate manner but does not enforce transparency requirements. Tendering is not stipulated in this Law, some relevant provisions are to be found in the Law on Concessions and the Law on Licenses, Authorizations and Permits. The National Licensing Centre provides practical conditions for shorter authorisation procedures, in particular when concession certificates or other administrative prerequisites are required. Nonetheless, a consistent primary legislation in compliance with Articles 6 and 7 of Directive 2003/54/EC is still not in place.

2. The **unbundling** provisions and status are not in compliance with Directive 2003/54/EC. The transmission system operator *OST* is legally unbundled from the rest of the system and performs market operator functions. *KESh* operates as the dominant generation company and wholesale market supplier at the same time. None of the two is obliged or have committed to apply compliance programmes. Unbundling of the accounts is basically required by the Power Sector Law however the enforcement provisions are insufficient. In practice this applies in particular to the unbundling between generation and wholesale supply activities in *KESh*.

CEZ Shperndarje performs the functions of distribution system operator and retail market supplier, without any compliance procedure. It has still not unbundled the accounts for supply to eligible and captive customers, as required by Article 19(3) of Directive 2003/54/EC. Legal unbundling of supply activities from distribution system operation needs to be accomplished by 1 January 2015.

3. **Third party access** to the electricity networks is practically omitted from the Power Sector Law with almost no reference further than the definition. An obligation of the network operators to grant access as well as the treatment of refusals and appeals is not enforced. ERE is obliged to set tariffs and/or tariff methodologies for access and use of networks but the conditions are only partially specified, with missing provisions for clear cost-reflectivity and mandatory publication.

In practice ERE managed to improve the situation and the right of access is supported through the grid code and rules for the allocation of interconnection capacity. The new Connection Rules improved the visibility and efficiency of the procedures and treatment of ownership rights, limitations, refusals, complaints, disputes and transparency in this area. The right of use and access remains fundamentally short of compliance with Article 20 of Directive 2003/54/EC.

4. As regards **eligibility**, the amendments of the Power Sector Law in 2011 define the status of eligibility based on the voltage level of the connection and/or the annual consumption, and not based on customer categories (households/non-households) as defined by Directive 2003/54/EC. Albania is not compliant in this respect. Furthermore, rules for supplier-switching have not been developed.

5. As regards **market opening**, the Law and the market model in force bundle the incumbent generation company with the function of a wholesale public supplier, thus creating a single buyer, an exclusive reseller and an import monopoly for the electricity needed to cover the demand of the captive customers (with the exemption only of losses of electricity). The Law thus implicitly defines the public interest in a manner that results in the indigenous and public generation capacities being used for exclusive and regulated supply to Albanian consumers, with only a few exceptions. This market model violates Article 41 of the Treaty and prevents wholesale market opening, a fundamental objective of the Treaty.

Supply under regulated tariffs is available to all customers except those identified as eligible by the Power Sector Law in a non-compliant manner. The across-the-board and unlimited persistence of price regulation for all customer categories, including the retail public supplier, is not in compliance with the *acquis*. Moreover, the high costs of imports needs to be transferred to the end-users. Using the depreciated cost of *KESh's* production to compensate relatively high prices of imports distorts price signals and prevents the entry of new suppliers.

The legal framework on **public service obligation** is not adequately structured and left for ERE to define with no sufficient and compliant legal scrutiny. The Power Sector Law stipulates under this category and subdues to regulation, unconditionally and without limitation, electricity generation which should in fact participate on the market by default. There are no provisions for conditionality and exceptionality of such measures and no reporting or review is required. The legal framework is thus not in compliance with Article 3 of Directive 2003/54/EC.

In practice, the public service is extended to all non-eligible customers through their access to regulated supply. Such practice has negative effects on the process of opening the market to the extent that regulated prices are lower than the costs of supply under competitive conditions.

6. For **capacity allocation**, compliance significantly improved after the Rules for Allocation of Interconnection Capacity were amended by ERE in 2011, following an Opening Letter by the Secretariat. Their application, however, has been delayed on account of security of supply. Daily auctions are envisaged, but not yet applied. The rules and their application are still not compliant with regard to the enforcement of the "use-it-or-lose-it" principle, secondary market, use of allocation revenues, timely publication of data by the transmission system operator, as well as criteria for transparency and monitoring. Despite *OST's* participation in the CAO project company, regionally coordinated auctions as required by the Congestion Management Guidelines still do not take place.

7. The **balancing** regime has been slightly improved, but inadequate metering and the overall balance responsibility allocated to *KESh* still remain problematic. The Balancing Rules amended in 2012 still lack adequate balancing groups, treatment of positive and negative imbalances (in particular of *CEZ Shperndarje*) and adequate identification of energy losses. Other shortcomings relate to the netting-off of imbalances over a long period of time (i.e. a month), allocated balance responsibility of *KESh* to *OST*, lack of adequate reference prices for imbalances, accounting unbundling for the balance settlement purposes, etc. Under these circumstances, the rules are considered not compliant.

8. **Transparency** in general is still far from being sufficient. The Power Sector Law is comprehensive in some aspects of transparency such as those related to metering and ownership status but short of compliance in other aspects requested by the *acquis*. ERE holds transparent public hearings and dispute settlement procedures, however the overall access to the information monitored and reported by ERE still requires substantial improvement.

OST, *KESh* and *CEZ Shperndarje* do not always provide consistent information to ERE and their internet platforms do not contain sufficient or adequate information, especially in English. The format of the information provided by *OST* for efficient access to the network has been improved; however it still does not fully comply with the level of transparency required by Regulation (EC) 1228/2003.

9. The **protection of consumers** is neglected by the Power Sector Law of 2003 - limited essentially to metering, disconnection and property rights, even though it is mentioned prominently in its preamble among the fundamental conditions for electricity supply. The obligations imposed to the undertakings as stipulated in Article 3 of Directive 2003/54/EC are not sufficiently detailed, and enforced mainly through the licences issued by ERE. Recently, ERE improved the situation through the Rules on Quality of Service, which cover the handling of customer complaints, imposition of penalties to license holders, and calculation of economic damage.

Implementation of the Third Energy Package

The Third Package will require the transition of several new elements into Albanian law, mainly related to unbundling, protection of vulnerable customers and the tasks, competences and independence of ERE. The current draft of the Power Sector Law is not apt to achieve these tasks.

UNBUNDLING

All operators and dominant incumbent companies in Albania are corporatized and their assets are on the balance sheets. Both *OST* and *KESh* are 100% state-owned – which requires restructuring in line with one of the options provided in the new *acquis*. Currently this is not in compliance with any of the options provided by Directive 2009/72/EC.

REGULATORY AUTHORITY

The independence of ERE from the Government, or from any other public body in Albania and its impartiality shall need to be legally scrutinized, including provisions for independent appeal. The objective of ERE to promote and support the development of a competitive market needs to be enforced along with its increased powers to investigate, request information and impose penalties. These, and other competences and tasks of ERE, need to be brought into compliance with Directive 2009/72/EC.

CUSTOMER PROTECTION

The notion of vulnerable customers is currently not defined in Albanian law, as required by Article 3(7) of Directive 2009/72/EC. Once defined, these customers should be protected against disconnection in critical conditions and be supported by schemes outside the regulated pricing system, as is the case now.

d. Conclusions and Priorities

Albania failed to update their legal framework in the electricity sector in the reporting period. As such it remains among the least compliant in the Energy Community. At the same time the organisation of the electricity market does not keep pace with the ongoing developments and growing requirements in this area in the region and in the EU.

The foreclosed and highly concentrated market model is not only non-compliant, it will never provide the level of flexibility required to allow for the entry of new market players and thus competition. Structural reform must be of the highest priority.

Eliminating the market concentration following from the wholesale public supplier and retail public supplier tandem and the exclusivity of their relations must remain high on the agenda. The first and most urgent step in this direction is the adoption of the new Power Sector Law. As the current draft is not advanced enough to implement the Third Energy Package, it requires substantial re-drafting before adoption. Besides opening up the market design, the Law must introduce competitive platforms, such as day-ahead trading.

The financial viability of the electricity sector has improved by mid 2013 mainly due to the improved hydrology. Its consolidation is still work in progress, including the settlement of internal debts and treatment of the arrears. The level of distribution losses and payment discipline are still unsustainable. They have to be systematically addressed by *CEZ Shperndarje*, but also by ERE and the State administration. They must learn the lessons made from past mistakes and restructure the whole sector thoroughly based on transparency, non-discrimination and strict adherence to the rule of law.

Albania also must and will address the lack of reliability of hydropower generation, on which it almost entirely depends. In that respect, the recent support given to the *TAP* pipeline project by the authorities (and the Secretariat) will hopefully bear fruit, most notably by allowing the idle power plant in Vlora to start operations on gas soon. Others may follow.

The transmission system operator *OST* so far has failed to improve Albania's system security and reliability to a level that it could join *ENTSO-E*, despite ample international support. ERE must be stricter in enforcing the applicable rules and its own decisions, otherwise Albania will remain lagging behind in regional integration.

3.1.3 BOSNIA AND HERZEGOVINA

Electricity

			2011	2012
Electricty Production [GWh]			14,050	12,935
Net Imports [GWh]			4,203	4,215
Net Exports [GWh]			5,660	4,525
Total Electricity supplied [GWh]			12,593	12,624
Gross Electricity Consumption [GWh]			12,593	12,624
Losses in Transmission [GWh]			324	308
Losses in Transmission [%]			1.776%	1.797%
Losses in Distribution [GWh]			1,225	1,188
Losses in Distribution [%]			12.93%	12.46%
Consumption of energy sector [GWh]			35	81
Final consumption of electricity [GWh]			11,008	11,047
Consumption Structure [GWh]	Industrial, transport, services and other non-residential sectors		6,461	6,448
	Households (Residential Customers)		4,547	4,599
Net maximum electrical capacity of power plants [MW]			3,982.56	3,992.68
Net maximum electrical capacity of power plants [MW]	Coal-fired		1,855.93	1,855.93
	out of which:	multi -fired	90.93	90.93
	Gas-fired		0.30	0.30
	out of which:	multi -fired		
	Oil-fired			
	Nuclear			
	Hydro		2,126.34	2,136.01
	out of which:	Small hydro	39.19	48.86
		Pumped storage	440.00	440.00
	Other Renewables			0.45
	out of which:	Wind		
Horizontal Transmission Network [km]	380 kV or more [km]		865	865
	220 kV [km]		1,525	1,525
	110 kV [km]		3,920	3,920
	HVDC [km]			
	Substation Capacity [MVA]		12,299	12,369
Electricity Customers	Total		1,459,624	1,475,934
	out of which:	Non-households	119,346	121,041
		Eligible customers under national legislation	119,346	121,041
		Active eligible customers	1	1
Domestic market	Electricity supplied to active eligible customers [MWh]		876,000	910,540
	Share of total consumption [%]		6.96%	7.21%

Source: SERC

a. The electricity sector in Bosnia and Herzegovina

The electricity sector in Bosnia and Herzegovina is characterised by its fragmentation. The legal, administrative and regulatory frameworks for electricity production, distribution and supply are divided between the Federation of Bosnia and Herzegovina, Republika Srpska and Brčko District of Bosnia and Herzegovina. Despite the legal definition of the electricity market in Bosnia and Herzegovina as *"a single economic space"* the three structures operate in parallel. Despite the lack of legal barriers there are no customers switching between utilities and supply across utilities' borders is not taking place.

The Federal Ministry of Energy, Mining and Industry is responsible for the electricity sector of the Federation of Bosnia and Herzegovina. The Federation adopted a new Law on Electricity in 2013, substituting the one from 2002. The Federal

Electricity Regulatory Commission (FERC) is the authority for regulation of the electricity activities in that entity.

In Republika Srpska, the Ministry of Industry, Energy and Mining is responsible for the Law on Electricity (2008, amended in 2009 and 2011) and the Energy Law (2009). The regulatory authority in this entity is the Regulatory Commission for Energy of Republika Srpska (RERS).

The Assembly of Brčko District has adopted its own Electricity Law (2004, amended in 2011). The state-level regulatory authority SERC has been assigned as the responsible regulatory authority for the generation, distribution, supply, trade and consumption of electricity in Brčko District. The Electricity Law provides SERC with the power to overrule any provision in the Law contradictory to an SERC decision *"until the overall legal framework in Bosnia and Herzegovina is brought in full compliance with the EU acquis"*.

Electricity transmission, system operation and the international trade of electricity are governed at the state-level of Bosnia and Herzegovina. The legal framework on that level consists of the Law on Electricity Transmission, Regulator and System Operator (2002, amended in 2003, 2009 and 2011), the Law establishing an Electricity Transmission Company (2004, amended in 2009) and the Law establishing an Independent System Operator for the Transmission System (2004). The administrative competences on the state-level are allocated to the Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina (MoFTER) and the State Electricity Regulatory Commission (SERC).

Each within the boundaries of its own jurisdiction, the Governments of the entities and the Brčko District dominate with their ownership and management rights in the incumbent electricity companies. The two vertically integrated enterprises in the Federation of Bosnia and Herzegovina, *Elektroprivreda Bosne i Hercegovine (EP BiH)* and *Elektroprivreda Hrvatske Zajednice Herceg-Bosne (EP HZHB)* are 90% owned by the Federation. On their respective territories they are distribution system operators as well as factual monopolies for electricity generation and, one way or another, electricity supply to all customers. In Republika Srpska the holding *Elektroprivreda Republike Srpske (EP RS)* is 100% owned by the entity, and is the owner of 65% of the shares in all of its subsidiaries (5 for electricity generation and 5 for distribution and supply). Regardless of their corporate structure, in both entities the companies are operated as public enterprises. The enterprise *Komunalno Brčko (KB)* is a horizontally integrated communal utility, 100% owned by Brčko District, which operates the local distribution network and provides electricity supply to all customers in the District.

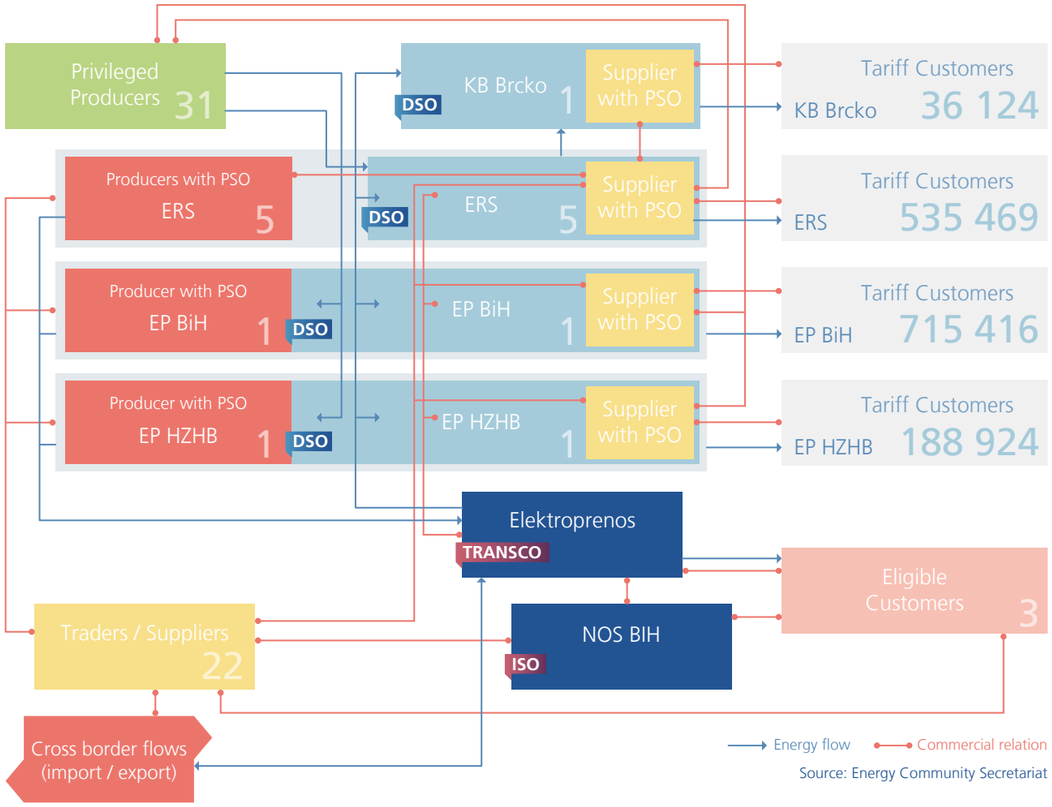
The transmission system is organised and operated at state-level. It is separated in two companies. The independent system operator *Nezavisni Operator Sistema BiH (NOS BiH)* is a non-profit enterprise established by a State law in 2004, responsible for the dispatching of generation, operation and balancing of the electricity system and allocation of the cross-border interconnection capacity. *NOS BiH* is not corporatized and operates as a state-level service provider financed through a regulated tariff approved by SERC. *NOS BiH* is owned by the two entities in the same ratio as the transmission company.

The shares of the transmission company *Elektroprenos* (also referred to as *Transco*) belong to the two entities – Federation of Bosnia and Herzegovina (58.90%) and Republika Srpska (41.10%). *Elektroprenos* owns the transmission network and bears the responsibility for the connection of generation and loads to the network, its maintenance and development, the transmission of electricity and metering. The transmission network of Bosnia and Herzegovina is interconnected with the neighbouring systems of Croatia, Serbia and Montenegro.

The transmission network performances indicate relatively stable operational safety and a low level of losses at 1.84% in 2012. These technical indicators, however, result mainly from the development of the network in the past. They cannot complement the fact that *Elektroprenos* persistently fails to perform most of its duties related to maintenance, development, planning and investment in the transmission infrastructure. Due to a protracted stalemate in the company's decision-making bodies, for a period of five years no significant activities in these areas have been undertaken. The standard transmission network performance indicators (SAIFI, SAIDI) are comparable with the neighbouring networks. However the lack of investment activities alone represents a serious shortcoming in the performance of the electricity sector and a possible threat to the future safety of the transmission system operation and electricity supply in Bosnia and Herzegovina.

The distribution networks on entity level are relatively well developed and maintained by each of the operators. Distribution losses in 2012 averaged 12.5%.

Bosnia and Herzegovina's Electricity Market Scheme



Source: Energy Community Secretariat

The electricity market in Bosnia and Herzegovina is not sufficiently developed. Its fragmentation along the entity borders follows the constitutional design of Bosnia and Herzegovina. The co-existence of several sets of legal frameworks and utilities could – unlike in other Contracting Parties – stimulate intra-domestic competition and market opening. However, despite the absence of legal or regulatory barriers for supplier switching, to date only one customer in Bosnia and Herzegovina is supplied by a supplier outside his own territory. With the production also monopolized by the utilities or their subsidiaries, and the cost of generation regulated at relatively low levels in all jurisdictions, the entry of any new supplier is hardly conceivable.

On the wholesale market, the only players are the three incumbent enterprises (all except *KB*) and 22 licensed traders – supplying one another with energy for covering their local demands, providing ancillary services, and providing energy for balancing the system and for export. Trading patterns generally encompass bilateral OTC agreements – no spot-trading mechanisms have been established. Energy for balancing is provided by the incumbent generators under prices regulated by SERC, only exceptionally is it provided through imports performed by *NOS BiH* (under the market clearing price). The only balance responsible parties in Bosnia and Herzegovina are the distribution companies or utilities, each responsible for the imbalances of its own customers. The ancillary services are regulated and respective costs are included in the costs of service. The energy for covering network losses is not purchased on the market but preferably provided by the local incumbent. The active traders eventually licensed for supply, with their limited service portfolios do not comply with the needs of all categories of eligible customers. No customer except one *(Aluminij – Mostar)* has switched away from its local incumbent utility.

The utility *Komunalno Brčko* is supplied with electricity from one of the neighbouring utilities, through annual full-supply regulated contracts with a preferable supplier from one of the two entities, including electricity supply for all customers in Brčko District, full balance responsibility and provision of network services. Since 2010 the supplier for Brčko District has been *EP RS*.

On the retail market, the largest importer and the only customer not supplied by its local incumbent was again the alu-

minium producer *Aluminij - Mostar* which covered 47.3% of its consumption from *HEP* (Croatia). This translates into a market share of 8.2% of the overall electricity supplied in Bosnia and Herzegovina. Transits amounted to 24% of the cross-border flows in Bosnia and Herzegovina in 2012.

Cross-border transmission capacity is allocated through daily, monthly and annual explicit auctions (for 50% of the capacity). *NOS BIH* participates in the SEE Coordinated Auction Office Project Company.

b. Progress made in 2012/2013

The opening of the market and, as a prerequisite, full implementation of the *acquis*, remains a primary challenge in the electricity sector of Bosnia and Herzegovina.

In November 2012 the EU-funded *"Project for the development of an electricity legislative framework compliant with the Third Package"* was established to reform the legal framework for all jurisdiction levels in Bosnia and Herzegovina. The project aims at bringing the legal framework at primary and regulatory level in full compliance with the Third Package, developing a market model for Bosnia and Herzegovina as well as providing technical assistance related to the required restructuring of the electricity sector and the regulatory environment.

Initially its pace of progress was very low. After months of administrative delays the project finally commenced its activities in the first months of 2013. The first drafts of new legal acts and initial aspects of the new market structure were developed in July and August 2013. They then entered into public discussions and review by the expert groups in Bosnia and Herzegovina established within the project, and were consulted with the Secretariat on the aspects of their compliance with the *acquis*.

The activities are currently scheduled until mid-November 2013, when it is expected that the legal acts will be submitted to the political and legislative authorities in Bosnia and Herzegovina for adoption.

In the Federation of Bosnia and Herzegovina, following three years of preparation, the new Law on Electricity has been adopted in July and made publicly available in August 2013. The Law is expected to fill the gaps and deficiencies of the Electricity Law of 2002. Most of the relevant provisions of the Second Package are transposed significantly improved. Some areas however, such as public service obligation, unbundling and supply of eligible customers, still fall short of compliance.

In terms of the regulatory activities, the state-level SERC adopted amendments to its Rules on the Connection to the Transmission network. The amendments improve the conditions for the connection of new wind farms. SERC also adopted several acts aimed to facilitate the regulatory framework in Brčko District. This includes improved Licensing Rules for Generation, Distribution and Supply Activities in Brčko District and simplified tariff procedures for access to the network and regulated cost of supply.

Furthermore, SERC approved the Indicative Development Plan for Generation in Bosnia and Herzegovina for the period 2013 – 2022 as developed by the system operator *NOS BiH*. The plan aims, *inter alia*, to accommodate the *ENTSO-E* requirements for the development of its new bi-annual update of the Ten-Year Network Development Plan (TYNDP), which is an obligation of *NOS BiH* to this association. It should be noted that the development of new generation capacity in Bosnia and Herzegovina in the reporting period did not reach anything close to what was forecasted in the previous plans.

The Indicative Development Plan for Generation is also supposed to provide a basis for the new domestic Network Development Plan which is developed by *NOS BiH* and approved by SERC. It has not been updated for the past five years as a consequence of the management stalemate in *Elektroprenos*.

Maybe the most evident and frustrating token for Bosnia and Herzegovina's lack of structural reforms in its energy sector is the situation in *Elektroprenos*. Despite the strong involvement of the European Commission and the Secretariat, the past year did not bring any of the expected improvements in this domain. For the principle reason that two entities are unable to reach an agreement, *Elektroprenos* factually remains blocked and investment in the transmission system does not take place, even though significant financial reserves (retained earnings) exist in the company. During the reporting period, the discussion focused on whether *Transco* may distribute these reserves as dividends to its shareholders, the two entities. Regardless of this, the company needs to be urgently restructured, and the monitoring and enforcement competences as well as independence of SERC need to be strengthened. The Secretariat is currently preparing enforcement action.

On the other hand, the regulatory authorities in charge (FERC, RERS and SERC – for Brčko District) managed to implement an important building block for further market opening in de-regulating electricity prices for customers connected to the high voltage (110 kV) network – including the ones connected to the transmission network. This follows up on the adoption of the Rules for Electricity Supply of Eligible Customers, adopted and applied in all three jurisdictions since 2011.

All three regulator authorities also took decisions for the costs of supply and price components for their respective companies providing last resort supply. Further to that, in Republika Srpska a differentiation was introduced between the fully-regulated tariffs for households and small and medium enterprises and prices for medium and low voltage customers which are supplied by the public supplier at prices proposed by them and approved by RERS. However, these improvements do not change the fact that all except one customer are still supplied by their incumbent provider.

c. State of compliance

1. **Authorization procedures** for new generation capacity and rules for **tendering** are partially addressed in the primary legislation. They are not compliant with Articles 6 and 7 of Directive 2003/54/EC.

In Republika Srpska the authorisation for the construction of new generation capacities is provided by RERS. There are no provisions for tendering of new capacity in the Electricity Law.

The new Law on Electricity of 2013 improves treatment of new generation capacity authorisation in the Federation of Bosnia and Herzegovina. The Federal Government, on proposal from the Ministry, is expected to adopt a regulation on this matter. There is still no single independent authority and the permits are issued by the Federal Ministry, in most cases subject to approval by the Government. Tendering for new capacity is treated in a similar manner.

In practical terms the procedures applied by the regulators in both entities are assessed by the industry as lengthy, and require various certificates, hearings and consultations thus introducing significant delays.

In Brčko District there are no rules for new generation capacity authorisation in place.

2. The legal **unbundling** of the transmission system operation from generation and supply has been applied since 2004, through the establishment of the two companies *NOS BIH* and *Elektroprenos*. In *Elektroprenos*, however, financial statements and audit reports have not been adopted for five years due to the blocked decision-making structures, which is contrary to Article 19 of Directive 2003/54/EC.

The (new) Law on Electricity in Federation of Bosnia and Herzegovina fails to provide for legal unbundling of the distribution system operation and stipulates only conditions for mandatory unbundling of accounts and functions. The utilities (*EP BiH* and *EP HZHB*) are still vertically integrated companies. Account unbundling is required by the Electricity Law and is applied in practice. Functional unbundling is questionable and there is no compliance program in place as required by Article 15 of Directive 2003/54/EC.

The legal unbundling in Republika Srpska is more advanced due to the unbundled generation and supply activities, but still insufficient when it comes to unbundling of the distribution system operation. The five distribution and supply subsidiaries of *EP RS* are not legally unbundled and no compliance program is in place, although restrictions on the supply of eligible customers by the distribution system operators are provided by the Law. Accounting unbundling is enforced by the Law and applied in all subsidiaries responsible for the distribution of electricity.

Finally, *Komunalno Brčko* also performs both electricity distribution and supply in Brčko District, The communal utility is horizontally integrated and no compliance program is in place. Accounting unbundling of the distribution activities is required by the Law and has been applied.

3. **Third party access** to the transmission network is provided for in the state-level legislation in a manner which is not in full compliance with Article 20 of Directive 2003/54/EC. The obligation for *Elektroprenos* to provide connection to the network, and hence access to the market, to all customers depends on the operational capacity of the company to invest in new infrastructure, which is currently highly problematic. Adequate transparency in the treatment of revenues from transmission services or from the management of congestions as required by Regulation (EC) 1228/2003 is still missing. Provisions for exemptions to third party access are also missing.

The State Law tasks SERC to set transmission **network tariffs**. SERC has adopted a methodology and approved and published the cost of services for *Elektroprenos* and *NOS BIH*, balancing costs and costs of ancillary services (provided by *NOS BIH*). The latter includes reserve capacity for secondary and tertiary regulation, reactive power and covering the losses in transmission.

Both entities and Brčko District provide for third party access in their legislation, and General Rules for Electricity Supply cover connection to the distribution networks. The responsible regulatory authorities have approved and published distribution tariffs in each jurisdiction.

4. In terms of **eligibility** SERC's Decision on the Scope, Conditions and Timing for Opening of the Electricity Market in Bosnia and Herzegovina of 2009 brought the eligibility calendar into formal compliance with the *acquis*.

The (new) Law on Electricity in the Federation of Bosnia and Herzegovina of 2013 follows suit. The rules adopted by FERC in 2012 have already set a deadline for eligibility for each customer category according to voltage level. Accordingly, customers connected on 110 kV have been eligible as of 1 June 2012, customers connected on 35 kV as of 1 January 2013, customers connected on 10 kV as of 1 January 2014 and all other customers as of 1 January 2015. Eligible customers in the Federation of Bosnia and Herzegovina can choose their supplier from among all licensed suppliers in Bosnia and Herzegovina.

The Law on Electricity in Republika Srpska sets the eligibility threshold at an annual consumption of 10 GWh but grants RERS the right to alter the threshold. RERS ensured compliance in 2011 by adopting Rules on the Eligible Customer which grants eligibility to all customers except households

starting 1 January 2008 and to all customers including households starting 1 January 2015. Eligible customers can contract their supplier from among all licensed suppliers in Bosnia and Herzegovina.

According to SERC's Decision on Electricity Supply to Eligible Customers in Brčko District of 2012 all customers in Brčko District are considered eligible except households, which will acquire this status as of 1 January 2015.

5. **Price regulation** is a common feature applied to all activities categorized as being of public interest in each jurisdiction. This includes the costs of generation (in the Federation only) of the generators tasked to supply captive customers, and the supply prices for all captive customers. All three regulatory authorities have adopted methodologies and approved prices for the regulated (i.e. public) supply, as well as regulated prices for the electricity produced by the incumbent generation companies. With this there are no incentives for supplier switching.

In the Federation of Bosnia and Herzegovina, eligible customers who fail to switch may be supplied by a public supplier – the respective incumbent utility – under an annual supply contract and prices approved by FERC. After 2015, only households and "small customers" (enterprises with less than 50 employees and annual revenues of less than BAM 2 million) shall retain the right to be supplied by the public supplier at regulated prices without any time limitation in the context of universal service. In addition, in the case of failure of the contracted supplier all eligible customers will have the option of a last-resort supply by a reserve supplier for a period no longer than 60 days. The price of such service shall be determined on the basis of incurred costs and verified by FERC.

Republika Srpska is also establishing a public supplier to supply those eligible customers who failed to switch before 2015. Until then, the incumbent suppliers, the subsidiaries of *EP RS*, have been appointed public suppliers. After 2015, the public supplier will have the obligation to supply, without time limitation, those households and "small customers" (enterprises with less than 50 employees and annual revenues not exceeding EUR 10 million) that are not willing to contract their supply individually, as well as – for a period of 60 days and at 20% higher prices – those eligible customers whose supplier fails to perform. The costs for services provided by the public supplier are approved by RERS.

In Brčko District, an "allocated supplier" – available for a period of 90 days to eligible customers who failed to switch – and a "reserve supplier" – in charge of providing 30 days of supply to those customers whose supplier of choice has failed to perform - was established in 2012. The prices for both functions are regulated by SERC. Both functions are attributed to the incumbent utility *Komunalno Brčko*.

The price regulation conditions in all three jurisdictions are not fully compliant with the definition of public service according to Article 3 of Directive 2003/54/EC. Notwithstanding the applicability of switching support mechanisms (such as public suppliers or reserve suppliers), such services should be available to restricted categories of customers rather than applied under the umbrella of public interest which is interpreted in a broad and general manner. The prices of such exceptional services should support the economic interest of customers for switching (back) to regular, independent suppliers in the market.

Even though FERC and RERS have applied phasing out periods before 2015, they should provide a periodical review on whether or not the end-users' price regulation has become disproportional. It should also address whether price regulation goes beyond what is necessary for achieving the objective for which it has been introduced, taking into account the goal of developing the competition in the wholesale electricity market.

6. **Capacity allocation** and congestion management principles are stipulated by the Market Rules and the Grid Code. According to the Rules for Allocation of Rights for Use of Cross-Border Transmission Capacities, developed by *NOS BIH* and approved by SERC in 2010, yearly, monthly and daily explicit auctions are regularly performed on all borders. The auctions are applied without coordination with the neighbouring operators and optimisation (netting out) of the flows is not applicable, which is short of compliance with the Congestion Management Guidelines.

Participation in the auctions is only possible for the holders of a license for international electricity trade issued by SERC. Transfer of capacity rights is possible except in the case of daily auctions. "Use-it-or-lose-it" is applied for the unused capacity which is made available for intra-day allocations on a "first-come-first-served" basis. Priority capacity rights are granted to *NOS BiH* for imports of balancing energy when required.

Congestion revenues are attributed to the transmission company *Elektroprenos* which is supposed to define the allocation of these funds at the beginning of each year and to submit this information to SERC for approval. This procedure has not been obeyed until recently due to the management stalemate in the company. The situation is still contrary to Article 6 of Regulation (EC) 1228/2003.

7. As provided by the Grid Code, the electricity used for **balancing** is supplied by the incumbent generators under regulated prices subject to approval by SERC. *NOS BiH* may purchase balancing energy from abroad if required, under the clearing price of the market where the energy was purchased. Under this fully regulated balancing regime, no market-based balancing conditions are provided.

Currently, the only balance-responsible parties are the three incumbent utilities, each being responsible for the imbalance settlement of its own customers, as well as *EP RS* for Brčko District. The only consumer *(Aluminij Mostar)* supplied outside the regulated domain falls under the balancing responsibility of its local utility *EP HZHB*. The costs of balancing are transferred to the customers as a component of the regulated cost of supply. New rules for electricity supply of eligible customers, brought in in all three jurisdictions foresee that the imbalance settlement of each individual eligible customer is resolved in an individual protocol with its balance responsible party, and administered by *NOS BIH*.

The legal framework for balancing is mainly in compliance with the provisions of Article 11 of Directive 2003/54/EC, except for the provisions related to the use of market-based procedures and unbundled, cost-reflective prices. In practice, the applied mechanisms have resulted in a strictly fragmented and overregulated environment in which a competitive balancing market can hardly be established.

8. At state-level, **transparency** requirements include obligations to *NOS BiH* and *Elektroprenos* for the publication and availability of information within the scope of their activities (balancing, ancillary services, capacity allocation and congestion management, network operation etc). The Laws however do not fully comply with Regulation (EC) 1228/2003 in particular with regards to enforcement, monitoring and imposing penalties. SERC needs to be more active in monitoring transparency in transmission system operation. Deficiencies still exist, most notably in the conditions for access to the data provided by *Elektroprenos*.

The entities have addressed various aspects of transparency through provisions in their laws. These acts fall however short of compliance in several areas, typically relating to the obligations of the utilities for the submission of information to their customers, for example in the context of the application of universal service and supply of households, as required by Directive 2003/54/EC and its Annex 1.

In practical terms the utilities are effective in providing or publishing the data required by *NOS BIH* for demand forecasts, balancing and ancillary services, and for trading arrangements. Crucial information to be provided to their customers, including data on the origin of electricity, fuel mix and environmental impact, conditions of supply and rights for switching, is still missing.

9. **Customer protection** is addressed only in the legislative framework of the entities.

The new Law on Electricity in the Federation of Bosnia and Herzegovina of 2013 significantly improves the treatment of customer protection. However customer protection is somewhat asymmetrical with no adequate protection of customers outside the public service. Provisions on mandatory contractual data are still missing.

The Energy Law of Republika Srpska also suffers from a somewhat disproportionate treatment of public interest, which is generally not in compliance. The eligible customers remain less protected. No provisions for universal service are specifically addressed in the Law. Customer protection is well addressed in the provisions for conditions of electricity supply and network access.

According to the Law on Electricity in Brčko District the public service relates only to the supply of captive customers (households), with no compliant provisions for customer support. SERC rules on General Conditions for Electricity Supply and the Distribution Code of Brčko District provide transparency and protection of customers' right to connection.

Implementation of the Third Energy Package

The implementation of the Third Package in Bosnia and Herzegovina has commenced through the ongoing EU Project for legal compliance. The process will require a new approach to several structural elements in the electricity sector and the corresponding laws and regulations, mainly related to unbundling, protection of vulnerable customers and the tasks, competences and independence of the regulatory authorities.

UNBUNDLING

The corporate structure of all operators and dominant incumbent companies in Bosnia and Herzegovina needs reconsideration. The current structure for transmission operation applied at state-level, the State enterprise *NOS BiH* and the entity owned company *Elektroprenos*, still does not comply with the *acquis* and requires restructuring in line with one of the options provided by Directive 2009/72/EC.

REGULATORY AUTHORITY

The independence, scope of competences and mutual relations of SERC, FERC and RERS needs to be reconsidered and redefined along the requirements of Directive 2009/72/EC. New powers are required in all jurisdictions including provisions for independent appeal. The objective of SERC to promote and support the development of a country-wide competitive market needs to be enforced, along with its increased powers to investigate, request information and impose penalties. The delineation of competences between SERC and the entity regulators remains a challenge.

CUSTOMER PROTECTION

The notion of vulnerable customers is currently not adequately treated in any jurisdiction, in particular with respect to the conditions required by Article 3(7) of Directive 2009/72/EC. Once defined, these customers should be protected against disconnection in critical conditions and be supported by schemes outside the regulated pricing system.

d. Conclusions and Priorities

Overall, the legal framework in Bosnia and Herzegovina suffers from fundamental shortcomings which first and foremost result from the inappropriate design and the lack of will for cooperation in the companies tasked with transmission system operation. They need to be thoroughly reconfigured in order to comply with the *acquis*. SERC cannot resolve the shortfalls in the sector on its own. Its position and attitude needs also to be changed, upgraded and re-enforced by a new Law.

Among the most urgent issues in the electricity sector is the operational state of *Elektroprenos*. The management and investment deadlock prevents implementation of the instruments for planning and development of the network – which is in direct breach of Directive 2005/89/EC. That SERC has not managed to resolve the problem which indicates a lack of independence and powers. Despite the significant amount of accumulated funds, the lack of effective management prevents the execution of the required investments. Dealing with these issues is not only a matter of compliance but also of practical urgency.

The project for legal compliance with the Third Energy Package is an exceptional opportunity for Bosnia and Herzegovina to advance in the implementation of the Treaty. It needs sustained cooperation from all stakeholders, and coordination with the Energy Community and EU. Implementation and enforcement require follow-up activities to be, planned and further supported. Implementation steps for the Third Package must improve the structural setup of companies, the regulatory environment, the market model and trading instruments, the social support of vulnerable customers etc.

The organisation and operation of the electricity market in Bosnia and Herzegovina is under-developed – the wholesale arrangements are set mainly by and between the incumbent utilities and the traders, supply is divided along utility boundaries. A new structural organisation of the wholesale market is required. The establishment of spot-trading platforms such as a day-ahead market and a balancing market is another priority. SERC needs to improve its market monitoring skills, powers and practice.

Deregulation in the supply started at regulatory level in the entities and Brčko District – however the process failed to provide tangible results. Additional support mechanisms are needed in order to enable the entry of "independent" suppliers in the retail market. They include ensuring the full transfer of costs in the end-user's regulated prices, deregulation of the incumbent generators' production and implementation of effective, coordinated and compliant instruments for customer protection including measures for support of socially vulnerable customers.

3.1.4 CROATIA

Electricity

			2011	2012
Electricty Production [GWh]			9,999	9,897
Net Imports [GWh]			14,012	13,191
Net Exports [GWh]			6,308	5,567
Total Electricity supplied [GWh]			17,703	17,521
Gross Electricity Consumption [GWh]			17.668	17.491
Losses in Transmission [GWh]			514	462
Losses in Transmission [%]			2.20%	2.00%
Losses in Distribution [GWh]			1,325	1,403
Losses in Distribution [%]			8.20%	8.70%
Consumption of energy sector [GWh]			227	273
Final consumption of electricity [GWh]			15,602	15,353
Consumption Structure [GWh]	Industrial, transport, services and other non-residential sectors		9,062	8,867
	Households (Residential Customers)		6,540.10	6,486.50
Net maximum electrical capacity of power plants [MW]			3,925.04	3,982.70
Net maximum electrical capacity of power plants [MW]	Coal-fired		297	297
	out of which:	multi -fired	0	0
	Gas-fired		1,052	1,052
	out of which:	multi -fired	892	892
	Oil-fired		303	303
	Nuclear		0	0
	Hydro		2,138	2,138
	out of which:	Small hydro	32	32
		Pumped storage	276	276
	Other Renewables		135.04	192.70
	out of which:	Wind	125	175
Horizontal Transmission Network [km]	380 kV or more [km]		1,247	1,247
	220 kV [km]		1,210	1,210
	110 kV [km]		4.,782	4,782
	HVDC [km]		0	0
	Substation Capacity [MVA]		11,120	11,181
Electricity Customers	Total		2,327,647	2,353,048
	out of which:	Non-households	215,643	215,427
		Eligible customers under national legislation	2,327,647	2,353,048
		Active eligible customers	124,442	119,947
Domestic market	Electricity supplied to active eligible customers [MWh]		7,551,700	7,491,200
	Share of total consumption [%]		42.74%	42.83%

Source: HERA

a. The electricity sector in Croatia

The electricity sector in Croatia is governed by a set of laws that have been updated during the last 12 months. The laws have been adjusted with the aim of full implementation of the Third Package. The newly developed legal framework initiated a process of reforms, starting from updating secondary legislation, to structural and functional changes. The Ministry of Economy of Croatia is the authority bearing the responsibility for legislative and policy matter in the domain of energy.

The key legislation relevant for the electricity sector consists of the Energy Act, the Act on Regulation of Energy Activities and the Electricity Market Act.

The Energy Act, adopted in October 2012, defines the core

functions in the energy sector, in particular security of supply, efficiency in production and consumption, design and implementation of energy policies, and key features related to performing energy activities in general.

The Act on Regulation of Energy Activities from October 2012 defines the setup and implementation of the system for regulation of energy activities with the aim to fully transpose EU *acquis* in this respect.

The Electricity Market Act, adopted in February 2013, defines rules and measures for safe and reliable generation, transmission, distribution and supply of electricity, trade and organisation of the market as an integral part of the EU market. It also defines rules relating to customer protection, public service, access to the network and cross border flows.

The Croatian Energy Regulatory Agency "Hrvatska Energetska Regulatorna Agencija" (HERA) was established in 2004 and operates in accordance with the Act on the Regulation of Energy Activities. HERA is authorized, among other things, to issue licenses for generation, transmission, distribution, trade and supply of electricity, to monitor and supervise operation of licensed undertakings, including cross border trading, as well as to bring methodologies for setting tariffs and to set tariffs for regulated activities.

The Croatian energy markets operator *HROTE* was established in 2005 as a limited liability company. *HROTE* performs the activities of organising the electricity and gas market as a public service under the supervision of HERA. In addition, *HROTE* plays a key role in the support mechanisms for incentivising the production of electricity from renewable sources and cogeneration, and the production of bio-fuels for transport.

The concern *HEP Group* is a national electricity company engaged in electricity production, transmission and distribution, electricity supply and trade as well as in many other supporting activities, including energy services, but also in other energy sectors such as heat and natural gas. *HEP* is the sole holder of the assets and parent company of several energy utilities with horizontally and vertically integrated activities in the energy sector. *HEP Group* includes a company that performs transmission system operation. The new Electricity Market Act imposed the obligation of further unbundling of the TSO from the vertically integrated utility as required by Directive 2009/72/EC. In July 2013 *HEP-Operator Prijenosnog Sustava (HEP-OPS)* was renamed Croatian Transmission System Operator Ltd (*Hrvatski operator prijenosnog sustava* or *HOPS*). At the same time, the equity capital of *HOPS* was increased and founding acts amended to ensure functional unbundling from the rest of *HEP Group*, including a different visual identity.

Electricity distribution and public supply is performed by the distribution system operator *HEP-Operator Distribucijskog Sustava (HEP-ODS)*. *HEP- ODS* also provides the public service of supply electricity to customers in the system of public service.

HEP-Opskrba holds the license for supply of electricity only to eligible final customers.

Electricity generation is concentrated in a separate company, *HEP-Proizvodnja*, and wholesale electricity trade is executed by *HEP-Trgovina*, also part of *HEP Group*.

HERA has so far issued 24 licenses for generation of electricity, the most significant two being *HEP-Proizvodnja* and the independent producer (TPP) *Plomin*. The annual production and consumption in Croatia are declining, but peak demand remains at high levels.

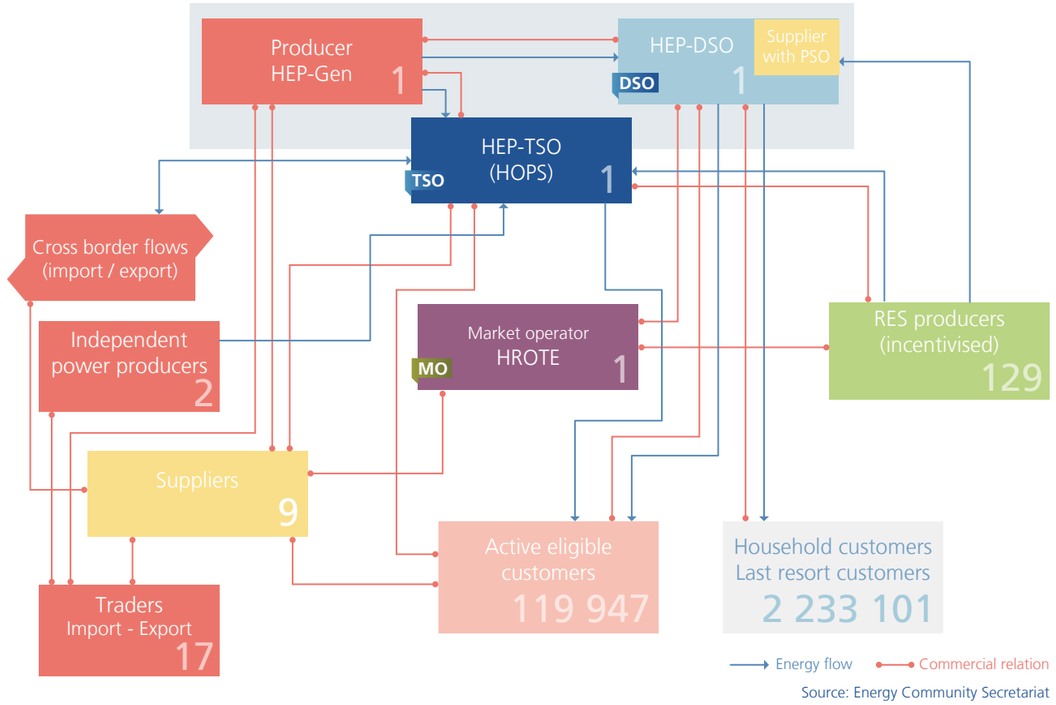
In accordance with the Allocation Rules, approved by HERA, *HOPS* as a transmission system operator and a cross-border capacity allocation auction office carries allocation of the Croatian part of the available transmission capacity (ATC) on the border with Bosnia and Herzegovina and with Serbia. Yearly, monthly and daily auctions and intraday allocation of the Croatian part of ATC on the border with Bosnia and Herzegovina are carried out, and yearly, monthly and daily auctions of the Croatian part of ATC on the border with Serbia. As regards the border with Slovenia, the Slovenian *ELES* auction office carries out intra-day allocation for both directions. In addition, the Central European Electricity Co-ordinated Auction Office (CEE-CAO) carries out yearly, monthly and daily coordinated auctions on the borders with Hungary and Slovenia.

Activities in the electricity market include trade with electricity and supply of electricity to final customers. Licenses are issued by HERA and currently 11 entities hold a trading license and 14 entities hold a supply license.

HEP Group sold 15.4 TWh to customers in Croatia. *HEP-Opskrba* as a supplier of eligible customers is exposed to competition. The share of *HEP-Opskrba* electricity sales to eligible customers in 2012 was 7.3 TWh, out of a total 7.5 TWh supplied to eligible customers, making *HEP-Opskrba* the single strongest supplier in the competitive market in 2012.

HEP–ODS as a default supplier in 2012 sold 7.9 TWh or 51% of the final consumption of electricity to final customers in the public service system, whereas 42% of the total final consumption in Croatia was supplied to households under regulated tariffs.

Croatia's Electricity Market Scheme



Source: Energy Community Secretariat

b. Progress made in 2012/2013

The main legislative framework for the electricity sector in Croatia has been subject to significant changes during the last 12 months. This was a fine tuning of the legislation to meet the requirements of the EU *acquis* including the Third Package, for the accession of Croatia to the EU on 1 July 2013.

Three relevant system laws were adopted during the reporting period, namely the Energy Act and Energy Activities Regulation Act in October 2012 with a 6 months period for implementation, and the Energy Market Act in 2013, with an implementation period of 12 months. Full implementation of the Third Package, including secondary legislation and practical application of the new rules should be accomplished by April 2014.

During the transitory period the rules and regulations developed under the previous laws will be applied.

In the regulatory area, HERA is in the process of developing updated General Conditions for Supply that will re-define the terms and conditions for use of the distribution network and for supply of electricity, a new methodology to determine connection charges and updated supplier switching rules. These acts were planned for adoption in July 2013, but finalisation is still pending.

In the reporting period HERA developed new methodologies for setting tariffs for transmission of electricity, for distribution of electricity, as well as for setting tariffs for supply of electricity as a universal service and for supply of electricity as a "default service". These documents are in the process of public consultation.

The updated procedure for unbundled accounting in integrated or related undertakings is under development and should have been adopted 6 months after the adoption of the Energy Act, i.e. in April 2013. Instead, a public hearing was concluded in June 2013 and adoption is expected in the course of 2013.

Croatian legislation opted for the Independent Transmission Operator (ITO) model for the transmission system. The new undertaking has a separate legal identity from *HEP Group*, including a distinguished visual identity. The transmission network operator *HOPS* was registered under its new name instead of *HEP-OPS* as the owner of transmission assets and functionally unbundled from the rest of *HEP Group*. Documents for certification should have been submitted to HERA by 1 July 2013, but activities are progressing at a slower pace than planned.

In June 2013 the electricity market in Croatia experienced a significant change, when two new entrants in the retail

market offering electricity to customers connected to the distribution network. The response of small customers and households at first seemed surprisingly high, although for the time being the actual switching rate is not yet determined. The outcome of such entry of competition into the formerly extremely concentrated market, forcing the incumbent utility to find its new place in the competitive environment, is yet to be seen.

This development is even more significant having in mind that the price for household customers remained fully regulated, including generation price, until the implementation of the new set of energy laws. The transitory period for implementation of the Energy Act and Energy Regulation Act is 6 months, meaning that the framework to implement these two laws should have been completed by April 2013, which obviously has not been the case. The deadline for implementation of the Energy Market Act is April 2014.

c. State of compliance

With the new legislation in place and with the deadline provided for its implementation the energy market in Croatia in the reporting period is functioning in a transitory mode. It is relying on the secondary legislation that was developed under the previous laws, and with continuous changes and adaptations, as the supply conditions and the market environment evolve.

1. According to the (new) Energy Market Act, the Ministry of Economy is responsible for issuing **authorisations** for the construction of new generation capacities including renewable energy and high efficient cogeneration capacities. The authorisation procedure has been developed by the Ministry and approved by the Croatian Government.

The **tendering** procedure that is also envisaged in the new Energy Act does not deviate from the previous practice in this respect and the whole setup is compliant with the *acquis*.

2. The Energy Market Act imposes strict requirements for **unbundling**. Practical implementation is yet to be accomplished. Having in mind the ownership structure of *HEP Group*, unbundling of the transmission operator is envisaged in the form of an ITO model and certification procedure is under preparation.

Croatia had previously legally unbundled all market-related activities from network operation in its electricity sector. That is, with the exception of the distribution system operator who also acts as a supplier of electricity for the households and small customers that do not switch their supplier and can be supplied at regulated and published prices, so called "public supplier for tariff customers".

HEP Group published a compliance programme to ensure that its activities are conducted on a non-discriminatory, objective and transparent basis for all market participants. There is no information about HERA´s oversight during 2010 and 2011 related to monitoring the compliance with the non-discriminatory conduct of the network companies.

The Decision on the manner and procedure for the unbundling of accounts of energy undertakings is envisaged to further strengthen non-discrimination and the prevention of cross-subsidies within integrated or related undertakings. The public consultations are concluded and adoption is expected soon.

3. **Third party access** is well addressed in the laws, including the access to interconnection capacities. Monitoring of third party access by the regulator still has to be enforced.

HEP-OPS signed an agreement with *HROTE* and the Slovenian counterparts *ELES* and *BSP* to implement price market coupling with the establishment of a Croatian power exchange. All these arrangements have been resumed and are now carried out by *HOPS*.

4. **Eligibility** is well transposed. According to the law, all customers are eligible and free to choose their supplier.

Currently, universal service is provided under the terms and conditions, prescribed by the Government. The supplier in charge is the incumbent supplier of tariff customers, until the appointment of a supplier with a public service obligation. Supplier(s) with a public service obligation shall provide universal service to household customers who did not switch to competitive supply or, in the case defined in the Energy Market Act, resume the role of default supplier. The Government decision in this respect is still pending.

In practice, **supplier switching** rules are yet to be developed and the deadline of April 2013 has already expired. HERA is in the process of preparing a rule which should ensure simple procedure – targeting it to take no longer than 3 weeks for a customer to change its supplier.

5. Currently **price regulation** extends to the price of the generation of electricity for supply of tariff customers, transmission of electricity, distribution of electricity and supply of tariff customers. The Government adopted decisions related to prices of generation, transmission, distribution and supply with the exception of eligible customers. The Government also fixed charges for the functioning of the market operator.

According to the new energy laws, only the price of electricity supplied under public service obligation is to be regulated and set by HERA.

HERA is developing new methodologies for transmission and distribution and for other regulated activities. Only after these methodologies are adopted, will HERA be able to fully assume its competences to fix tariffs, as defined in the laws and the *acquis*.

Activities of transmission, distribution and organisation of the electricity market are defined as **public services**. Energy activities generation, supply and trade are defined as market activities, except when supply is performed as public soucre obligation.

The scope of supply as public service obligation extends to providing universal service to households and supply of electricity as a default service. The Government, upon the proposal of the Ministry of Economy and after consultation with HERA, determines which undertakings will have public service obligations, supplying electricity as a guaranteed (default) service. The prices of electricity supplied as a universal service will remain regulated. Electricity supplied as a default service to eligible customers, except households, whose selected supplier failed to provide the service will also be defined by HERA.

The Act on Regulation of Energy Activities requires HERA to develop new methodologies for setting regulated tariffs for the provider of public services in a transparent manner.

The general framework related to price regulation is compliant with the *acquis*, but the implementation is lagging behind the schedule and HERA has not taken over price regulation as required. Effective tariff rates are determined by the Government. Price regulation is still comprehensive and exceeds the objective needs to ensure non-discriminatory treatment and the provision of public service.

6. **Interconnection capacities allocation** is applied in accordance with the rules approved by HERA and are in compliance with the Regulation and the Guidelines. *HEP-OPS* is working on improving the ways of further integration with neighbouring electricity systems, including models for market coupling.

In practice interconnection capacities with Bosnia and Herzegovina and Serbia are allocated with a 50:50 split.

At the border between Croatia and Slovenia for both directions intra-day allocation of cross-border transmission capacities of total ATC will be held by *ELES*.

The Croatian TSO participates in the Coordinated Auction Offices from SEE and CEE. *HPS* continues its active participation in *ENTSO-E* activities (as stipulated in Regulation (EC) 714/2009).

7. **Balancing Rules** have been issued by *HEP-OPS* in 2008 and amended several times since, in order to improve alignment with the electricity legal framework of Croatia. The latest update was made in 2011.

HOPS performs balancing in accordance with the existing balancing rules. *HEP-OPS* is responsible for procuring ancillary services. New legislation requires *HROTE* to procure balancing energy and to develop new Balancing Rules. The deadline is April 2014, however the activities have already been started by HERA in consultation with *HROTE* and *HOPS*.

Part of the challenge is to define the methods for calculation of imbalances for balance responsible parties which is currently being re-designed by *HROTE* and network operators under the guidance of HERA. HERA developed methodology to determine prices for the calculation of balancing energy to parties responsible for imbalances. The process of public consultations will be concluded in August 2013 with the current process of building a framework for the calculation and settlement of imbalances.

8. *HOPS* publishes extensive information for access to the networks including interconnections. However, **transparency** needs to be further completed to be in compliance with the *acquis* requirements.

Ten-Year Development Plans of Network Operators, both transmission and distribution, approved by HERA, are publicly available.

Network operators have made information available relating to the terms and conditions for connection to the network as well as terms and conditions for access and use of network, including respective charges and tariffs.

Public service providers, performing supply activities during the transitional period, until full implementation of the legislative framework developed in accordance with the Third Package, have also made terms and conditions available, including applicable tariffs for their services. However, all these terms and conditions, including prices and tariffs, were defined before the adoption of the new set of laws.

9. **Protection of customers** is strengthened with the new laws, particularly in terms of ensuring quality of service and protection of vulnerable customers.

The Energy Act defines two categories of customers under the special protection scheme: protected customer and vulnerable customer. The protected customer is entitled to be supplied with electricity by the default supplier in the case of a crisis. In such a case, the default supplier has a priority to purchase from the domestic generators.

Vulnerable customer is a residential customer entitled to enjoy a supply of electricity under special conditions because of his social status and/or health conditions.

As elaborated above, the Energy Market Act defines the scope of public service obligations imposed on undertakings andthe universal service provided to household customers.

Currently *HEP – ODS* holds a license for the supply of tariff customers which falls within the obligation to provide public service, the service that should have been abolished so far and replaced with the imposition of public soucre obligations to provide universal service. The appointment of a default supplier is also still pending.

Implementation of the Third Energy Package

The primary legislation in Croatia introduced in 2012 and 2013 adequately transposed key provisions of the Third Package. However, the practical implementation has not followed at the pace defined in the laws. Therefore the market infrastructure is still in the process of development.

UNBUNDLING

Unbundling requirements are fully transposed, allowing HERA to fulfil its competences, from certification to effective unbundling and enforcement. It is yet to be implemented. The most critical issue will be to perform and ensure regulatory oversight on unbundling in accordance with the law.

REGULATORY AUTHORITY

HERA is equipped with the appropriate regulatory powers according to the Third Energy Package, including sufficient level of independence from the Government. The key issue remains practical implementation.

CUSTOMER PROTECTION

Customer protection in the primary legislation is also properly defined. Implementation is critical though, particularly as regards development of necessary secondary legislation, such as procedures and methodologies.

d. Conclusions and Priorities

Croatian institutions have only one priority – to implement the Energy Act, the Act on Regulation of Energy Activities and the Energy Market Act without further procrastination.

Several deadlines from these acts have already expired, so HERA, *HROTE* and *HOPS* should make up for the lost time.

3.1.5 KOSOVO*

Electricity

			2011	2012
Electricty Production [GWh]			5,340	5,480
Net Imports [GWh]			816	625
Net Exports [GWh]			371	473
Total Electricity supplied [GWh]			5,785	5,632
Gross Electricity Consumption [GWh]			5,758	5,634
Losses in Transmission [GWh]			115	109
Losses in Transmission [%]			1.37%	1.32%
Losses in Distribution [GWh]			1,786	1,750
Losses in Distribution [%]			38.15%	36.69%
Consumption of energy sector [GWh]			287	283
Final consumption of electricity [GWh]			3,570	3,492
Consumption Structure [GWh]	Industrial, transport, services and other non-residential sectors		1,562	1,408
	Households (Residential Customers)		2,008	2,084
Net maximum electrical capacity of power plants [MW]			1,204.35	1,204.35
Net maximum electrical capacity of power plants [MW]	Coal-fired		1,171.00	1,171.00
	out of which:	multi -fired		
	Gas-fired			
	out of which:	multi -fired		
	Oil-fired			
	Nuclear			
	Hydro		32	32
	out of which:	Small hydro	10.07	10.07
		Pumped storage		
	Other Renewables		1.35	1.35
	out of which:	Wind	1.35	1.35
Horizontal Transmission Network [km]	380 kV or more [km]		188	188
	220 kV [km]		232	232
	110 kV [km]		765	791
	HVDC [km]			
	Substation Capacity [MVA]		3,320	5,470
Electricity Customers	Total		442,128	458,323
	out of which:	Non-households	68,009	70,023
		Eligible customers under national legislation	68,009	70,023
		Active eligible customers	0	0
Domestic market	Electricity supplied to active eligible customers [MWh]		0	0
	Share of total consumption [%]		0%	0%

Source: ERO

a. The electricity sector in Kosovo*

The legal framework for the electricity sector of Kosovo* consists of a set of three Laws from 2010, the Law on Energy, the Law on Electricity and the Law on the Energy Regulator. The authority responsible for energy legislation and policy is the Ministry of Economic Development. The Energy Regulatory Office (ERO) is responsible for electricity, gas and district heating.

Electricity production in Kosovo* is mainly based on lignite thermal power plants which represent 97% of installed capacities and are operated by the public utility *Kosovo Energy Corporation (KEK)* as a dominant producer. The remaining 3% of electricity production is based on hydro capacities, hydro power plant Ujmani and 4 independent power producers.

Until 2012, the incumbent vertically integrated utility *KEK*

was licensed for production, distribution system operation and public electricity supply, as well for import/export of electricity, including wholesale trade and transit. The distribution and supply activities of *KEK* were privatized in 2013. On 8 May 2013, the licences and assets for distribution system operation and public supply were transferred from *KEK* to the joint-stock company *Kosovo* Electricity Distribution and Supply (KEDS)*. Since that date, following the signature of the share-purchase agreement between the Government and the company *Kosova Calik Limak Energy*, the latter owns and controls *KEDS*.

Investments into strengthening the distribution network and substations, installing new meters and the procurement and installation of AMR (Automatic Meter Reading), made by *KEK* in 2012, contributed to the improvement of the distribution system and services. However, both technical and commercial losses still remain very high at 36.69% in total. The collection rate has improved to 89.98% in 2012.

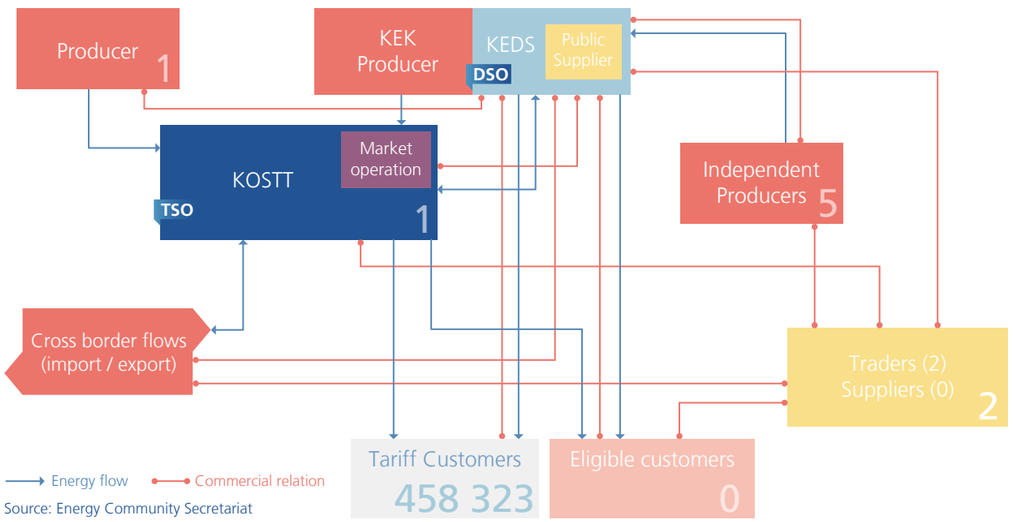
Resulting from an earlier unbundling of *KEK* in 2006, the public joint-stock company has been established as the electricity transmission system operator and market operator in Kosovo* *(KOSTT)*. *KOSTT* is operating the interconnecting transmission lines between the system of Kosovo* and the neighbouring systems – but the capacity is allocated by the operator of the neighbouring transmission system of Serbia, *EMS*. This is subject to a long-running dispute settlement procedure with the Secretariat (Case ECS-3/08).

According to the Law on Electricity, all customers except households are eligible to purchase electricity from the supplier of their choice. Starting from 1 January 2015, all customers will be eligible.

The public supplier, *KEDS*, supplies electricity at regulated tariffs to non-eligible customers. Additionally, the public supplier is supplying electricity at regulated tariffs to all eligible customers, based on ERO's decision that regulated tariffs will apply to all customers in Kosovo*, following the assessment that there is no efficient competition in the electricity market.

ERO issued four licences for import/export of electricity.

Kosovo's* Electricity Market Scheme



Source: Energy Community Secretariat

b. Progress made in 2012/2013

Kosovo* is in the process of amending its laws for transposition of the Third Energy Package. Together with ERO, *KEK* and *KOSTT*, the Ministry prepared so-called "concept documents" on the amendments of the laws. Upon completion of the public consultations, the Ministry sent the final concept documents to the Government which approved it in the first half of 2013.

The Government of Kosovo* finalized the process of privatisation of *KEDS* with the Turkish consortium *Limak & Çalik* which took over control of the company in May 2013.

In 2012, ERO completed the harmonization of all issued licenses with the secondary legislation that was adopted in the wake of the 2010 laws.

Following the provisions of the Energy Law, ERO approved a methodology for preparation of the energy balance, based on the proposal made by *KOSTT*. The methodology increases transparency and accuracy of demand forecast, and should be implemented by the transmission and distribution system operators. A Ten-Year Transmission Development Plan for the period 2013 - 2022 was developed by *KOSTT* and was approved by ERO in the beginning of 2013. Recently, *KOSTT* has made considerable investments into the transmission network, resulting in the reduction of bottlenecks and transmission losses which decreased from 1.37% to 1.32% in 2012.

KOSTT, as the market operator, completed the work on the new market design in early 2013. The document was harmonized with legislation, the Energy Strategy and the Energy Community *acquis* and finally approved by ERO in March 2013. The Market Design describes the market structure and sets out basic principles of the day-ahead and trading day system operations, namely planning, scheduling, balancing mechanism, ancillary services, imbalance calculation and settlement, billing and disputes, as well as governance. Based on the Market Design, amendments of market rules and market rules procedures are being prepared by *KOSTT*, in line with the Electricity Law.

An electricity tariff review was initiated by ERO in 2012. For the first time, it sets the maximum allowed revenues for regulated companies for a multi-year regulatory period. In the course of the electricity tariff review, applications of *KOSTT*, *KEK-Production, KEK-Distribution* and *KEK-Public* Supply were evaluated on the basis of the Pricing Rules. Accordingly, ERO issued decisions on approval of the maximum allowed revenue determined for the transmission system operator/market operator and distribution system operator for the period 2013 - 2017, for the production companies Kosovo A and Kosovo B for the period 2013 - 2016, and for public supply for a one year period starting from 1 April 2013.

Based on the transmission and distribution pricing rules and charging principles ERO approved the methodologies for the regulated tariffs for transmission, system operation, market operation and distribution, as well as charges to be applied as of 1 April 2013. Retail electricity tariffs for regulated customers and regulated prices for production from thermal power plants Kosovo A and Kosovo B were approved by ERO and applied as of 1 April 2013.

As a result of the Government Decision on asset transfer between *KOSTT* and *KEK* and changes made in the energy sector Laws, *KOSTT* has reviewed the Transmission Connection Charging Methodology. This document has been sent for comments to *KEDS* and ERO and now is in the final stage of approval from ERO.

c. State of compliance

1. **Authorisation and tendering procedures** are defined by the Law on the Energy Regulator according to which ERO is responsible for conducting authorisation procedure for the construction of new energy generation capacities and direct electricity lines, as well as for initiating and conducting tendering procedures for the construction of new energy capacity, both of which are in line with the *acquis*.

Further to that, the Rule on Authorisation Procedure for Construction of New Generation Capacities published by ERO in 2011 establishes the procedure for the authorisation for construction of new generating capacities, including interconnectors and direct lines.

The Government may authorize the launching of a tendering procedure for the construction of new generation capacities if ERO issues a written determination that the authorisation procedure has not resulted in either the building of sufficient electricity generation capacity to ensure the security of supply, meeting environmental targets or energy efficiency and/or demand-side management measures. Depending on the electricity sector ownership at the time the Government authorizes a tendering procedure, the procedure is conducted either by a Public-Private Partnership Inter-Ministerial Steering Committee or by ERO.

2. **Unbundling** of system operators in terms of their legal form, organisation and decision-making is required by the legislation. In violation of the *acquis*, accounting unbundling is only compulsory as of 31 December 2014, requiring companies licensed for generation, distribution and supply to separate accounts.

According to the laws and the licence, the public supplier shall maintain separate accounts for supply of eligible customers at unregulated tariffs, supply of eligible customers at regulated tariffs and supply of non-eligible customers. All system operators are required to prepare a compliance programme; however, the according documents have not been developed so far.

In practice, the transmission system operation is unbundled from other activities in line with the *acquis*. In 2013, the distribution system operation and public supplier were legally unbundled from the now generation only company *KEK* by a transfer of the assets and licences to the subsequently privatized *KEDS*. Unbundling of distribution and public supply as well as accounting unbundling of the public supplier has yet to be achieved. The lack of account unbundling is in breach of Directive 2003/54/EC.

3. The requirement for non-discriminatory **third party access** is transposed in the legislation in line with the *acquis*. Transmission and distribution use of system charges entered into force as of 1 April 2013, upon the approval of the ERO

issued on 2 May 2013. However, in violation of the *acquis*, tariffs and methodologies have not been published prior to their entry into force.

4. **Eligibility** is defined by the Electricity Law in accordance with the *acquis*, stipulating that all customers, except households, are eligible. Households will become eligible on 1 January 2015.

According to the Electricity Law, ERO is responsible to ensure that effective arrangements are in place to allow eligible customers to switch their supplier as simply as possible and within no more than three weeks after notifying their incumbent supplier. Switching procedures need to be free of charge and large non-household customers shall have the right to contract simultaneously with several suppliers. Supplier switching rules, however, have not yet been defined, resulting in a major obstacle for retail market opening and issue of concern with regard to eligibility in real terms.

5. As regards **market opening**, every household customer has the right to universal service. Going far beyond this, currently all customers in Kosovo* are supplied under regulated tariffs. The public supplier is obliged to supply electricity at regulated tariffs to non-eligible customers as a public service. The public supplier is also entitled to supply eligible customers, both at regulated and non-regulated tariffs. Whether eligible customers are to be supplied at (low) regulated tariffs is to be decided by ERO based on the regulator's assessment of the lack of efficient competition in the market. Such evaluation has been undertaken by ERO during the tariff review in 2012; consequently all customers in Kosovo* are currently supplied at regulated tariffs by the public supplier. The regulator's legal competence to decide on supply at regulated prices based on the level of competition in fact intends to foster market opening by enabling ERO to reduce regulated supply to the necessary limits rather than to prolong price regulation. It has to be closely monitored whether the regulator will execute its related powers prudently and pro-competitively. Additionally, ERO shall regularly assess the possible effects of public service obligations on national and international competition in the electricity market and consider whether or not such obligations should be revised. While this approach tries to balance price regulation, a public service obligation, with the potential evolution of competition, it failed to further liberalize the market in Kosovo* as price de-regulation and competition depend on each other. It is to be acknowledged, however, that the situation of Kosovo* is particularly challenging, as external competition is exposed to obstacles to free trade related to this Contracting Party's political situation.

According to the Law on the Energy Regulator, after 1 January 2015 ERO shall discontinue setting public supply prices unless there are concerns about the effectiveness of competition in the electricity market. Again, such procedure in itself is not likely to boost competition, in particular if not supported by effective regional and cross-border trade.

A major obstacle for the establishment of a competitive market structure is the Electricity Law's requirement for all power plants of an installed capacity exceeding 5 MW, that were operational at the date the Law came into force, to provide their generated electricity to the public supplier at regulated tariffs to the extent needed by the public supplier in order to fulfil its functions. It needs to be carefully monitored whether there is and remains justification for such a far-reaching public service obligation.

6. The Electricity Law defines the obligation of the transmission system operator to identify available **cross-border transmission capacity** and provide congestion management for all transactions on the interconnectors with neighbouring systems through market based rules and mechanisms. In practical terms, the Serbian system operator *EMS* allocates capacities on the interconnectors adjacent to the network operated by *KOSTT*. This is subject to a long-running dispute settlement procedure with the Secretariat (case ECS-3/08).

7. The development of **balancing** rules and balancing the system, as well as ensuring the availability of all necessary ancillary services, are the responsibilities of the transmission system operator *KOSTT* according to the Electricity Law. The applicable grid code from 2010, approved by ERO, includes balancing rules that cover real time operation, processes and procedures used for balancing the system.

Rules for balancing the market, including rules for charging the system users for imbalances have not been developed yet. The Electricity Market Design was adopted by ERO in 2013. It describes the procedures of the balancing mechanism, energy imbalance calculation, imbalance price calculation and settlement. The market rules will have to make these binding.

8. **Transparency** requirements stipulated in the legal framework are adequately transposed and implemented with respect to tariff methodologies and charges for use of the transmission and the distribution system.

9. **Customer protection** service provisions are transposed by the Laws in line with the *acquis*, giving broad competences to the regulatory authority.

ERO may review and approve proposals for customer protection measures and establish standards of service to be met by licensees, define the procedures to be taken relating to the disconnection of customers. ERO is also responsible for safeguarding the interests of customers, resolving disputes between customers and energy enterprises, system operators and energy enterprises, and between two energy enterprises. Following that, customer protection and non-discriminatory treatment with respect to disconnection and resolution of complaint and disputes is ensured through the set of rules issued by ERO. Rules on Disconnection and Reconnection are setting criteria, standards and principles to be applied with this respect. Rules on the Resolution of Complaints and Disputes in the Energy Sector are prescribing procedure of submission, review and resolution of customer complaints and dispute settlement between licensees as well as offering an alternative dispute resolution mechanism in line with the *acquis*.

According to the Law on Energy Regulator, a vulnerable customer is defined as a household customer whose low level of income, ill-health or disability qualifies him or her for protection or assistance according to rules set by ERO, on the basis of qualifying rules established by the Ministry of Labor and Social Welfare.

Implementation of the Third Energy Package

The present legal framework is to a large extent in compliance with the Second Package and represents a good basis for transposing the Third Package requirements into primary legislation. Amendments should be mainly focused on unbundling and the further strengthening of the tasks, competences and independence of ERO. The ongoing transposition process is envisaged to be finalized in 2014. As the initial activity, concept documents for energy laws were drafted and approved by the Government in 2013.

UNBUNDLING

In the electricity sector in Kosovo* the joint-stock company *KEDS*, responsible for electricity distribution and supply, has been privatized. The public utility *KEK* and transmission system operator *KOSTT* are 100% state-owned companies. Both companies are controlled by the Ministry of Economic Development, which is not in line with the Third Package requirement on TSO unbundling. Still, requirements of the Second Package related to unbundling need to be fully transposed and implemented.

REGULATORY AUTHORITY

Duties and powers of ERO given by the current legal framework provide a good basis for the further strengthening of ERO's authorities in order to comply with the Third Energy Package requirements. The regulatory authority shall have rights to carry out investigations and impose penalties in cases of non-compliance. The regulatory authority shall be empowered to perform its role in the process of certification of the transmission system operator.

CUSTOMER PROTECTION

Kosovo* has already established a substantial framework for electricity customer protection in conformity with the Third Package provisions regarding vulnerable customers, contractual terms and conditions and transparency of information. Customer rights for good service standards, complaint handling and dispute settlement are guaranteed by the set of rules adopted by ERO. However, a major obstacle to exercising eligibility is the lack of supplier switching rules. Their adoption and implementation in line with the Third Energy Package is essential for retail market opening.

d. Conclusions and Priorities

In Kosovo*, practical implementation is lagging far behind the legal framework which is largely compliant with the Second Package. In addition, adapting the legislation to the requirements of the Third Energy Package should be started.

As a priority, the unbundling of accounts for supply of eligible customers at contracted tariffs, supply of eligible customers at regulated tariffs (as long as applied) and supply of non-eligible customers needs to be implemented. Legal unbundling between distribution and supply in *KEDS* must be prepared to be implemented by 2015.

On the operational side, improving technical performance, reduction of losses particularly in the distribution network, and enforcement and improvement of quality of service standards are key next steps. At the same time, a link between the quality of services and costs of these services should be established to ensure the principle of cost-reflectivity.

Secondary legislation needed for competitive market opening should be adopted. Following the adoption of the Electricity Market Design, new market rules should be developed aimed at defining detailed provisions for a balancing mechanism, energy imbalance calculation, imbalance price calculation and settlement. In order to allow for retail market opening, effective supplier switching arrangements should be established. Excessive public service obligations on the generation company in order to meet the full demand of the public supplier should be abolished. Also, the right of ERO to regulate energy prices for all customers in case of insufficient competition should be replaced by a timeframe for phasing-out regulated prices, with large non-household customers becoming the first category.

3.1.6 FORMER YUGOSLAV REPUBLIC OF MACEDONIA

Electricity

			2011	2012
Electricty Production [GWh]			6,325	5,845
Net Imports [GWh]			2,749	2,741
Net Exports [GWh]			73	72
Total Electricity supplied [GWh]			9,001	8,514
Gross Electricity Consumption [GWh]			9,001	8,514
Losses in Transmission [GWh]			201	187
Losses in Transmission [%]			2.3%	2.2%
Losses in Distribution [GWh]			1,186	1,107
Losses in Distribution [%]			18.1%	17.4%
Consumption of energy sector [GWh]			1.40	1.30
Final consumption of electricity [GWh]			7,614	7,220
Consumption Structure [GWh]	Industrial, transport, services and other non-residential sectors		4,268	3,962
	Households (Residential Customers)		3,345	3,257
Net maximum electrical capacity of power plants [MW]			1,895.69	1,939.60
Net maximum electrical capacity of power plants [MW]	Coal-fired		800	800
	out of:	multi -fired	0	0
	Gas-fired		287	287
	out of:	multi -fired	0	0
	Oil-fired		210	210
	Nuclear		0	0
	Hydro		597.69	638.8
	out of:	Small hydro	30.89	35.6
		Pumped storage	0	0
	Other Renewables		1	3.8
	out of:	Wind	0	0
Horizontal Transmission Network [km]	380 kV or more [km]		507	507
	220 kV [km]		103	38
	110 kV [km]		1488	1492
	HVDC [km]		0	0
	Substation Capacity [MVA]		2700	2700
Electricity Customers	Total		662,526	678,740
	out of:	Non-households	77,181	78,508
		Eligible customers under national legislation	9	9
		Active eligible customers	9	9
Domestic market	Electricity supplied to active eligible customers [MWh]		1,731,587	1,755,456
	Share of total consumption [%]		19.24%	20.62%

Source: ERC

a. The electricity sector in the FYR of Macedonia

The energy sector, including electricity, in the former Yugoslav Republic of Macedonia is governed by the Energy Law of 2011, amended in 2011 and 2013.

The Energy Law establishes full market opening following the introduction of the necessary legislative framework and the establishment of key market infrastructure, such as transparent network tariffs, provision of balancing services, market rules, supply rules and supplier switching procedures. The Law defines a set of secondary legislation to be developed within specified timeframes.

The authority responsible for legislative matters and energy policies is the Ministry of Economy.

The Energy Regulatory Commission (ERC) has been operational since 2003 and according to the Energy Law is equipped with the core competencies required by the *acquis*.

The transmission network is operated by *Makedonski Elektroprenosen 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.

Key players in the electricity market are the state-owned incumbent utility *Elektrani na Makedonija (ELEM)* and *EVN Makedonija*. *ELEM* owns the majority of generation plants, namely two TPPs and eight HPPs, with a total installed capacity of 1380 MW. A new hydro power plant "Sveta Petka" of 36 MW owned by *ELEM* was commissioned in 2012. *ELEM* also operates the CHP TEC Energetika with 40 MW of installed capacity and a small distribution network through which it supplies 73 industrial customers with some 80 GWh/y.

In addition there are independent power producers: the oil-fired TPP Negotino with 210 MW installed capacity, and two gas-fired CHPs, TE-TO Skopje commissioned in 2012 with an installed capacity of 227 MW and *KOGEL Sever* with 30 MW of installed capacity.

The Austrian utility *EVN* holds 90% of shares in *EVN Makedonija*, the owner of most of the distribution assets and supplier of 98% of all sales to so-called "tariff customers". All household customers in the country and more than 99.9% of all non-household customers are connected to the distribution system of *EVN Makedonija*.

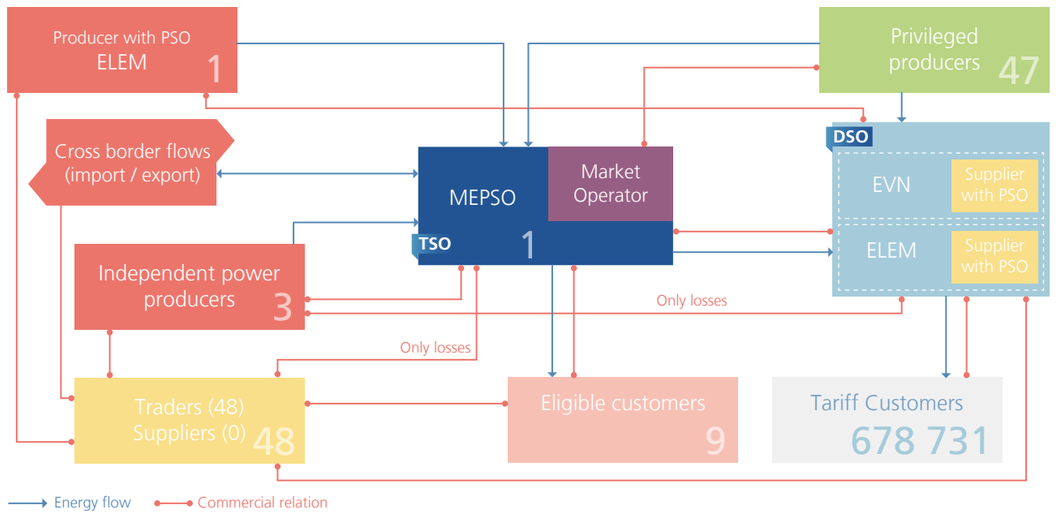
The category of "tariff customers" includes household customers until 31 December 2014 when they become eligible. During the same transitional period small customers are entitled to opt for being supplied as tariff customers or to purchase from a supplier of their choice. The incumbent suppliers, *EVN Makedonija* and *ELEM* supply tariff customers at regulated prices. Suppliers also should buy electricity according to competitive procedures.

Incumbent suppliers of tariff customers are designated by the Energy Law to perform the task of a supplier of last resort as a public service obligation. As a general rule households and small customers, *i.e.* undertakings with less than 50 employees and an annual turnover not exceeding EUR 10 million are entitled to be supplied by a supplier of last resort.

Currently, there are 44 registered traders with valid licenses issued by ERC. *EVN Makedonija* and *ELEM* hold supply licences, allowing them to supply tariff customers. In July 2013 ERC issued the first license for supply of electricity to a new entrant *(GEN-I Prodazba)*.

Former Yugoslav Republic of Macedonia has been for several years the only Contracting Party where big customers were obliged to procure electricity from the competitive market: since 2009, final customers connected to the transmission network are obliged and have been purchasing electricity outside the regulated supply on the competitive market. In addition, in accordance with the Energy Law, following a dispute settlement with procedure with the Secretariat, the transmission and distribution system operators procure electricity to cover their network losses in the competitive market. In terms of volume nearly 40% of electricity supplied in 2012 was purchased on the non-regulated market.

Former Yugoslav Republic of Macedonia's Electricity Market Scheme



Source: Energy Community Secretariat

b. Progress made in 2012/2013

During the reporting period a number of activities took place but significant progress in actual market opening was not achieved.

The year 2012 marked a breakthrough in legislative terms, when the ERC adopted new Market Rules, obliging all customers, except small enterprises and households, to purchase electricity on the competitive market starting from 1 January 2013. Although regulated tariffs remain available for small enterprises, they are eligible to purchase electricity on the competitive market. Households remain captive until 31 December 2014.

In July 2012 the ERC adopted the Regulation on Setting the Electricity Price for the Supplier of Last Resort. The ERC also adopted new Tariff Systems for the transmission and distribution of electricity. In November 2012 the ERC adopted Rules for Supply of Electricity intended to regulate relations in the retail supply in an open market and Rules for Supply of Electricity by a Supplier of Last Resort. Rules for Supply of Electricity to Tariff Customers from 2011 define relations on the regulated market.

The Law obliged *EVN Makedonija*, as a supplier of tariff customers, to develop the Rules for Procurement of Electricity, the purpose of which was to ensure transparency and safeguard customers' interests in the procurement of electricity used for regulated supply. The document was approved by ERC in September 2012.

Adoption of the rules defined in the Law as preconditions for mandatory market opening for all customers except households refers to: the Rules for Supply of Electricity, the Rules for Supply of Electricity by a Supplier of Last Resort, the Rulebook on Prices of the Supplier of Last Resort, Electricity Market Rules and Tariff Systems for Transmission and Distribution of Electricity and for Services of the Market Operator. With these documents adopted in 2012, ERC completed its tasks stemming from the Energy Law.

MEPSO in its capacity as market operator published the list of eligible customers (146 final customers connected to the distribution network) which were supposed to switch from a regulated to a competitive supply. Intensive education and training programs on the market rules, balance responsibility and financial effects of imbalances were provided by *MEPSO* for the market participants who were obliged to switch.

These 146 final customers should have registered with the market operator and assumed their balance responsibility, either by themselves or organised into balance responsible groups. Unfortunately the establishment of balance responsibility did not follow as planned and in December 2012 ERC postponed the implementation of Market Rules to 1 July 2013.

EVN Makedonija failed to develop standardised load curves for the calculation of the load of customers connected to their network until the deadline of May 2013 defined in the Market Rule. In addition, *MEPSO* did not complete the procurement of new software for the metering and calculation of imbalances in accordance with the Market rules. For these reasons in June 2013 ERC decided to postpone the implementation of the Market Rules again, amending the Market Rules with an obligation for ERC to develop an Action Plan for the Liberalization of the Electricity Market by 30 September 2013 at the latest. It is evident that market opening in the former Yugoslav Republic of Macedonia is not implemented at the pace envisaged in the Energy Law and the Market Rules.

Whereas *MEPSO* and *ELEM* had earlier adjusted their Grid Codes to the requirements of the Energy Law, *EVN* only in 2012 submitted its Grid Code to ERC; the new rules came into effect July 2012. These rules define conditions for connection to the network, third party access, long term planning, system operation, system security and stability, procedures in case of disruption, access to information and other matters defined in the Energy Law.

Aiming to support the reduction of losses, the Ministry of Economy was working on improving the enforcement regime related to combating the theft of electricity, tampering with meters and illegal access to network equipment. The Criminal Code was amended in 2013 so that the theft of electricity is now rendered as a criminal act and prosecuted in accordance with the Criminal Code.

The Government extended the implementation of the protection program for vulnerable customers throughout 2013, providing support for household customers who are recipients of the welfare subsistence program. Within the program, the energy consumption of households which receive social welfare assistance are subsidised in the amount of roughly EUR 11 per month and the scheme is financed from the State budget.

Currently *MEPSO* is managing two key construction projects of new interconnections with Serbia and with Albania, including the supporting substations.

c. State of compliance

1. In terms of **authorization and tendering**, the Ministry of Economy or municipal authorities are in charge, depending on the installed capacity. The Minister established a committee for issuing authorisations in 2011. Authorisation is not needed if construction is based on concessions and for capacities of less than 10 MW.

According to the Energy Law, if there is no sufficient interest in investment as planned by the authorities or in meeting the demand, or if security of supply objectives cannot be met with demand side management measures, the Ministry may invite tenders for construction of new facilities or reconstruction of existing facilities. This procedure is compliant with the Treaty.

ERC is the competent body for granting energy activity licenses for the operation of a production facility including for the generation of electricity from renewable sources and combined heat and power.

2. The **unbundling** of network operators is required by the Law and implemented according to the *acquis* of the Energy Community. In practise, it needs to be better monitored and enforced by ERC.

MEPSO is legally unbundled from all other activities and owned by the State. The market operation activities are performed within *MEPSO* as an integrated function. In addition, the dominant producer *ELEM* and the transmission system operator *MEPSO* are owned by the State.

The distribution network operators (*EVN Makedonija* and *ELEM*) perform the activities of supply of tariff customers, but still do not publish their financial statements separately for each of their regulated activities. A compliance program for functional unbundling is also missing. Although both distribution network operators have established separate legal entities for dealing in trade and competitive retail supply, their activity to supply tariff customers is still fully bundled with distribution.

The unbundling requirements have not been properly implemented in this respect so far.

3. **Third party access** is addressed in a compliant manner by the Law, the implementation needs improvements, particularly as regards easy access to information on the terms and conditions for access.

MEPSO is working on improving its Grid Code from 2006 in order to comply with the Energy Law and to keep in line with *ENTSO-E* regulation. Part of this process is the development of a set of procedures for the procurement of electricity (for network losses, for ensuring system security in case of disruption of supply or significant imbalances in demand).

Non-discriminatory access is implemented in the grid codes for transmission and distribution, developed by network operators and approved by ERC.

Connection charges are also regulated and approved by ERC. The charges and price lists for connection are being reviewed by ERC and a decision is pending.

Network tariffs for transmission and distribution network operators are set by ERC for a three year period, subject to annual review. Network tariffs are published on ERC's web page, but *MEPSO* and distribution network operators do not publish charges for the use of their network on their respective web pages. The transparency of applicable network tariffs is not properly enforced.

4. According to the Energy Law, after the adoption of the secondary legislation by ERC, all customers except households shall become **eligible**. Eligible customers with more than 50 employees and more than EUR 10 million annual turnover do not have the right to be supplied by the supplier of last resort. The Law allows that small customers and households remain supplied at regulated prices by a supplier of last resort even after full market opening, without time limitations.

Household customers remain captive until 31 December 2014 and, after that time, will be able to switch to the open market or to be supplied by the supplier of last resort under regulated prices. The Law defines that small customers can choose between the liberalised electricity market and regulated electricity market until 31 December 2014.

From the moment small customers become eligible, and from 1 January 2015 when household customers become eligible, these two categories shall have the right to be supplied by the supplier of last resort under regulated prices and conditions defined by ERC.

According to the Energy Law, all customers are eligible to **switch supplier**. However, the market for non-household customers is still not fully open as required by Article 21 of Directive 2003/54/EC. Currently only the customers connected to the transmission network are supplied from the open market and may not be supplied at regulated prices. The remaining eligible customers, namely the customers connected to the distribution network with more than 50 employees and an annual turnover exceeding EUR 10 million are still supplied at regulated prices by the incumbent supplier of tariff customers.

The switching rules are defined by ERC as a part of the Rules for the Supply of Electricity. Final customers with outstanding debts to the previous supplier, network operator or market operator are not permitted to switch supplier; these exemptions are certainly not in favour of market opening and should rather be solved via civil law. Small customers and households, even when eligible, will be entitled to be supplied by a "supplier of last resort", if they do not choose their supplier.

In practise, preconditions for the implementation of the above rules have been in place as of 1 January 2013, but the implementation was delayed because provisions of the Market Rules were not complied with. The most recent postponement from June 2013 introduced an Action Plan for Liberalisation of the Electricity Market as a new document which will set the date for market opening required by the Energy Law.

5. Public services are provided at **regulated prices**, as a rule. Public services include generation to meet demand of supplier

of last resort, as well as demand of tariff customers until 31 December 2014. The price at which the incumbent generator (*ELEM*) sells electricity to its own customers and to the supplier of tariff customers (*EVN Makedonija*) as a public service obligation, is set by ERC, as a transitional measure, provided for in the Energy Law. In addition to the delays in adopting the secondary legislation and its implementation as explained above, obstacles to market opening include excessive price regulation, particularly in the wholesale market.

The price of electricity purchased from generators with public service obligations shall remain regulated until 31 December 2014. Even though the supplier of tariff customers is allowed to buy electricity in the open market, it has no incentive to do so if the regulated domestic generation is available at lower regulated prices. Moreover, the Methodology for Setting Prices of Tariff Elements for the Sale of Electricity by the Generator to the Supplier of Tariff Customers and the Supplier of Last Resort, which was planned to come into effect from 1 July 2013, but has now been postponed until the implementation of the Market Rules, explicitly defines the procedure by which ERC sets the tariffs for the sale of electricity in the wholesale market.

Excessive regulation with extensive scope of public services raised concerns regarding the objective need and detrimental effects on market opening and competition. It is also against the Energy Law, which prohibits approved or controlled prices to prevent efficient competition and market functioning.

6. The **allocation of cross-border capacity** is conducted through yearly, monthly, weekly and intra-day auctions. The allocation rules, compliant with Regulation (EC) 1228/2003, are approved by ERC and publicly available. Capacities are split 50:50 with neighbouring systems.

The agreement of *MEPSO* with the Serbian *EMS* to apply joint auctions developed in 2011 but, although approved by ERC, could not be implemented due to the problem of double taxation and open issues on value added tax (VAT) application which were not resolved. Namely, revenues from congestions according to local VAT legislation are subject to VAT. This issue would need a regional solution.

The results of auctions are published, allocated capacities, congestions and marginal prices for each border and time slot in congestion.

7. The Market Rules define the principles of **balancing** and procurement of **ancillary services**, the costs of providing balancing services, balancing responsibility and charging for imbalances.

Ancillary services are currently provided by *ELEM* under its public service obligation. This practise distorts price signals for the balance responsibility of market participants. The implementation of the approved new Market Rules is expected to prevent this practise. Currently balancing responsibility is applicable only to customers connected to the transmission network and imbalances are settled weekly. Distribution system operators are not charged for imbalances.

According to the most recent amendments of the Market Rules, until liberalisation of the electricity market, the market operator is obliged to calculate hourly imbalances of all final customers except households, without financial settlement.

8. As regards access to information and **transparency**, the institutions and responsible market players have made some effort. Nevertheless, improvement is needed, particularly in terms of easy access to information in the public domain. Network tariffs are published in Official Gazette and on ERC's web page, but not on network operators' web pages

As regards *MEPSO*, the key information for the system users is publicly available, including terms and conditions for connection, a Ten-Year Network Development Plan and Maintenance Plans for interconnectors. However, the published Ten-Year Network Development Plans of *MEPSO* (2010 - 2020) need an update.

Interconnection capacities are effectively allocated in annual, monthly and weekly auctions. Capacities can be allocated intra-day as well. Results of all auctions are timely published on *MEPSO's* web page.

EVN Makedonija, as a distribution network operator has published terms and conditions, including charges for connection and use of network, as well as end use prices for tariff customers.

Easy access to information also includes the access of system users to demand-related information provided by network operators. System users should have access to such information in the most appropriate format. This is even more important in the following months when full market opening is expected and customers will need simple and easy access to all relevant information about prices charged to them.

9. The aspects of **customer protection** are only partially implemented. The Energy Law defines the objectives of energy policy to ensure the protection of citizens from energy poverty. The Government is obliged by law to develop an annual programme for the reduction of energy poverty, including subsidies on consumed energy.

Currently, the social protection programme of subsidising monthly bills for consumed energy is being applied. New social protection measures are being developed within the respective institutions, aiming to pay due care to the protection of vulnerable customers and prevention of energy poverty.

Implementation of the Third Energy Package

Revision of the legislation is necessary not only to reflect requirements of the Third Energy Package, but to ensure the implementation of the current *acquis* in all its key aspects, namely market opening, efficient regulation and unbundling.

UNBUNDLING

Ownership unbundling is an issue because of the State's stake in transmission and generation companies. Primary legislation needs to be amended in that respect. In addition, the requirements from the Second Package in relation to functional and accounting unbundling within vertically integrated undertakings have not been properly enforced.

REGULATORY AUTHORITY

The position of ERC must be strengthened, particularly in terms of power to enforce its decisions. In addition, comprehensive price regulation by ERC currently carried out in the form of setting all prices for public services should be abolished.
As regards additional competencies required to comply with the new *acquis*, ERC needs power to perform its role in the certification process, to issue mandatory orders, to conduct investigations and impose penalties for non-compliance and explicit powers regarding cross border cooperation.

CUSTOMER PROTECTION

A definition of a vulnerable customer should be introduced, along with a guaranteed scope of service and information provided by licensed undertaking. Although some elements of the customer protection measures are transposed, particularly in the rules for supply introduced by ERC in 2012, the scope of public service should be reconsidered to allow for efficient customer protection measures without excessive regulation leading to discrimination between customer groups or an impediment to market competition.

d. Conclusions and Priorities

The first and foremost task is to implement the Market Rules and finally open the market as defined in the Energy Law. The Action Plan for Liberalisation must not be used as a means for further procrastination. ERC should use all its powers to enforce implementation.

The position of ERC should be strengthened, particularly in terms of power to enforce its decisions and obligations of licensed undertakings to comply with the laws and by-laws.

Easy access to information also includes access for system users to demand-related information provided by network operators. System users should have access to such information in the most appropriate format. This is especially important for the following months when full market opening is expected and customers will need simple and easy access to all relevant information about prices charged to them.

Overall the customer protection scheme is too comprehensive, allowing for extensive definition of public service and price regulation detrimental to competition. Closing the gap between regulated wholesale prices and real market prices of electricity as a result of market opening will require an adequate social protection network capable of absorbing the effects of price changes on socially sensitive groups of customers. This is one of the key tasks ahead for domestic institutions responsible for different aspects of this matter.

3.1.7 MOLDOVA

Electricity

			2011	2012
Electricty Production [GWh]			854	776
Net Imports [GWh]			3,144	3,278
Net Exports [GWh]			545	612
Total Electricity supplied [GWh]			3,998	4,055
Gross Electricity Consumption [GWh]			3,998	4,055
Losses in Transmission [GWh]			115	115
Losses in Transmission [%]			2.89%	2.84%
Losses in Distribution [GWh]			474	460
Losses in Distribution [%]			12.48%	11.91%
Consumption of energy sector [GWh]				
Final consumption of electricity [GWh]			3,409	3,480
Consumption Structure [GWh]	Industrial, transport, services and other non-residential sectors		1,866	1,905
	Households (Residential Customers)		1,542.85	1,574.97
Net maximum electrical capacity of power plants [MW]			396.00	
Net maximum electrical capacity of power plants [MW]	Coal-fired			
	out of which:	multi -fired		
	Gas-fired		380	380
	out of which:	multi -fired		
	Oil-fired			
	Nuclear			
	Hydro		16	16
	out of which:	Small hydro		
		Pumped storage		
	Other Renewables			0.10
	out of which:	Wind		
Horizontal Transmission Network [km]	380 kV or more [km]		203	203
	220 kV [km]		377	377
	110 kV [km]		3,325	3,335
	HVDC [km]			
	Substation Capacity [MVA]		4,761	4,761
Electricity Customers	Total		1,292,719	1,309,389
	out of which:	Non-households	55,125	64,924
		Eligible customers under national legislation	4	4
		Active eligible customers	1	1
Domestic market	Electricity supplied to active eligible customers [MWh]		81,747	81,801
	Share of total consumption [%]		2.04%	2.02%

Source: ANRE

a. The electricity sector in Moldova

Moldova is almost entirely dependent on imports of natural gas for the production of electricity, or electricity imports from Ukraine. The local electricity production relies on a dominant electricity producer, the gas/oil fired thermal power plant Kuchurgan (2,520 MW installed capacity) which covers as much as 80% of the overall demand. Kuchurgan is owned and operated by the Russian company *INTER RAO UES*, located in the Moldovan region of Transnistria. The remaining 20% of the demand is provided by several gas-fired combined heat and power generation capacities and one hydropower plant (with an overall installed capacity of 396 MW), or is covered by imports. The TPP Kuchurgan is dispatched internally by the system operator *Moldelectrica* and the interconnection capacities with Ukraine are sufficient for the electricity systems to operate with no congestion on this interconnection.

The electricity sector of Moldova still operates under the Electricity Law of 2009; the adoption of the amendments that have been being prepared since 2011 - 2013 are delayed. Other relevant legislation includes the Law on Conducting Licensed Activities, the Law on Public Service, the Law on Customer Protection, the Law on Basic Principles for Regulating Entrepreneurial Activity and the Concession Law.

The Electricity Law sets the principles for energy governance like unbundling requirements, third party access and deadlines for market opening. The responsible authority for the legal and policy matter in the electricity sector is the Ministry of Economy.

Energy market regulation is performed by the Energy Regulatory Agency (ANRE). There have been no changes in the corporate structure of the electricity sector during the reporting period. The transmission system is not synchronized with the *ENTSO-E* network and operates as a part of the UPS electricity system along with neighbouring Ukraine. The Moldovan transmission system operator *Moldelectrica* performs transmission and dispatch activities, including basic market administration.

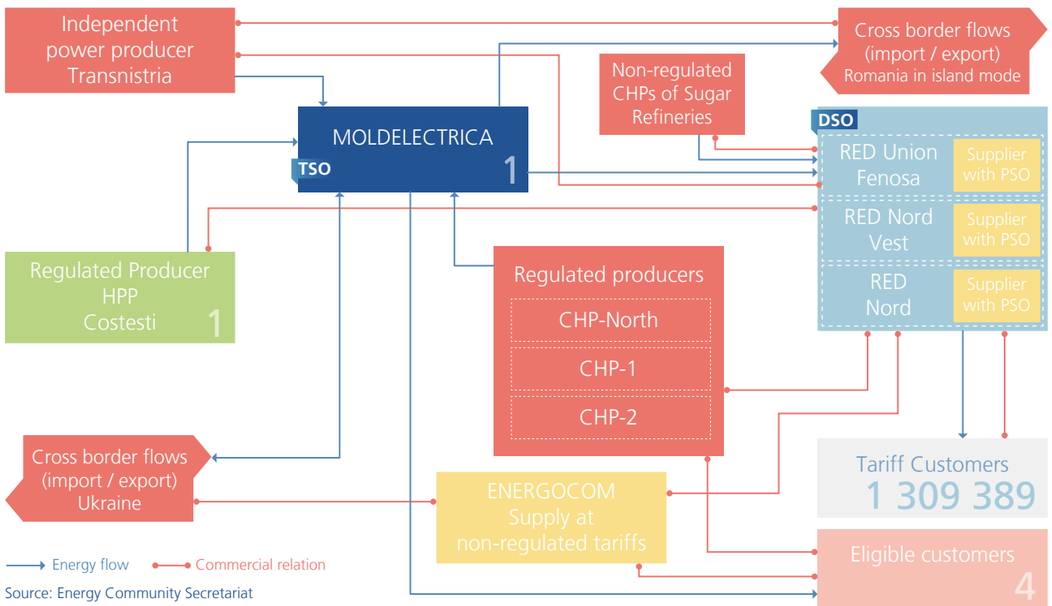
There are three distribution system operators and public suppliers active in Moldova – *RED Nord*, *RED Nord-Vest* and *RED Union Fenosa*. The latter covers 70% of the overall electricity demand and emerged after the privatisation and merger of the former distribution operators and suppliers *RED Sud*, *RED Centru* and *RED Chisinau*. It is now owned by the Spanish utility *Gas Natural Fenosa*. The other two utilities, *RED Nord* and *RED Nord-Vest* are state-owned.

The wholesale market model described by the Electricity Law of 2009 is based on bilateral contracts between producers and suppliers or between suppliers with an import portfolio in the electricity market. Legally, all suppliers are entitled to import or export electricity. However, a state-owned company, *Energocom*, acts as a single buyer for the entire volume of electricity imported from Ukraine. This is a condition requested by the Ukrainian trade counterparts, and is not required by the laws or regulations of Moldova. Being licensed for supply of electricity at non-regulated tariffs, *Energocom* is entitled to supply electricity to eligible customers. It is currently supplying the only active eligible customer which switched from the incumbent supplier.

The electricity imported by *Energocom* is regularly sold to the distribution and supply companies *RED Nord* and *RED Nord-Vest* or to eligible customers. The supply portfolio of the electricity distribution and supply company *RED Union Fenosa* includes supply contracts with the dominant electricity producer in Moldova – TPP Kuchurgan and, as of 2013 in response to the growing demand, with *Energocom* for electricity imported from Ukraine.

ANRE does not apply a uniform tariff policy throughout the country, but reflects the specific technical characteristics of each distribution network and the number of customers per km of lines, which has resulted in higher end-user tariffs for customers of state-owned utilities. In 2013, the end-user electricity tariffs remained at the levels adopted in May 2012.

Moldova's Electricity Market Scheme



Source: Energy Community Secretariat

b. Progress made in 2012/2013

Draft amendments to the Electricity Law had been prepared in the previous period, with a view to transposing the requirements of Security of Electricity Supply Directive 2005/89/EC, Regulation (EC) 1228/2003 and to improve compliance with Directive 2003/54/EC. Contrary to the expectations, they have not yet been adopted.

The Energy Strategy for 2030 was adopted in early 2013 and envisages the liberalisation of the electricity market, while reducing dependency on imported energy and improving the energy intensity of the economy. The objective of synchronising the Moldovan electricity network with the system of *ENTSO-E* is envisaged to be accomplished either together with the Ukrainian system, or through unilateral synchronisation with the Romanian system.

A new methodology for determining the distribution tariffs has been enforced in 2013. However, the new distribution tariffs have not yet been approved. Their missing adoption is one reason for the delay in the practical implementation of electricity market opening for non-household customers.

ANRE did not change the regulated electricity prices during 2013, neither for domestic electricity production or for end-user customers' supply, nevertheless at the current exchange rate, it trims down the Euro values at about 9.5 eurocent/KWh compared with an average of 10.5 eurocent/KWh in 2012. In January 2013, ANRE approved tariffs for electricity supplied by *RED Nord* to customers connected to high voltage networks (35 kV, 110 kV) at similar values for the same customer class as for *RED Nord-Vest*.

A procedure for customer switching has been drafted and is pending adoption.

In its 2012 Annual Report, ANRE, as one of the most advanced regulatory authorities in the Energy Community, continues to present benchmarking of the quality of supply indicators for three distribution companies.

c. State of compliance

The Electricity Law of 2009 transposes most of the basic requirements of Directive 2003/54/EC. However, the amendments to the 2009 Electricity Law meant to transpose the Security of Electricity Supply Directive 2005/89/EC and several provisions of Regulation (EC) 1228/2003 have not been adopted. This also delays progress with market opening for eligible customers connected to the distribution network, and the implementation of rules for capacity allocation on interconnections by the transmission system operator. The regulatory framework and institutional development is relatively advanced, with the exception of the company *Moldelectrica* which still needs to undergo major organisational and functional changes to comply with the powers, requirements and competences of a true transmission system operator.

1. 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. Detailed procedures for the authorisation of power plants higher than 20 MW are yet to be adopted.

Tendering procedures for new generation capacities to ensure security of energy supply are organised and based on a regulation adopted by the Government.

2. The process of legal **unbundling** of transmission operator from generation and supply activities has been complete since 1997. Legal unbundling of distribution system operators from supply activities has not been implemented despite the fact that the Electricity Law requires it starting with 1 January 2013. However, the draft amendments to the Law envisage legal unbundling between distribution and supply to be enforced starting 1 January 2015. Nevertheless, accounting and functional unbundling is obligatory until the legal separation.

Compliance programmes for distribution companies still need to be introduced and monitored to meet the requirements for accounting unbundling of distribution and supply activities.

With the requirements for market opening for non-household customers as of 1 January 2013, the unbundling of accounts for supply of eligible and captive customers and between distribution and supply activities is obligatory. However the process is delayed in its implementation and has still not been completed.

3. The right to **third party access** is properly transposed by law. However, ANRE does not monitor how the transmission and distribution companies fulfil their obligations relating to access to the networks.

The electricity transmission tariff methodology, as modified in 2013, recognises the cost of electricity to cover the network losses as part of the network tariff. The transmission system operator is obliged to purchase electricity to cover losses in the transmission network at market price according to the draft amendments to the Electricity Law. However, the methodology and the calculation of transmission charges still needs to consider appropriately the cost of capital for the system operator. Moreover, not all tariff principles have been implemented in line with the *acquis*: in particular network charges based on individual transactions for the declared transit of electricity have to be eliminated and the transmission tariffs should be designed as entry-exit tariffs, providing efficient locational signals.

The methodology for setting distribution charges has been adopted by the regulatory authority in 2013. The adoption of distribution network access charges separate from costs of supply is still pending, impeding the market opening for non-household customers connected to the distribution network. ANRE also approved technical rules for connection to and operation of transmission and distribution networks.

Supplier switching procedures are being developed by ANRE and are estimated to be adopted in autumn 2013.

4. The **eligibility** requirements have been properly transposed. According to the Electricity Law of 2009, all non-household customers became eligible as of 1 January 2013 in accordance with the deadlines established for Moldova in the Accession Protocol. Nevertheless, the delay in the approval of distribution tariffs renders this provision in the law practically not applicable to the eligible customers connected to distribution networks. This constitutes a breach of Article 20 of Directive 2003/54/EC. In practice, the four large industry customers connected to the high-voltage transmission grid are currently eligible.

Households will be eligible customers as of 1 January 2015. This is in line with the deadline under the Treaty.

5. In terms of practical market opening, only one eligible customer, a cement factory, *Lafarge Ciment* is supplied under market conditions. That customer is supplied by *Energocom*, the only alternative supplier besides the incumbent distributors/suppliers active on the market. Effective market opening is thus very low.

Otherwise, ANRE develops and approves methodologies for the calculation and application of regulated electricity prices for electricity generation and for the prices of supply of electricity to the captive customers. In practice, ANRE regulates the end-user price for all final customers except for the customers who exercised their eligibility. The eligible customers have the option to return to the regulated tariffs of the incumbent distribution and supply companies and, in the past years, three companies that opted-out and signed electricity contracts with private suppliers have returned to regulated electricity tariffs.

The situation proves that the current regulated tariffs and the limited competition in the sources for electricity supply, due to imposed restrictions on Ukrainian electricity suppliers for electricity exports, do not offer incentives for eligible customers to switch suppliers.

The costs for the purchase of electricity by the three distribution companies are taken into account for determination of the final end-users' prices. Electricity price setting is thus cost-reflective in the sense that the cost of energy from imports is passed on to the final customers. However, this does not consider the cost of long term investment needed in the energy sector.

ANRE also regulates the generation price for the following generators: CET-1, CET-2, CET-Nord and the HPP Costesti.

6. Rules for the **allocation of interconnection capacities** have been drafted but not yet adopted by ANRE, due to the delayed adoption of the amendments to the Electricity Law. The lack of these rules, however, does not result in practical impediments to the cross-border trade given that the existing interconnections to the Ukrainian system are not congested. However, existing barriers for Ukrainian suppliers in accessing the interconnections, and the low interest of private suppliers to enter into the Moldovan market limit the possibilities for development of a competitive wholesale market in Moldova.

Moldelectrica and the Ukrainian transmission system operator *Ukrenergo* still have not agreed to implement a bilaterally coordinated market-based platform for the allocation of interconnection capacities between the two electricity systems in compliance with Regulation (EC) 1228/2003. Currently, there is limited competition in electricity trade between Ukraine and Moldova, the possibility of exporting electricity from Ukraine being granted to only one Ukrainian company (*DTEK*) which also has full access to the interconnection capacities. The exporter requests only one trading partner in Moldova for the entire volume of electricity therefore *Energocom* has been assigned as electricity importer in Moldova. This existing situation is creating *de facto* a duopoly in the electricity market in Moldova, with the single company exporter from Ukraine and the single IPP Kuchurgan therefore impeding the wholesale market competition in Moldova.

Coordinated, market-based capacity allocation procedures for interconnection on all borders synchronously connected still need to be developed and implemented.

The interconnection capacities between the Moldovan and the Romanian (non-synchronously connected) systems are allocated jointly based on market procedures and performed by the Romanian system operator. The electricity import/export between the two systems is made in passive island consumption mode, and in cooperation with the respective distribution companies at the borders.

7. Because Moldova is **balancing** its system mostly through imports from Ukraine, the 2013 ECRB study on imbalance settlement advises Moldova and Ukraine to consider developing a sub-regional scheme. This should start based on a TSO-TSO model without a merit order list, implementing to the extent possible all the steps required and described in the study.

Balancing rules and the introduction of balancing responsible parties are being included in the amendments to the Electricity Law. Balancing Rules in compliance with the practice of *ENTSO-E* members have not yet been adopted and implemented. Supply companies are currently required to contract balancing energy with a view to satisfying the demand of their customers and cover imbalances, which is certainly not

in line with the imbalance settlement principles implemented in *ENTSO-E*.

8. The **transparency** requirements of the *acquis* are still largely not implemented. Information relating to connection to the grid, transmission contracts, network tariffs or interconnection capacities is not available either in the local language or in English. ANRE fails to monitor and enforce rules on transparency for the system operators.

9. The provisions on **customer protection** are transposed and implemented for final electricity customers only. A vulnerable customer category is currently defined in a Governmental Decree. It is made from a social point of view and not specifically addresses vulnerability in relation to electricity consumption. The category needs to be clearly defined in relation to electricity consumption in the Electricity Law.

Implementation of the Third Energy Package

To ensure compliance with the Third Package, several amendments need to be considered in order to transpose the principles of Directive 2009/72/EC related to unbundling, tasks, competences and independence of the regulatory authority, and the protection of vulnerable customers.

UNBUNDLING

The system operator is legally unbundled from the generation and supply activities according to the Second Package. However, compliance with the Third Package related to the unbundling requires further amendments to the Law and its implementation.

REGULATORY AUTHORITY

Clear and unambiguous articles related to the legal and functional independence of ANRE from any public or private entity, being able to take autonomous decisions independent from any political body must be enshrined in the Energy Law. Moreover, the extended duties and powers of the national regulators provided for in Article 37 and 38 of Directive 2009/72/EC need transposition and enforcement.

CUSTOMER PROTECTION

A vulnerable customer category in relation to electricity consumption needs to be introduced and adequate policies implemented. Measures to protect final customers and in particular ensure that there are adequate safeguards to protect vulnerable customers from electricity disconnection in critical times, transparency regarding contractual terms and conditions and general information and dispute settlement mechanisms for this customer category all need to be clearly defined in the Law.

d. Conclusions and Priorities

The reforms made in the electricity sector towards the implementation of the *acquis* have been steady in the last years, however the consistent and proper implementation of Directives 2003/54/EC, 2005/89/EC and Regulation (EC) 1228/2003/EC remain to be achieved.

The highest priority by the end of 2013 is the adoption of the revised draft Electricity Law which will improve compliance with the current electricity *acquis*. As 2015 is now only one and a half years away, these activities will have to go hand in hand with the transposition of the Third Energy Package into the legal framework of Moldova.

A revision of the methodology for determination and calculation of the transmission tariffs to introduce entry-exit types of transmission network charges and to eliminate the transmission tariffs based on commercial transactions, thus complying with Regulation (EC) 1228/2003, is still pending, and needs prompt attention.

Rules for capacity allocation and transparency requirements need to be implemented urgently by *Moldelectrica*, as close to the *acquis* as possible. ANRE has to enhance the monitoring of network operations including the transparency of information for efficient third party access to the networks.

The Ministry of Economy as the sole shareholder of *Moldelectrica* needs to strengthen the institutional capacity needed for the transmission system operator to live up to its role in a liberalised electricity market. This could be contemplated in the context of the structural reforms of the transmission system as required by the Third Energy Package.

ANRE has to boost cooperation with the Ukrainian Regulator in order to remove the trade barriers for electricity exports applied to Ukrainian electricity producers, therefore allowing the Moldovan suppliers to have access to competitive electricity supplies, and through non-discriminatory access to interconnections.

The existing framework for imbalance settlement is not compliant with the European model and needs to be modified and adjusted towards a market-based platform. In this process, *Moldelectrica* and ANRE, in cooperation with their Ukrainian counterparts, need to play key and very active roles.

3.1.8 MONTENEGRO

Electricity

			2011	2012
Electricty Production [GWh]			2,656	2,715
Net Imports [GWh]			1,993	1,569
Net Exports [GWh]			431	353
Total Electricity supplied [GWh]			4,218	3,932
Gross Electricity Consumption [GWh]			4,218	3,937
Losses in Transmission [GWh]			159	154
Losses in Transmission [%]			3.70%	3.90%
Losses in Distribution [GWh]			492	541
Losses in Distribution [%]			19.20%	20.84%
Consumption of energy sector [GWh]			7	9
Final consumption of electricity [GWh]			3,560	3,233
Consumption Structure [GWh]	Industrial, transport, services and other non-residential sectors		1,224	1,222
	Households (Residential Customers)		2,336	2,012
Net maximum electrical capacity of power plants [MW]			835	835
Net maximum electrical capacity of power plants [MW]	Coal-fired		200	200
		out of which: multi -fired		
	Gas-fired			
		out of which: multi -fired		
	Oil-fired			
	Nuclear			
	Hydro		635	635
		out of which: Small hydro	8	8
		Pumped storage		
	Other Renewables			
		out of which: Wind		
Horizontal Transmission Network [km]	380 kV or more [km]		284	284
	220 kV [km]		348	378
	110 kV [km]		604	613
	HVDC [km]			
	Substation Capacity [MVA]		3,288	3,351
Electricity Customers	Total		363,147	369,956
		out of which: Non-households	31,912	32,457
		Eligible customers under national legislation	3	3
		Active eligible customers	0	0
Domestic market	Electricity supplied to active eligible customers [MWh]		0	0
	Share of total consumption [%]		0%	0%

Source: RAE

a. The electricity sector in Montenegro

The Energy Law of 2010 is the main legal act governing the electricity sector in Montenegro. Legal and policy matters in the domain of electricity fall within the competences of the Ministry of Economy. The regulatory tasks and duties are performed by the Regulatory Agency for Energy of Montenegro (RAE).

The main structure of the electricity market of Montenegro is built around three companies - the transmission system operator *Crnogorski Elektroprenosni Sistem (CGES)*, the vertically integrated *Elektroprivreda Crne Gore (EPCG)*, and the electricity market operator of Montenegro *Crnogorski Operator Trzista Elektricne Energije (COTEE)*. Apart from the fully state-owned *COTEE* established by the Government in 2010, the other two companies are corporatized and quoted at the stock exchange of Montenegro.

The State holds 55% of equity capital in *CGES*, and the Italian transmission system operator *TERNA* acquired nearly 22% in 2010 investing in new shares as a part of the deal to construct an undersea cable between Italy and Montenegro. Most of the remaining shares in *CGES* belong to investment funds and other minority shareholders.

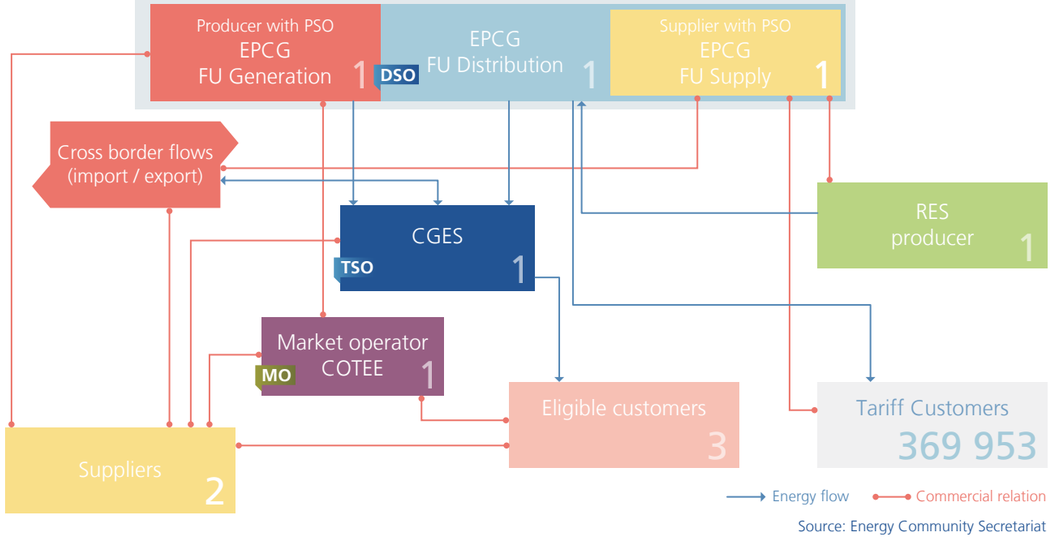
In *EPCG*, an undertaking that performs electricity generation, distribution and supply activities, the Italian utility *A2A* owns 43.7% of the shares, while the State retained 55% and the rest belongs to minority shareholders. The incumbent supplier *EPCG* was appointed by the Government, in accordance with the Law, to perform the tasks of a "public supplier".

With regard to the electricity market, the Energy Law envisages that all household customers will become eligible in 2015. All non-household customers are already eligible to switch their suppliers. The Market Rules adopted in 2012 include an obligation for all customers connected to the transmission network to switch to non-regulated supply as of 1 January 2013. Customers connected to the distribution network retain the right to be supplied by the public supplier *EPCG* at regulated prices even after acquiring eligibility status.

Unlike other Contracting Parties, Montenegro does not require domestic licenses for wholesale operations. Several companies, some of them significant regional market players, registered as market participants at *COTEE*. In addition to the incumbent *EPCG*, starting from October 2012 another retail supplier, the state-owned *MontenegroBonus*, has been licensed and begun operation by supplying the largest customer in the country, the aluminum smelter complex *Kombinat Aluminijuma Podgorica (KAP)*. *KAP's* share in electricity taken from the transmission network amounted to 31% in 2012, significantly influencing the average level of transmission charges per unit.

Two companies are licensed for the generation of electricity, *EPCG* being the dominant producer with 2.7 TWh of annual production in 2012, in the TPP Pljevlja and two HPPs, Piva and Perucica. There are seven small HPPs operated by *EPCG*, two of them owned by the company *Zeta Energy* holding a separate license for generation.

Montenegro's Electricity Market Scheme



Source: Energy Community Secretariat

b. Progress made in 2012/2013

According to the Energy Policy from 2011, covering the period until 2030, a major reform is planned in the electricity sector. As the current energy strategy covers the period until 2025, the Ministry of Economy has drafted a new Energy Strategy for the period until 2030 and published it for a public hearing. The Strategy aims at reflecting new circumstances with the finalisation of investment agreement as well as assumptions to achieve objectives in terms of security of supply, market opening and sustainable development in terms of energy efficiency, and share of renewable energy sources.

Eight construction permits for new small hydropower plants were issued by the Government. The Ministry of Economy also launched public consultations on the document defining terms and conditions for granting concessions for the construction of 10 new hydropower plants.

The implementation of the Energy Law of 2010 required the adoption of substantial new secondary legislation. The responsible institutions have adopted most of the required by-laws, more or less within the deadlines set by the Law.

RAE has fulfilled almost all of its tasks stipulated in the Energy Law as regards the legislative framework for a competitive market, mostly in 2012 and 2013. Implementation of these rules and their strict enforcement are crucial for a market to develop. RAE approved the Rules for Functioning of Electricity Distribution System in September 2012 (adopted by *EPCG*) as well as the Methodology for Setting Charges, Terms and Conditions for Connection to the Distribution Network (adopted by *EPCG* in March 2013). In May 2013 RAE adopted the Rules for Changing Electricity Tariffs, defining the procedures for setting provisional tariffs and the procedures for changing approved revenues and tariff rates during the tariff period. Remaining tasks are creating rules for defining quality of services, which are currently in preparation.

During 2012, *COTEE* defined standard forms and documents for the registration of market participants and balance groups as well as operational rules and procedures relating to communication, complaint handling and other similar issues. On 15 December 2012 *COTEE* published a notification to the participants in the electricity market that all acts defined by the Energy Law had been adopted and that *COTEE* was ready to take over the operation of the market.

Implementation of the Market Rules and Methodology for Setting Prices and Conditions for Provision of Ancillary and System Services and Balancing Services, adopted in 2012, was foreseen to take place as of 1 January 2013. These rules obliged customers connected to the transmission network to contract their supply from the competitive market from 1 January 2013. Customers connected to the distribution network were allowed to continue to purchase electricity from the public supplier *EPCG* at regulated prices.

In practical terms, only three eligible customers were forced to switch supplier. Their share in total consumption in 2012 was 30% or 35% in final net consumption. Two of them, a steel factory and *Montenegro Railways*, entered into new supply contracts and assumed all obligations as required by the Market Rules.

The biggest consumer in Montenegro, the aluminum smelter *KAP* failed to switch supplier or even to register as a market participant. *EPCG* had already stopped supplying this consumer in 2012 due to accumulated debts of nearly EUR 44 million. The newly licensed supplier *Montenegro Bonus* took over the supply of *KAP* in the period between October 2012 and January 2013, accumulating new debts. In the course of 2013, *KAP* has been consuming electricity without any supply contract or payments, thus flagrantly violating the Energy Law and the Market Rules, and causing continuous imbalance in the Montenegrin power system. The imbalance was covered from the ancillary services of *EPCG* contracted by *CGES*. As the energy for imbalance was also not paid for in accordance with the Law and the Methodology for Setting Prices and Conditions for Provision of Ancillary and System Services and Balancing Services, *EPCG* stopped delivering energy to cover *KAP* imbalances.

Subsequently, *CGES* requested disconnection of *KAP* from the grid in accordance with the effective Grid Code. Although *KAP* did not comply, *CGES* did not take enforcement measures, reportedly due to possible costly damages caused by a forceful disconnection.

This situation posed a serious threat to compromise the whole concept of balance responsibility in Montenegro. Namely, the consumption of *KAP* without a purchase contract put the Montenegrin power system in imbalance with respect to the whole synchronous system, at substantial costs to *CGES*. *ENTSO-E* reacted on 6 June 2013 requesting *CGES* to set up a program for compensating the affected network operators which provided energy for balancing its system. Further prolongation of this status only increased the accumulated costs without any collateral for the system operator to settle its position.

In the meantime, the problem was solved in a manner that *MontenegroBonus* took over the commitment to return the energy, in agreement with *EPCG* and *KAP*. A compensation program has been agreed, with the deadline for returning the energy until 1 October 2013.

Taking note of the activities of Montenegro to comply with the compensation program, at the general meeting of *ENTSO-E* held on 27 June 2013, it was decided not to initiate proceedings against *CGES*.

KAP is under receivership, its future operation uncertain. In the case that *KAP* closes its operation, transmission costs borne by *KAP* should be redistributed to the remaining customers imposing an increase in average transmission price.

To turn back to actual progress made in Montenegro during the reporting period, the implementation of the Methodology for Setting Prices and Conditions for Provision of Ancillary and System Services and Balancing Services began promptly after its adoption, when *CGES* as system operator and *EPCG* as a provider of ancillary services, agreed the contract on providing ancillary services in 2012. The contract was probationary and calculations were made only as a dry run, without financial settlement. Balancing services were not included, as the whole system at the time functioned as a single balance group. However, the contract for ancillary services in 2013 was not concluded because of problems with *KAP* raising concern from *EPCG* that its services would not be paid for.

Draft Minimum Standards of Quality of Supply, intended to define continuity of supply, voltage quality and time needed for TSO and DSO to repair and connect, are finalised and ready for consideration by RAE. Definitions of these standards required establishing a system of quality related data collection by the network operators and submission of this data to RAE. The regulation will be in a trial run from 1 August 2013 to the end of the regulatory period 31 July 2015 when its mandatory application is envisaged, including penalties for non-compliance.

RAE developed a draft rule on regulatory accounting, planned for adoption in 2013. The purpose of this document is to strengthen regulatory scrutiny over accounting systems, enforce accounting unbundling, facilitate tariff proceedings and improve the transparency of accounts of regulated undertakings.

The Energy Law requires Ten-Year Network Development Plans and annual investment plans of network operators. Consequently, *CGES* submitted its Ten-Year Network Development Plan for the period 2011 - 2020 to RAE. RAE only approved Three-Year Development Plans for the purpose of tariff setting because the plan was not in full conformity with the Energy Strategy of Montenegro until 2025 and did not contain a cost estimation for its implementation. *CGES* was requested to adjust its plan to the Energy Strategy, notably indicating the updated Energy Strategy until 2030, once adopted.

EPCG submitted only a Three-Year Development Plan for the period 2012 - 2015. RAE instructed *EPCG* to prepare and submit for approval its Ten-Year Network Development Plan. For the purpose of approving regulated revenues for the tariff period 2012 - 2015 RAE used the three-year investment plans. In addition, the distribution system operator in *EPCG* is obliged to conduct a study on the losses in the distribution network that will serve as a basis for assessment of reasonableness of related costs to be recovered from network tariffs, in accordance with the applicable tariff methodology.

c. State of compliance

1. In terms of **authorisation**, the Government sets the objectives and defines the development of energy infrastructure through the Energy Strategy. The action plan for the implementation of the strategy identifies the applicable terms and conditions for construction and rehabilitation of the power infrastructure. Construction and / or reconstruction of energy facilities requires an energy permit or a concession by the Ministry, with 10 construction permits currently issued and the prepared tender to grant concessions for construction of 8 new HPPs.

The Ministry is also responsible for launching tenders 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 Strategy and its action plan, in principle compliant with the *acquis*.

2. Transmission is fully **unbundled** from other activities, although the State holds a majority of shares in all key undertakings active on the electricity market (*CGES*, *EPCG* and *COTEE*). Distribution, generation and supply activities are still bundled in the vertically integrated *EPCG* within three established functional units. Energy undertakings are obliged by the Energy Law to adopt a program of measures for implementation of non-discriminatory access to the transmission and/or distribution network. However, no compliance program was submitted to RAE by *EPCG*, and no report on its implementation is available.

Accounting unbundling of the three functional units in *EPCG* has reportedly been performed, although separate financial statements of the regulated activities have not been published. RAE repeatedly issued orders to *EPCG* to complete the unbundling as requested by the Energy Law, with no effect so far. This is in breach of Directive 2003/54/EC.

3. The Energy Law requires the network operators to ensure non-discriminatory **third party access** for all system users unless it endangers the provision of public services. When access is denied, the affected party is entitled to complain to RAE. Construction of a direct current line may be exempted from third party access with the decision of RAE, under the conditions defined in the Law. The Montenegrin transmission system operator so far has not requested exemption from third party access for the planned construction of the new direct current undersea interconnector with Italy. The Law requires RAE to define terms and conditions for the construction of direct lines. This rule is in early preparatory phases in RAE.

Terms, conditions and fees for access and use of transmission and distribution networks are defined in the respective rules adopted by RAE, in accordance with the Energy Law.

The review of tariffs for use of transmission and distribution systems scheduled after the first year of the regulatory period was performed in June 2013 and RAE published new tariffs applicable for the second year of the regulatory period, i.e. from 1 August 2013. Reflecting all aftermaths of the new position of *KAP*, RAE is reconsidering the effective tariff methodology for setting transmission network charges. In June 2013, the Secretariat closed a case concerning *inter alia*, the lack of cost-reflectivity of distribution tariffs after RAE corrected the Methodology in 2012.

4. **Eligibility** is addressed in the Energy Law. The electricity market is formally open to competition for all non-household customers, and customers connected to the transmission network are not allowed to purchase at regulated prices from the public supplier. Customers connected to the distribution network are free to switch to competitive supply, but they are not obliged to do so.

The **supplier switching** procedure is defined in a Rule on Conditions and Procedure for Supplier Switching approved by RAE in 2010, compliant with the *acquis*.

Currently, there are only two licensed suppliers of final customers in Montenegro. As described above, effectively only two customers assumed rights and liabilities of active market participants and switched to competitive supply. The biggest consumer *KAP* did not register as a market participant and did not negotiate any supply contract, as required in the Market Rules and procedures defined by *COTEE*.

5. The Energy Law defines that supply under **regulated prices** is provided as a public service. Public services, in addition to transmission and distribution, include services provided by the supplier of last resort, the supplier of tariff customers until full market opening and the supplier of vulnerable customers, under the title of public supply. *EPCG* is designated by the Government as a public supplier. To assume its task of the supplier of last resort, *EPCG* was supposed to submit to RAE for approval a methodology for tariffs for supply of last resort. This obligation has not yet been fulfilled.

From 1 January 2013 end-user prices are not regulated for customers connected to the transmission network. They are thus forced to contract their supply in the competitive market. Generation is not subject to explicit price regulation. Namely, RAE does not determine the price at which domestic generators should sell electricity to the public supplier. Instead, the price of electricity in the tariffs for final customers is determined on the basis of actual negotiated price in the previous period in the case of import. For domestic generation it is set applying the previously regulated prices and a factor of harmonising this price with the referent market price.

6. Starting from 1 January 2012, *CGES* applies the rules for **allocation of interconnection capacity** approved by RAE in 2011. The rules define annual, monthly, weekly and daily auctions on interconnection capacities, split 50:50 with the neighbouring systems. Congestion income is used for the reduction of tariffs, as a deductive item in determining regulated revenues. The Allocations Rules were brought in compliance with the *acquis* upon the Sectretariat's intervention.

7. RAE regulates the provision of **balancing services** in line with the Methodology for Setting Prices and Conditions for the Provision of Ancillary and System Services and Balancing Services in the Transmission System. In July 2012, RAE set prices for ancillary and system services, effective from 1 August 2012.

Calculation of imbalances and allocation of respective costs is applicable only for customers connected to the transmission network, each customer being responsible for its imbalances. The distribution network operator is balanced as a single party and the incurred costs of imbalance to be transferred to the distribution tariffs.

The breach of the Energy Law, the Market Rules and RAE's Methodology by the biggest consumer of electricity in Montenegro, *KAP* prevented effective implementation of the balancing rules. It also led to the suspension of the provision of balancing services contracted by *CGES*, endangered the system stability and the financial liquidity of the electricity sector and put the power system of Montenegro in breach of international practices and *ENTSO-E* rules.

8. Despite RAE's instructions, there is still no evidence that the network operators comply with all **transparency** requirements, such as publishing their financial statements or allowing for easy access to information for system users. Even when information is made publicly available, it is not always easily accessible to the users.

Tariffs for use of transmission and distribution system are published in the Official Gazette, and on the website of RAE, but in case of regulated undertakings, the information is not easily accessible to system users.

The public companies have their financial statements for the year 2012 published by the Montenegrin Commission of Securities within statutory deadline, but network operators still have not published their most recent financial reports on their respective web pages.

Rules for allocation of interconnection capacities and results of auctions are published on *CGES'* web page.

9. With regard to **customer protection**, the Energy Law regulates the supply of electricity to vulnerable customers. The public supplier is designated to act as a supplier of vulnerable customers. The Law defines vulnerable customers as households entitled to a social protection scheme if their life or health may be threatened if electricity supply is disrupted. These customers cannot be disconnected and the Government has an obligation to provide financial support to these customers. RAE adopted tariffs for vulnerable customers for 2013, calculated on the basis of the number of vulnerable customers and funds made available for this purpose. The funds for subsidies are provided from the State budget.

New rules for the functioning of the public supplier and quality of supply standards are currently in preparation. These acts are supposed to provide the key components in the scheme for customer protection. Customers may complain to RAE and also to the court.

The regulatory task to adopt methodology for setting tariffs for vulnerable customers in the context of the existing definition of vulnerability lead not only to distorting the price signals for these customers, but also to introducing the responsibility of the regulatory authority for the specific aspect of social protection measures.

Implementation of the Third Energy Package

Montenegro has already taken action to assess the conformity of its legislation with the Third Energy Package. The assessment and a gap analysis were prepared for consultation among key stakeholders.

UNBUNDLING

Unbundling requirements need to be introduced in the primary legislation. Ownership unbundling is not implemented because the State is the majority shareholder in *CGES* as a transmission operator, and vertically integrated generation, distribution and supply in *EPCG*, as well as single owner of the market operator.

REGULATORY AUTHORITY

The key shortcomings are related to strengthening the position of RAE, particularly in terms of power to enforce its decisions. So far the regulatory rulings did not achieve the desired outcome. Apart from additional competences, new legislation should ensure that the regulatory authority has the powers enabling it to carry out its duties, including investigating and penalty imposing powers.
Regulatory independence, including financial independence, must be assured in primary legislation. The conditions for dismissal of regulatory authority must not be abused.

CUSTOMER PROTECTION

Under the current Law, the concept of the vulnerable consumer is clearly defined, but the Law is not applied properly. The regulator is responsible to determine tariffs for vulnerable customers, and the Ministry in charge of social welfare is responsible to define the rights of vulnerable customers.

d. Conclusions and Priorities

Despite the efforts of many responsible authorities, implementation of the rules and regulations was the key challenge for the electricity market in Montenegro. Therefore, enforcing powers must be ensured in the system. The initiated legislative reform can bring the desired improvement.

Transparency of operations, primarily of network operators, should be implemented in accordance with the Law. Since the Law transposed the requirements of the *acquis* related to information on terms and conditions for connection, access and use of network, prices and tariffs, payment methods, the presentation of information in an understandable manner and easily accessible form, as well as the enforcement tools must be prioritized.

3.1.9 SERBIA

Electricity

			2011	2012
Electricty Production [GWh]			38,600	36,926
Net Imports [GWh]			6,701	6,441
Net Exports [GWh]			6,979	5,457
Total Electricity supplied [GWh]			38,322	37,910
Gross Electricity Consumption [GWh]			38,321	37,909
Losses in Transmission [GWh]			1,096	1,078
Losses in Transmission [%]			2.57%	2.55%
Losses in Distribution [GWh]			4,747	4,699
Losses in Distribution [%]			15.50%	15.10%
Consumption of energy sector [GWh]			4,487	4,241
Final consumption of electricity [GWh]			27,991	27,891
Consumption Structure [GWh]	Industrial, transport, services and other non-residential sectors		13,325	13,138
	Households (Residential Customers)		14,666	14,753
Net maximum electrical capacity of power plants [MW]			7,127.00	7,130.50
Net maximum electrical capacity of power plants [MW]	Coal-fired		3,936	3,936
	out of:	multi -fired		
	Gas-fired		353	353
	out of:	multi -fired	353	353
	Oil-fired			
	Nuclear			
	Hydro		2,835	2,835
	out of:	Small hydro	41	44
		Pumped storage	614	614
	Other Renewables		3	6,5
	out of:	Wind	0	0,50
Horizontal Transmission Network [km]	380 kV or more [km]		1,514	1,614
	220 kV [km]		1,882	1,884
	110 kV [km]		6,036	9,625
	HVDC [km]			
	Substation Capacity [MVA]		26,295	26,713
Electricity Customers	Total		3,539,645	3,592,251
	out of:	Non-households	386,705	384,866
		Eligible customers under national legislation	386,705	384,866
		Active eligible customers	0	0
Domestic market	Electricity supplied to active eligible customers [MWh]		0	0
	Share of total consumption [%]		0.00%	0.00%

Source: Ministry of Energy, Development and Environmental Proetction / AERS

a. The electricity sector in Serbia

The Energy Law of 2011 is the main primary legal act for the electricity sector in Serbia. The responsibility for its implementation lies with the Ministry of Energy, Development and Environmental Protection. The regulatory competences are performed by the Energy Agency of the Republic of Serbia (AERS).

The main electricity undertakings in Serbia are fully state-owned. The public enterprise *Elektroprivreda Srbije (EPS)* is a vertically integrated holding encompassing a total of thirteen legal entities. Five of them are licensed for the generation of electricity. Coal production (open-pit mining) is done by a separate legal entity within *EPS* as well as within one of the power generating companies. One legal entity within *EPS* has been established for the generation of electricity from renewable sources, but still does not operate any production facilities.

Five undertakings within *EPS* perform electricity distribution and distribution system operation.

The new subsidiary *EPS Supply* was established in 2013 by a Government Decision on *EPS's* restructuring. The Decision aims to unbundle distribution and supply activities of *EPS*. *EPS Supply* was designated as a public electricity supplier. A public electricity supply licence was issued to *EPS Supply* on 1 July 2013.

The public enterprise *Elektromreza Srbije (EMS)* is the country's only electricity transmission and transmission system operator. In addition to this function, *EMS* is responsible for the organisation and administration of balancing market according to the Energy Law. *EMS* will also act as the electricity market operator until the Government issues an act regulating the organisation and operation of the electricity market in more detail. Activities of the Ministry and *EMS* on defining basic principles for the establishment of an organised electricity market are in the final phase.

In addition to the production companies within *EPS'* holding structure, licences for electricity production were issued to five independent generation companies.

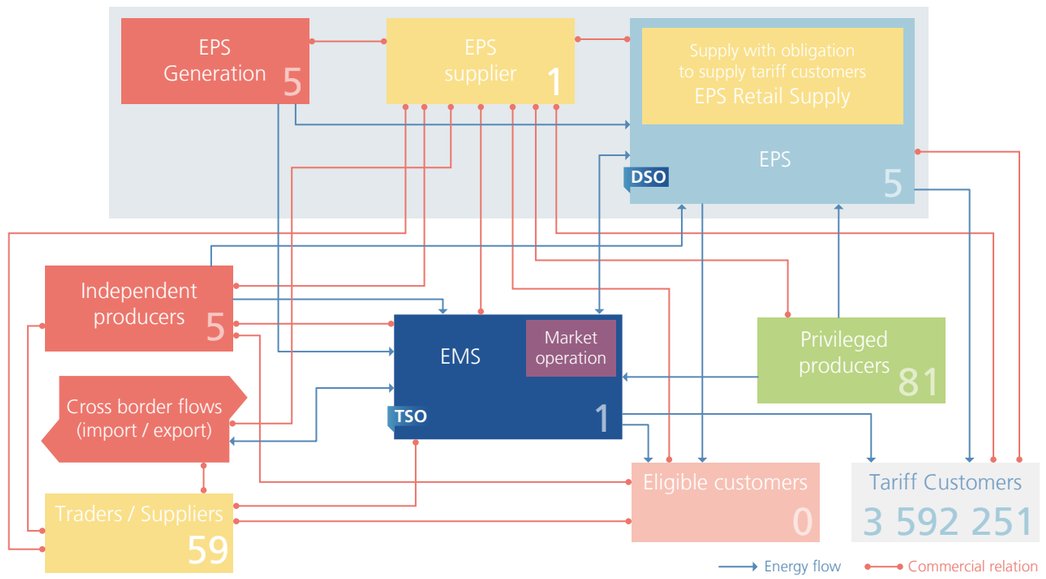
59 undertakings were holding licenses for electricity supply in Serbia in 2012. 27 of them were active in wholesale trading, mainly cross-border, while the rest of them were not performing activities under this licence. The number of licensed suppliers in Serbia has increased to 65 by July 2013.

All customers in Serbia are eligible, except for households which will become eligible as of 1 January 2015. However, all customers were using the possibility to be supplied at regulated prices until 31 December 2012. As of 1 January 2013, the 26 customers connected to the transmission system – representing 9.5% of the total electricity consumption were forced to choose their supplier on the free market. 25 of them have chosen to be supplied by *EPS* at non-regulated conditions, while the industrial customer *Messer Tehnogas* switched to the other licensed supplier on the free market, *GEN-I*.

According to the Energy Law all customers connected to the distribution system remain entitled to public supply, *i.e.* supply under regulated prices. Starting from 1 January 2014, only households and small customers will be entitled to public supply. Small customers are defined in line with Directive 2003/54/EC.

EPS was appointed as a temporary supplier of last resort starting from 1 February 2013, until a public tender for supplier of last resort is conducted in accordance with the Energy Law. A final deadline for this designation has, however, not been defined by the Government yet. The right to be supplied by the supplier of last resort is given to customers not entitled to public supply during a transitional period until 1 January 2015 for a maximum of 60 days in cases when their new supplier goes bankrupt, its license expires or is revoked, or if the customer fails to contract a new supplier. The price for the supply of last resort is 70 EUR/MWh.

Serbia's Electricity Market Scheme



Source: Energy Community Secretariat

b. Progress made in 2012/2013

The Energy Law was amended twice in 2012. The amendments mainly focused on energy efficiency, energy permits and renewable energy. The Ministry also started drafting the amendments necessary for implementing the Third Package. The new Energy Law is envisaged to be adopted by the end of 2013.

The Electricity Market Code was issued by *EMS* in December 2012 upon approval from AERS, and entered into force in January 2013. In line with the Energy Law, the Market Code regulates the principles, rules and procedures applied in the wholesale market in Serbia and the contractual framework for rights and obligations of market players – rules for balance responsibility, balancing market, calculation of imbalances and imbalance price, as well as imbalance settlement mechanism for financial settlement of balance responsible parties.

In line with the Market Code, *EMS* registered 29 balance responsible parties. Financial settlement of imbalances is done based on the calculated imbalance of a balance group. The imbalance price is derived from prices of activated balancing energy in the balancing market for each imbalance settlement period of 1 hour. The prices of activated balancing energy and imbalance prices for each imbalance settlement period are published on a daily basis on *EMS'* website.

Since 1 January 2013, the balancing market operates on market-based rules based on bids for balancing energy. Since no other market participants are able to offer balancing services, *EPS* remains the only participant in the balancing market for the time being. The rules for the balancing market to some extent prohibit exercising of market power by *EPS* by limiting the bidding price spread for aggregated explicit bid to the maximum of 30 EUR/MWh between 100 MWh for downward and 100 MWh for upward regulation. Additionally the bidding price is limited between 0.1 and 500 EUR/MWh. The implemented balancing market is in compliance with the best EU practices; priority should be given to mitigation of high concentration of the balancing market through prompt implementation of the Network Code on Electricity Balancing, once adopted in the Energy Community.

AERS adopted Rules on Supplier Switching which entered into force in 2012. The Rules regulate the conditions and procedure for switching for final customers on the basis of a "full supply" contract i.e. an all-inclusive, continuous service without quantity limits, as well as the rights and obligations of the suppliers and the system operator. The Rules cover cases of switching upon the customer's request, switching to the public supplier or supplier of last resort, as well as switching in the case of a contract termination following non-payment. The Rules define a simple, efficient and free of charge procedure for switching supplier within a period of 21 days.

New annual Rules on Allocation of Cross-Border Transmission Capacities for 2013 were adopted by *EMS* and approved by AERS. In addition to split auctions and joint auctions with Hungarian system operator *MAVIR* that were already in place, joint auctions with Romanian operator *Transelectrica* have been adopted for the first time. Joint auctions take place on a yearly, monthly, daily and intra-day basis, whereas split auctions are being organized on a yearly, monthly, weekly and intra-day basis (except with Croatia).

In line with the Energy Law, new methodologies for setting prices for use of the electricity transmission and distribution systems, as well as the new methodology for calculation of connection charges for transmission and distribution networks, were adopted by AERS in 2012. Methodology for Setting Regulated Electricity Prices for Public Supply was adopted and prices were approved in July 2013. The methodologies set maximum allowed revenues of the regulated energy companies, and set the criteria and rules for the allocation of revenues, the elements for calculation and methods of invoicing. The revenues cover justified costs of operation, as well as an adequate return on assets and investments. New transmission and distribution tariffs in line with new methodologies were proposed by system operators and approved by AERS in 2013. AERS also determined the prices for the procurement of ancillary services in 2013.

Legal and accounting unbundling of distribution companies within *EPS* was accomplished in July 2013, following the establishment of the new legal entity *EPS Supply*. Licences for the supply of tariff customers issued to the distribution companies by the 2004 Energy Law, ceased to be valid when the licence for the performance of public supply of electricity was issued to *EPS Supply* on the 1 July 2013.

Recent progress has been made in completing secondary legislation that was lagging far behind deadlines given by the Energy Law. The Ministry adopted new Licensing Rules in April 2013 and the Rules Prescribing Conditions and a Procedure for the Application and Issuing of Energy Permits in July 2013. A Decree on the Protection of a Vulnerable Customer was adopted by the Government in March 2013 and entered into force as of 1 April 2013. Additionally, a Decree Prescribing Detailed Conditions for Electricity Delivery and Supply and Measures to be Undertaken in Case of a Threat to the Security of Supply prepared by the Ministry was adopted by the Government in July 2013.

Amendments to the transmission grid code are under preparation by *EMS*. The amendments are mainly aimed at harmonising the grid code with the new Market Code.

In 2012, *EMS* prepared a first draft of the Ten-Year Network Development Plan and submitted it to AERS for review. The approval process has not been finalized yet.

c. State of compliance

1. The **authorisation and tendering procedures** are defined in the Energy Law in line with the *acquis*: a public tender for new capacity is envisaged in cases where the energy permits issued and measures for energy efficiency are not sufficient to ensure security of supply. Upon proposal by the Ministry, the Government decides on initiating a tender procedure for which the Ministry is responsible.

According to the Law, the Ministry sets rules defining in detail conditions and a procedure for the application and issuing of energy permits, as well as conditions for approval of energy facilities that do not require energy permits.

2. The transmission system operator is fully **unbundled** from the other activities in line with the *acquis*. Also, distribution system operators have been recently unbundled in terms of their legal form and accounting in line with the *acquis*. The Directive's provisions on functional unbundling of the distribution system operators are still not complied with. They have been transposed by the Energy Law in line with the *acquis*. The obligations for the network operators to implement a compliance programme, to submit an annual report on the measures taken to AERS, and to publish the report on their website have also been transposed. The distribution system operators have not yet developed compliance programmes, as they were in the process of legal unbundling.

3. Non-discriminatory **third party access** to the transmission and distribution systems is guaranteed by the Energy Law, the network codes and tariff methodologies for access and connection to the transmission and distribution network, all of which have been adopted and implemented in line with the Energy Law.

4. **Eligibility** is defined by the Energy Law in line with the *acquis*, meaning that all customers, except households, are eligible. Households will be eligible starting from 1 January 2015. Supplier switching rules have been applicable as of 1 January 2013. It is important to note that the limitation of switching to suppliers who supply final customers on the basis of a "full supply" contract per se does not limit customers' choice since all eligible customers alternatively have the choice to either register as a Balancing Responsible Party (BRP) with full control of balancing deviations or transfer balancing responsibility to another BRP.

5. In terms of **market opening**, it should be noted that despite granting them full eligibility, the right of access to regulated supply has not been curtailed for any customer category except for those connected to the transmission network. Starting from 1 January 2014, only households and "small customers" will be entitled to public supply by *EPS Supply*. In principle, such a phase-out approach is compliant with Article 3 of Directive 2003/54/EC. Moreover, the necessity for price-regulation for households and small customers needs to be continuously reassessed in line with the development of competition. Most importantly, the wholesale level, i.e. production capacities within *EPS* needs to be exposed to the free market in order to boost competition and allow for a proper price signal.

6. **Allocation of interconnection capacity** is conducted in line with the *acquis* following the Secretariat's intervention in 2011. The allocation rules together with the results of conducted auctions, congestions, prices and other relevant data are published on *EMS'* website in line with the *acquis*.

The allocation of interconnection capacity on electricity interconnectors between the network operated by *KOSTT* and adjacent systems is still subject to a dispute in which the Secretariat issued a Reasoned Opinion against Serbia in 2011. The issue is covered by the bilateral agreement reached by Serbia and Kosovo* in September 2013.

7. Based on the Market Code, a free **balancing market** based on bids for providing balancing energy as well as imbalance settlement of balance responsible parties became operational starting 1 January 2013. Being the first Contracting Party that has set up a functional real-time balancing market with a price signal for imbalance settlement, Serbia has established a good basis for facilitating the competitive balancing market and its regional integration. In practical terms, however, the balancing platform will provide adequate price signals only once the balancing energy is also offered by a parties other than *EPS*. The development of a regional balancing market should promote the entry of alternative players.

Prices at which ancillary services are being procured are regulated and determined by AERS in line with the Energy Law and Directive 2003/54/EC.

8. The **transparency** requirements are stipulated in the Energy Law as a condition to be respected by all companies and authorities concerned. *EMS* has established a transparency platform on its website where all the data related to transmission network operation is published in line with the *acquis*.

9. **Customer protection** provisions are transposed and implemented in line with the *acquis*. The Decree on the Protection of Vulnerable Customers in force as of 1 April 2013 addresses criteria, methods of protection, conditions, deadlines and a procedure for determining the status of a vulnerable customer, the source and manner of providing funding for the supply of certain amounts of electricity as well as record keeping.

Implementation of the Third Energy Package

The Third Energy Package will require transposition of several new elements in Serbian law, mainly related to unbundling and the tasks, competences and independence of AERS. The present legal framework provides a good point of departure for this endeavour, and Serbia set itself the ambitious goal to transpose the Third Energy Package by the end of 2013.

UNBUNDLING

The electricity sector in Serbia has not been corporatised and the transmission system operator *EMS*, and the incumbent vertically integrated company *EPS* are established as public enterprises, with their assets being 100% in State ownership. Both companies are in the competence of the Ministry of Energy, Development and Environmental Protection, which is not in compliance with the ownership unbundling requirements stemming from the Third Package.

REGULATORY AUTHORITY

Tasks and authorities assigned to AERS by the current Energy Law have to be strengthened in order to comply with the Third Energy Package. The regulatory authority must be granted powers to conduct investigations and impose penalties in cases of non-compliance. The regulatory authority also must be empowered to perform its role in the process of certification of the transmission system operator.

CUSTOMER PROTECTION

Serbia has a good legal framework for the protection of electricity customers in conformity with the Third Package provisions regarding vulnerable customers, contractual terms and conditions, transparency of information and switching supplier. Customers' rights to a good standard of service and complaint handling must be guaranteed by establishing an independent mechanism for complaint handling and out-of-court dispute settlement in line with the Third Package. Active participation of customers in the electricity market should be supported by the implementation of intelligent metering systems following requirements and deadlines given in the Third Energy Package.

d. Conclusions and Priorities

Serbia has continued to make remarkable progress since the adoption of the Energy Law, especially in completing secondary legislation. Their effective implementation and monitoring, in particular of the new Market Code, must be a priority. They should be implemented in a way so as to support market opening which despite a good legal structure has yet to evolve in practical terms. Conducting the public tender for supplier of last resort in line with the Energy Law should not be delayed further.

The initiated activities on unbundling the distribution system operators need to be finalized. Functional unbundling of the distribution system operators has to be implemented and duly monitored.

EMS should continue its activities on the development of common allocation procedures for coordinated cross-border transmission capacities together with the neighbouring operators and consider the options for coordination with the SEE CAO.

The first concrete steps for an amicable settlement of the dispute with the authorities and companies of Kosovo* must be taken in order to bring to an end the infringement actions launched by the Secretariat. Settling this dispute is also a prerequisite for further regional integration in the electricity sector and thus must be given highest priority. The Secretariat has expressed its preference for a comprehensive inter-TSO agreement between *EMS* and *KOSTT* which would identify the service to be provided and the compensation to be paid in the bilateral relations in accordance with the *acquis*.

Activities for bringing the primary legislation in compliance with the Third Energy Package are expected to proceed according to the schedule of the Ministry.

EMS should finalise preparation of its Ten-Year Network Development Plan. The DSOs should continue their activities on reducing network losses and improving quality of supply.

3.1.10 UKRAINE

Electricity

			2011	2012
Electricty Production [GWh]			176,592	180,513
Net Imports [GWh]			21	91
Net Exports [GWh]			6,455	9,752
Total Electricity supplied [GWh]			170,158	170,851
Gross Electricity Consumption [GWh]			169,550	170,838
Losses in Transmission [GWh]			4,315	4,460
Losses in Transmission [%]			2.44%	2.47%
Losses in Distribution [GWh]			17,306	17,523
Losses in Distribution [%]			10.44%	10.54%
Consumption of energy sector [GWh]				
Final consumption of electricity [GWh]			147,929.185	148,855.465
Consumption Structure [GWh]	Industrial, transport, services and other non-residential sectors*		108,760	107,874
	Households (Residential Customers)*		39,169	40,981
Net maximum electrical capacity of power plants [MW]			49,001.50	49,237
Net maximum electrical capacity of power plants [MW]	Coal-fired**		22,257	22,257
	out of which:	multi -fired		
	Gas-fired**		7,111	7.111
	out of which:	multi -fired		
	Oil-fired			
	Nuclear		13,835	13,835
	Hydro		5,459.70	5,462.40
	out of which:	Small hydro	70.80	73.50
		Pumped storage	861.50	861.50
	Other Renewables		338.80	571.60
	out of which:	Wind	146.40	193.80
Horizontal Transmission Network [km]	380 kV or more [km]		4,931	4,933
	220 kV [km]		17,333	17,323
	110 kV [km]		40,969	41,202
	HVDC [km]		0	0
	Substation Capacity [MVA]		n/a	n/a
Electricity Customers	Total		19,603,193	19,603,193
	out of which:	Non-households	527,467	527,467
		Eligible customers under national legislation	n/a	n/a
		Active eligible customers	n/a	n/a
Domestic market	Electricity supplied to active eligible customers [MWh]		n/a	n/a
	Share of total consumption [%]		n/a	n/a

* data for 2011
** ECS' estimate based on list of LCP
Source: NERC

a. The electricity sector in Ukraine

The principal authority responsible for legislative and policy issues in the domain of energy in Ukraine is the Ministry of Energy and Coal Industry. The main legal act governing the electricity sector of Ukraine is the Electricity Law of 1998, as amended almost on a yearly basis until 2010. The Law provides the basic framework for State control over the electricity industry and the principles of management of the public infrastructure and operations in electricity generation, transmission, wholesale trading, and end-user supply. Another legal act applicable to the electricity sector is the Law on Combined Generation of Heat and Power and Use of Waste Energy Potential.

The National Commission for State Regulation in Energy (NERC), already operational since 1994, is gradually developing its competences and independence. It has been re-established by a Decree of the President of Ukraine of November 2011, and is subordinate and accountable to the President and the "Verkhovna Rada" (Parliament) of Ukraine. NERC's Commission consists of a Chairman appointed by the President of Ukraine, and six Members appointed on proposal of the Chairman. Besides the fact that its powers and appointments are given and made by the President, NERC reports on the operational level to the Government. In 2012, a Public Council was established within NERC to assure transparency and publicity, prevent corruption and support public interests in the application of the regulatory rules, as well as to submit comments and proposals to the draft acts and decisions of NERC. The operation of NERC is financed from the State budget and from fees for licensed activities, upon approval by the Cabinet of Ministers.

The activities of NERC include electricity, gas, oil and heat supply. Its powers and competences are further outlined by the Law on Natural Monopolies of 2000, as amended, and several supporting acts such as the Law on Licensing of Certain Types of Economic Activities of 2000, as amended, the Law on Principles of Regulatory Policy in Economic Activity of 2004, as amended, and the Law on Principles of State Supervision (Control) in Economic Activity of 2007, as amended. All these acts are also applicable in the energy sector

According to the Electricity Law of 1998 and the other relevant legislation the competences on NERC in the electricity sector are related to licensing the activities of generation, transmission, distribution, and supply at regulated tariffs, non-regulated and wholesale supply of electricity and combined heat and power generation. NERC is also competent for the promotion of competition in electricity generation and supply, setting the transmission and distribution network tariffs and the approval of regulated end-user prices. This includes approving the rules and monitoring cross-border capacity allocation, quality and safety of supply services, connection of new generation, performance of the licensed transmission and distribution operators, conditions for access to the market, agreements for activities in the market, settlements and monitoring of possible distortions of the market including cases of acquisition or mergers. NERC is responsible for the protection of customer rights through complaint-handling.

The transmission system of Ukraine is operated by the state-owned company *Ukrenergo* which also performs the central dispatching of the generation, balancing of the loads in the system and auctions for allocation of the interconnection capacities on the borders. The operation of *Ukrenergo* is fully regulated and monitored by NERC.

The transmission system falls short of the technical and safety standards required for the European networks, and works in rather insecure market conditions with its obsolete infrastructure. It operates in a synchronous mode with the United Power System (UPS) of the Russian Federation, except for the isolated "Burstin Island" – a region interconnected and synchronised with *ENTSO-E* network.

Ukraine's interconnections with the Russian system are used for the exchange of electricity outside the market, and all capacities are reserved by *Ukrenergo* for its own purpose. Recently increased interest of some traders for commercial exports from Ukraine to customers using interconnectors synchronised with the Russian system might change this practice. Interconnection capacities are allocated on the borders with Belarus for export and with Moldova for export and for transit to the Ukraine region of Odessa. The interconnections of the Burstin Island (synchronised with *ENTSO-E*) with the systems of Slovakia, Hungary and Romania dispose of a maximum total capacity of 650 MW and are used for export from Ukraine only. The capacity auctions are performed by *Ukrenergo*, based on Auction Rules approved by NERC in 2009. They are subject to a dispute initiated by the Secretariat.

The wholesale market operator *Energorynok* is a State enterprise established in 2000. It functions as a single buyer of all electricity from generators or traders (not excluding eventual imports), and a wholesale supplier to the public and independent suppliers and traders (including exports). *Energorynok* is also responsible for day-ahead generation schedules, merit-order lists for balancing and financial settlement.

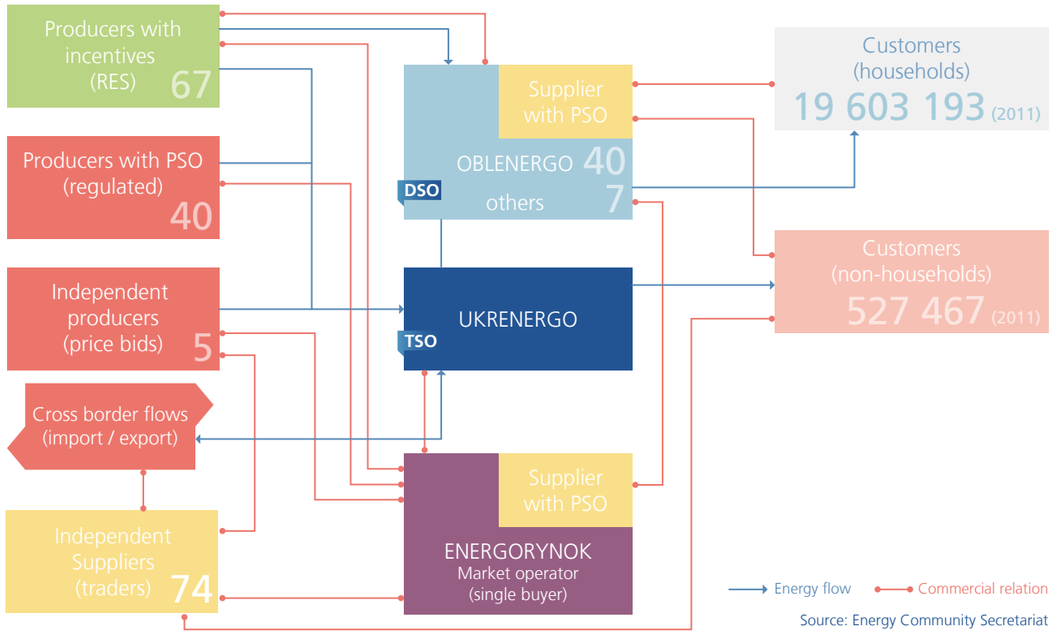
The nuclear and large hydro generators (along with the incentivised production from CHPP and renewable sources) sell the electricity to *Energorynok* at regulated prices, while thermal power plants sell through a competitive bidding platform, with the marginal system price determined on the basis of the "average wholesale price from producers", established on a daily basis.

Electricity supplied by *Energorynok* is sold on the basis of an "average wholesale price for suppliers", calculated after adjustment (increase) by the amount required to cover the (regulated) transmission tariffs and costs of services, as well as the regulated charges required to cover the incentives for renewables ("feed-in tariffs"). The resulting price is further adjusted for the costs of cross-subsidies (amounts required to cover losses) for the electricity provided to public suppliers, which in turn depends on regulated discounts that are negotiated and approved for each public supplier separately (based on the social profile of its customers). All increases of the cost are compensated through raising the price of energy offered to independent suppliers or traders which contract freely with final customers. All regulated costs are established by NERC.

A fundamental reform of the Ukrainian wholesale market is currently under discussion, the draft new Electricity Law, currently pending before Parliament.

The electricity generation structure of Ukraine consists of five regional coal-fired thermal power generation companies, a single nuclear generation company *Energoatom* with five nuclear facilities, a single large-hydro generation company *Ukrgydroenergo* with 11 plants and a growing number of wind farms. Exceptionally, the production of local gas-fired CHP and distributed generators can be sold to public suppliers or directly to the final consumers, at regulated prices. Ukraine is a net exporter of electricity.

Ukraine's Electricity Market Scheme



Source: Energy Community Secretariat

The distribution and supply of electricity on the territory of Ukraine is provided by 27 utilities "Oblenergo". They supply electricity to all captive customers, i.e. non-industrial final customers and households, at regulated prices. Some "Oblenergos" operate distributed generation units, mainly gas-fired CHP or small hydro power plants.

b. Progress made in 2012/2013

One ambitious activity related to the implementation of reforms in the electricity sector of Ukraine was the development of the new draft Law on the Main Aspects of Functioning of the Electricity Market. The Law is expected to liberalise the electricity market by abandoning the obsolete single buyer market model and introducing liquid trading instruments and market-based balancing activities. Other improvements expected from the new Law concern unbundling, eliminating cross-subsidies, increased transparency, deregulation in generation and supply and a developed switching framework.

In the course of 2012 the draft Law went into the "Verkhovna Rada" and passed the first reading. After improvements, it is currently pending in Parliament for the second reading.

The Energy Strategy of Ukraine until 2030 was subject to public debate in the second half of 2012. The document was supposed to include, among others, a demand forecast for the period of time covered, criteria for possible investment priorities, and an outline of reform activities for the liberalisation of the electricity market and cost-reflectivity of regulated prices. The Secretariat was not informed about the outcome of the process.

Within the activities for consolidation of its internal operations in the reporting period NERC adopted, among other things, rules on its internal procedures, rules on the procedure for participation in amending the legislative acts of the Cabinet of Ministers, and rules on the establishment and operation of the Public Council. During the reporting period, NERC published a number of amendments and resolutions in the domain of electricity and regular updates of the regulated supply prices for each distribution utility, and of the end-user prices.

c. State of compliance

The legislative framework for the electricity sector of Ukraine

is fragmented. Legislative and regulatory acts are rarely published in languages other than Ukrainian.

The current Electricity Law based on a single buyer, developed even before Directive 2003/54/EC, is obsolete and requires urgent reform. That is why the Secretariat has supported the draft new Electricity Law.

1. The Electricity Law does not directly provide for any obligation for non-discriminatory and objective procedures for **authorisation** or **tendering** of new generation capacity, or for the appointment of independent authorities to perform such functions. In the context of construction of new infrastructure the Law calls upon provisions from the legislation on construction, referring both to authorisation and tendering, defining the conditions for construction, expansion and retrofit of electricity facilities.

According to the Electricity Law, the Ministry of Energy and Coal Industry is in charge of the authorisation of new generation capacity construction, as well as for the tendering of such projects. However, no specific criteria or procedure have been adopted by the Ministry. The Electricity Law does not provide any obligation to the Ministry or to NERC for publishing the conditions or setting a transparent procedure in this context. There are no specific provisions in the Law for the treatment of refusals of authorisations. Responsibility for the licensing of electricity generation in the domain of operation of new facilities lies with the NERC.

The legal framework does not address authorisation and tendering in a compliant manner.

2. The transmission system operator *Ukrenergo* and the wholesale market operator *Energorynok* are legally **unbundled** companies, under full State ownership and control.

At the distribution level, the unbundling is not completed. The distribution utilities "Oblenergos" are licensed to operate the networks and to supply electricity; and no legal unbundling of these activities is implemented or even imposed by the Law. No specific criteria for independent day-to-day operation, management or decision making are applied either.

The Law does not impose account unbundling within an integrated utility. However, for the purpose of monitoring the accounts, the utilities are legally obliged to submit information to NERC on their assets and liabilities for each licensed activity separately. This includes accounting information for any CHP operated within the distribution company, if any.

There is no further compliance with the obligation for establishing audited annual accounts for each licensed activity, and there is no unbundled accounting between the supply of eligible and non-eligible customers either. Furthermore, there is still no obligation to publish the annual audit reports.

Cross-subsidisation between different activities in distribution is not treated by the Electricity Law but is prohibited by NERC's rules, and regularly checked on. Cross-subsidisation between different classes of customers is not prohibited. Overall, Ukraine currently does not implement the unbundling rules from Directive 2003/54/EC.

3. Regulated **third party access** to the transmission network is granted to registered companies licensed for supply – including the distribution and supply utilities "Oblenergo", and companies licensed for export or supply under market conditions. Access for eligible customers is not envisaged which constitutes a substantial incompliance with Article 20 of Directive 2003/54/EC.

At distribution level, the Electricity Law provides for network access under equal conditions for all registered companies licensed for supply with active supply contracts. The refusal of access is treated in the context of network connection for generation from alternative (renewable) energy sources and requests for the establishment of a customer supply contract. The access cannot be refused by the local distribution utility (network operator) except in case of insufficient network capacity and with a consequent report to NERC. Customers are allowed to financially assist the necessary upgrade of the infrastructure and claim reimbursement.

According to the Electricity Law and the other applicable legislation NERC is responsible for tariff regulation in the electricity sector. In particular NERC is in charge of setting the transmission and distribution tariffs. These obligations are accomplished and the transmission tariffs have been approved and published by NERC.

4. In the Protocol for Accession of Ukraine to the Energy Community of 2010, **eligibility** of non-household customers is required from 1 January 2012 and for households as of 1 January 2015. The Electricity Law of Ukraine, however, falls short of compliance in this respect and does not provide any explicit definition of eligible customers or a timetable for market opening.

Switching as such is not prohibited but no switching rules or conditions are in place, and no incentive measures or support mechanisms for switching are applied.

5. As regards **market opening**, the single buyer and seller system prevents effective supplier switching, and thus violates Directive 2003/54/EC. Moreover, the generation prices and electricity wholesale prices of *Energorynok* are established by NERC. End-user prices of electricity are also regulated by NERC namely for the regulated distribution companies which purchase their electricity from *Energorynok* and from local regulated generators, and supply their (captive) customers under regulated prices. Non-regulated suppliers, on the other hand, purchase electricity from *Energorynok* and sell it to non-regulated customers in Ukraine at negotiated prices, or for export. In this environment the captive customers are by default supplied by the local distribution utility (supplier) at regulated prices. Non-household customers connected to the distribution network are theoretically allowed to switch their supplier, however only if they manage to obtain a license from NERC for non-regulated supply, in which case they can only purchase electricity from *Energorynok*.

The Law does not explicitly distinguish between network tariffs and regulated costs of supply. However, NERC has applied a methodology for the structure of published tariffs for distribution (and transmission) in separation from the costs of supply. The suppliers of regulated customers have the right to be compensated for non-collected revenues from the national or local budget which may exceed what is permitted under State aid rules.

6. With regard to **cross-border capacity allocation** Ukraine also fails to comply with the requirements of the *acquis*.

The capacity allocation on the borders with EU Member States and Moldova is performed by *Ukrenergo* based on the Procedure for Auctions Relating to the Transmission Capacity of Ukraine's International Power Grids for Purpose of Electric Power Export adopted by NERC in 2009. The procedure applies only to the export of electricity, while imports depend on prior approval by the Ministry thereby failing to comply with several provisions of Energy Community Law.

Access is limited by the requirement for existence and approval of purchase/supply contracts both with *Energorynok* and foreign entities as requirements for participation in cross-border capacity allocation procedures. The Procedure defines the auctions as *"a form of sale ... of the system operator's services..."* thus imposing the requirement for payment of a sale price even if there is no congestion.

No justification of eventual refusal or any kind of compensation for curtailment is anticipated. The provisions for allocation of the congestion revenue provided in the Law clearly address the network development, but include "repayment of restructured indebtedness" of the wholesale supplier to generators and exporters, which is not compliant.

Furthermore, the information on the use of interconnections and available capacity is updated on a monthly basis. The auctioning platform still does not apply the electronic exchange of information on the bidding. Auctions take place on annual and monthly bases; daily auctions are not foreseen in the Procedure. There is no adequate electronic bidding platform, which is a significant hurdle for the implementation of a compliant allocation procedure. It imposes limitations on the liquidity of cross-border trade. The application of the "use-it-or-lose-it" principle obliges the use of at least 70% of the allocated capacity in any two consecutive months. The unused or reclaimed capacity is to be allocated in a monthly auction, which is not always the case in practice. Secondary capacity market and the transfer of capacity between market participants are not allowed.

These and other breaches of the *acquis* provoked the Secretariat to open up an infringement case in 2013.

7. **Balancing** is regulated and the costs of imbalance of the suppliers are calculated by *Energorynok* and netted-out with the imbalances of the generation units, before transferring them into the regulated cost of supply. Imbalance settlement is provided by *Energorynok*.

Scheduling is performed by *Energorynok* on a daily basis upon the planned schedules submitted by the regulated generation units and the bids of the non-regulated generators. The imbalances are compensated according to the merit order of listed generation units made in advance by *Ukrenergo*, according to economic and technical criteria.

This mechanism does not provide for any price signals for the balancing energy or allocation of balance responsibility.

It does not constitute market-based balancing as required by the *acquis*.

8. The access to information and **transparency** provisions are inherently problematic in the Ukraine electricity sector due to the insufficient legal enforcement and underdeveloped infrastructure. Monitoring by NERC of the transparency in the electricity sector needs to be further legally supported and implemented.

The information provided by the operators to the market participants is often incomplete or missing on account of the legal provisions on confidentiality. The provisions for enforcement of conditions for access to information, in particular with respect to transmission capacity allocation, need to be brought in compliance with the requirements in the Regulation (EC) 1228/2003 and the related Congestion Management Guidelines.

9. **Customer protection** is inadequately treated and insufficient. The Energy Law does not envisage an obligation to the suppliers for the provision of sufficient information to customers as required by the *acquis*. A number of consumer rights are missing, at least in terms of information on the quality of service, on the access to updated tariffs, contractual arrangements and related information including termination, available compensations and access to available dispute settlement mechanisms.

One significant improvement with regard to the protection of public interests by NERC is the establishment of the Public Council. Such a structural measure improves public visibility and transparency in the interest of final customers. Nevertheless, it is also prone to possible abuse of its administrative capacity provided by its constitutional acts and eventual undermining of the independent decision-making powers of NERC.

There is no appropriate definition of vulnerability and no adequate support mechanism is established. The legislation on social welfare enforces the right for direct subsidies from the State Budget for a certain percentage of the electricity bills of certain categories of customers. Regulation of the end-user supply prices is not selective. The use of subsidies from the generation and cross-subsidies between classes of customers to compensate the costs of supply to households is not transparent, not sustainable and detrimental to the competitive environment due to the distortion of prices.

d. Conclusions and Priorities

Tangible results in developing the electricity sector in Ukraine are evident mainly in the regulatory domain in developing the electricity sector in Ukraine. The primary legislation is outdated and widely noncompliant. Currently the obsolete transmission and generation infrastructure calling for urgent investments, and the access to open markets required by local industry are the main drivers behind the ongoing reforms of the electricity sector.

The adoption of the Law on the Main Aspects of Functioning of the Electricity Market remains the main priority for the next period. The Law would represent significant progress in the compliance of Ukraine. The open issues aside, the Law will make a crucial contribution to a more liquid, transparent and competitive electricity market in Ukraine. At the same time, approximation with the Third Energy Package should be contemplated in a timely manner.

The new Law would require adjustments to the key secondary legislation, in particular new market rules. Other regulatory rules of NERC, such as the grid code, need adjustments in any event or even need to be developed from scratch, such as the switching rules and balancing rules.

An adjustment of the Auction Rules is urgently needed to rectify the issues of non-compliance identified by the Secretariat's Opening Letter. This needs to be completed in time for the forthcoming annual auctions due before the end of 2013.

On the level of practical implementation, structural measures are needed in the domain of unbundling of distribution from supply and unbundling of the accounts, following the implementation of legal unbundling. New operators and facilities imposed by the new market model must be established and made operational. The current practice for regulation of the production needs to be abandoned for the benefit of open competitive relations.

A tariff reform is required along with improved customer protection mechanisms, aimed to eliminate cross-subsidies and introduce sustainable tariffs. Mechanisms for the support of supplier switching also need to be introduced, enforced and applied.

Implementation of the Third Energy Package

Ukraine is apparently still in the process of "ratifying" the Third Energy Package in its domestic legal order. This makes it likely that the country will not meet the general transposition deadline of 1 January 2015.

UNBUNDLING

The transmission system operator *(Ukrenergo)* and the market operator *(Energorynok)* as well as their assets are in State ownership and controlled by the Government. The same is the case for the nuclear production facilities, with no option for privatisation. The assets of the remaining dominant generators and the majority of distribution and supply utilities in Ukraine with dominantly state-owned assets are aggregated in a holding. The current ownership structure does not comply with any unbundling option provided by the Third Energy Package and its implementation needs to envisage legal provisions for structural reforms in the domain of transmission system operation.

REGULATORY AUTHORITY

The independence of NERC has been significantly improved after the President's Decree from 2011. However its independence from the Government or from any other public body in Ukraine and its impartiality must be further defined, including provisions for independent appeal. The objective of NERC to promote and support the development of a competitive market needs to be clearly enforced along with its increased powers to investigate, request information and impose penalties.

CUSTOMER PROTECTION

The vulnerable customers are not treated in the Electricity Law of Ukraine or in the social welfare system in an adequate manner as required by Article 3(7) of Directive 2009/72/EC. The rules and criteria for identification still need to be established and enforced in the Law. Once identified, such customers should be protected against disconnection in critical conditions and be supported by schemes outside the regulated pricing system.

3.2 Competition

A Regional Overview

3.2 COMPETITION – A Regional Overview

a. Protection of competition in the Energy Community

Energy sectors in the Contracting Parties are characterized by natural monopolies, a high degree of concentration and intense State intervention. Markets remain effectively foreclosed. Given the limited impact of legislation and the activities of national regulatory authorities, further steps towards market liberalization depend on the effective enforcement of competition and State aid rules. Based on cases of anti-competitive practices by the incumbents, public or private, and being equipped with a toolbox including fines and behavioural or structural remedies, competition authorities can make the difference in opening up markets and enabling market access to new entrants and investors. The practice by the European Commission, as well as several EU Member States, in cases concerning cartels, abuses of dominant positions and long-term contracts guides the way in this respect. State aid, on the other hand, constitutes an intrinsic feature of energy market governance and individual transactions in the Contracting Parties. This was confirmed by a study commissioned by the Secretariat and published in 2011. Practices such as price regulation below market prices need to come under scrutiny by domestic authorities tasked with the enforcement of the State aid prohibition. The system of State aid control established in essentially all Contracting Parties falls short of delivering on the objectives pursued by the Treaty in relation to protecting markets from distortions.

b. The *acquis* on competition

Chapter IV of Title II of the Energy Community Treaty determines the *acquis* to be implemented by the Contracting Parties in the fields of competition and State aid. The competition *acquis* is modelled on the EU Treaty by incorporating Articles 101, 102, 106(1) and (2) as well as Article 107 of the Treaty on the Functioning of the European Union (TFEU). By the entry into force of the Energy Community Treaty on 1 July 2006, 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 EnC. While the Treaty does not contain specific rules on mergers, the case law of the Court of Justice of the European Union applying what is now Article 101 and Article 102 TFEU to concentrations is applicable to the Contracting Parties through Articles 18(2) and 94 of the Treaty. Similarly, there is a lack of a specific Energy Community *acquis* on competition and State aid law enforcement (procedures, institutions, sanctions, remedies etc). This is put into perspective by the fact that the Contracting Parties, pursuant to Article 6 of the Treaty, are obliged to ensure efficient implementation of their obligations under the Treaty, of which efficient enforcement of the rules on substance is an important aspect.

The Energy Community does not provide for a centralised enforcement institution or procedures in the way that the European Union and the Agreement on the European Economic Area (EEA) do. Their absence has resulted in the lack of consistent and rigorous application of competition and State aid rules in the Contracting Parties. A system of State aid control, for instance, where the authority granting the aid and the authority expected to prohibit the aid are on the same level, and sometimes even within the same institution, is evidently not apt for effective enforcement. In the absence of any investigation or decision-making rights, the Secretariat is essentially confined to monitor transposition of the *acquis communautaire* and enforce the absence of legislation, as it has done so far in several cases concerning State aid. Its contribution to implementing the rules by applying them to individual cases remains very limited. This should be reconsidered in the context of discussing possible amendments to the Treaty.

Under the constraints imposed by the existing legal framework, the Secretariat initiated the launch of an Energy Community Competition Network. On 23 November 2012, a Joint Declaration on cooperation between the Competition Authorities and the Energy Community Secretariat on the establishment of an Energy Community Competition Network was signed in Vienna by all Contracting Parties, as well as Armenia, Austria and Georgia. The Network establishes a platform for promoting cooperation and discussion on competition law enforcement in the energy sectors. It also serves the purpose of exchanging experience and developing the best practices with respect to competition policy, legislation and enforcement of the EU competition *acquis* within the Energy Community. The members of the Network will meet regularly, and the most recent meeting in June 2013 in Athens was followed by a joint meeting with the ECRB. Outside the annual meetings, an electronic platform for exchange of information and mutual consultation among the competition authorities was launched by the Secretariat, in July 2013. This will allow for continuous exchange among members. Joint activities, such as coordinated enforcement action and joint sector inquiry in the electricity and gas markets with energy regulatory authorities, will be the focus of the future activities of the Energy Community Competition Network.

c. Main findings

1. Competition

Legislation

The Contracting Parties reached a relatively high degree of transposition of the competition rules in their national legislations. All Contracting Parties have included in their competition laws, provisions that correspond to the cartel prohibition and a prohibition of the abuse of a dominant position in line with Article 101 and 102 TFEU. The competition rules of all Contracting Parties apply to public undertakings and undertakings entrusted with providing services of general economic interest.

During this reporting period no major changes in the legislative framework governing competition law occurred. The exception is **Moldova**, which in July 2012 adopted a new Competition Law which entered into force in September 2012. The newly adopted legislation contains prohibitions of anti-competitive agreements and concerted practices, as well as abuses of a dominant position. It is also applicable to public undertakings and entities providing services of general economic interest. In the drafting phase, the Secretariat *inter alia* questioned the provisions in the Law giving the Government the possibility to block excessive price increases in economic sectors where the competition is restricted or does not exist. It requested that such price regulation shall be limited and regulated by sector specific legislation in more details. Those comments have not been taken into account. Currently, six new regulations implementing the new Competition Law are under preparation, and are to be adopted by the Competition Council.

Montenegro adopted a new Competition Law in July 2012. The Law entered into force as of October 2012. In the reporting period the country focused on adopting new secondary acts. Three by-laws, concerning the definition of relevant markets, procedure for individual exemption and submission of merger applications, have been adopted in April 2013. Four more by-laws are under preparation and another three – related to block exemptions are pending approval.

The Antimonopoly Committee of **Ukraine** (AMCU) adopted two acts of secondary legislation in the reporting period, one determining the leniency procedure and another one related to involving experts in cases when the AMCU applies competition law. The first act was adopted in June 2012 and the second in January 2013.

Croatia and Serbia have developed amendments to the existing competition laws. Both are pending adoption. In **Croatia**, the main changes relate to the new competence of the Croatian Competition Agency (CCA) to directly apply Articles 101 and 102 of the TFEU after Croatia becomes an EU Member State, as well as the competence of the courts for judicial review of the Agency's decisions. In December 2012, the **Serbian** Commission for Protection of Competition has initiated a procedure for amending the Competition Act from 2009 in order to improve the effectiveness of the procedures of the Commission. In particular, commitment procedure would be introduced with the amendments.

Institutional framework

All Contracting Parties have established a national competition authority as an independent authority tasked with the enforcement of competition law. Most of the competition authorities, with the notable exception of the Ukrainian, are understaffed, which certainly has an impact on their activities.

Montenegro, which for a long time was the only Contracting Party without an independent competition authority, in 2012 established the Administration for Competition Protection (ACP) with the new Law on Protection of Competition. It took over these activities from the Administration for Competition Protection, within the internal trade and competition department of the Ministry of Economy. The Agency is managed by a director and is responsible to the Government, which appoints and dismisses the Director and gives consent on the plan for financing the Agency. The Agency is an independent institution funded from budget revenues, the fees paid to the Agency and from donations. However, appointment and dismissal of the decision making body of the competition authorities, as well as its reporting to the Parliament would be preferable.

Enforcement

The achievements made in enforcing competition law do not match the high level of transposition in most of the Contracting Parties. As a general finding, the energy sectors still remain largely outside the scope of activities by most competition authorities. Even the authorities that, in the past years, were slightly more proactive did not initiate any substantial investigations in the energy sectors this year. Cases applying competition law to the electricity and gas sectors are still missing. Moreover, the criticism in last year's Implementation Report related to lack of transparency is still valid, as the decisions are published only to a limited extent.

The **Albanian** Competition Authority (ACA) has always been quite active in issuing recommendations on the evaluation of laws and by-laws in the energy sector. Concluding a review made during this reporting period, ACA, however, found that its comments and recommendations are only partially taken into account by the Energy Regulatory Authority (ERE) and the policy and law makers. In 2013, the ACA initiated monitoring of the functioning of the electricity market with

a view to detecting any anticompetitive behaviour restricting competition. The review consists of analysing the entire legal framework governing the electricity sector in Albania and a review of the implementation of the ACA's recommendations to ERE and the Government. The ACA is collecting information from all market players and has requested ERE's cooperation in order to analyse the existing market model and the reasons for termination of operation of *CEZ* – the former DSO and retail public supplier in the country.

Besides advocacy activities, the **Croatian** Competition Authority (CCA) dealt with a few cases concerning application of competition law to the energy sectors. In March 2013 it approved a merger between two traders of oil and gas, *Crodux Derivati* and *OMV Hrvatska*. On 30 November 2012, the CCA decided not to open proceedings against *INA* for an alleged abuse of a dominant position due to the lack of evidence. Finally, the CCA informed that there is also an ongoing investigation in the sector of natural gas. However, it is in the early stages of preliminary investigation in the relevant market and it relates to the Croatian Gas Market Act from 2007, that was repealed with the entry into force of the new Gas market Act from March 2013. The complaint concerned the market position of *Prirodni Plin*, which according to the Act from 2007 was the only wholesale supplier of natural gas to meet the demand of the tariff customers. In addition, *Prirodni plin* was the only undertaking that provided balancing energy and underground gas storage in Croatia. In the reporting period, the CCA also has been active in issuing opinions on draft primary and secondary legislation in the energy sector, in particular on the legislation adopted in Croatia in 2012/2013 for the transposition of the Third Package.

The **Moldovan** Competition Council (CC) is one of the few authorities in the region that has taken action against abuses of dominant positions in the electricity markets. One of the two cases against the distribution system operator and supplier *Gas Natural Fenosa* was initiated upon a complaint by a customer. In its decision, adopted on 29 October 2012, the CC established an abuse of dominant position due to the fact that the complainant was required to install the infrastructure necessary to be connected to the network by itself, whilst *Gas Natural Fenosa* claimed ownership on that infrastructure without compensation or even offering its maintenance services. In case that was denied, *Gas Natural Fenosa* would refuse to supply the undertaking with electricity. The appeal to the decision is currently pending in the court. The second decision established another abuse of dominant position by *Gas Natural Fenosa*, which also sells electricity meters. For the connection of new customers *Gas Natural Fenosa* accepts only electricity meters sold by itself, thereby preventing other sellers of metering equipment from approaching their customers. CC's decision was confirmed by the first and second instance court. Currently, the case is pending in the Supreme Court. Since these cases were initiated according to the old Competition Law, under which the CC had no competence to impose fines directly, the CC will still have to apply to the court to request penalties.

The Commission for Protection of Competition (CPC) of the former Yugoslav Republic of **Macedonia** informed that it is still at an early stage of investigation of a case concerning a price fixing cartel in the electricity sector between four wholesale electricity traders. The main problems faced in the investigation are the lack of qualified staff in the CPC to deal with competition enforcement in the energy sector and to perform inspections. Moreover, since most of the traders are present in the markets in some other Contracting Parties, coordination of activities with other competition authorities is needed to obtain more concrete information. No other cases in the energy sector have been assessed or decided on by the CPC in the last year.

The ACP in **Montenegro** only reported the approval of one concentration between *RWE Innogy GmbH* from Germany and mixed holding *Elektroprivrede Republike Srpske* from Trebinje with the purpose of building four hydropower plants in the upper basin of the River Drina.

The **Serbian** Commission for Protection of Competition continued with its activities of conducting a sector inquiry in the oil and oil derivates market in Serbia, which was launched in 2010. So far, two reports have been published, in October 2011 and February 2013, with conclusions and recommendations. The sector inquiry resulted in finding that the dominant oil company *Naftna Industrija Srbije (NIS)*, as exclusive importer of oil derivatives, lowered the retail prices at its petrol stations while keeping the wholesale price for derivatives to be paid by other undertakings at the maximum levels allowed. However, the Commission held that such effects could not be clearly identified as an abuse and, instead of opening an investigation against *NIS*, decided to continue monitoring the behaviour of the undertakings active on the petrol market. In addition, it recommended that the Government and the relevant institutions and ministries initiate monthly and annual reporting on the wholesale and retail petrol market.

Besides the Moldovan ANCP, the **Ukrainian** AMCU was the other competition authority active in enforcing competition law in the energy sectors. One case, initiated on 10 January 2013, concerns the possible abuse of a dominant position by *Cherkasygaz* on the market of distribution of natural gas in the Cherkassy region. The alleged abuse is related to access to the market supply of natural gas to industrial customers within the Cherkassy region where *Cherkasygaz* operates. The second case was initiated on 30 April 2013 and concerns a possible abuse of its dominant position by the distribution system operator *ZEM* on the market for electricity transport through distribution networks within its geographical territory. The third case concerns an abuse of a dominant position by *Mykolaivoblenergo* on the electricity supply market. The abuse consists of imposing unreasonable charges to the consumers for reconnection to the network after sealing their meters and disabling access to those meters installed on the facades of houses in the Mykolayiv region. The AMCU fined *Mykolaivoblenergo* with UAH 100 million (around EUR 9 million). The AMCU also performed a sector inquiry in March 2013 related to the procedure for connection of construction projects, including housing projects to the energy networks (electricity, gas, heat) and reviewed the provision of public services.

2. State aid

Legislation

After the Secretariat initiated infringement procedures against **Bosnia and Herzegovina** and **Kosovo*** for their failure to adopt State aid legislation, these two Contracting Parties adopted State aid laws largely transposing the State aid rules at national level in February 2012 and July 2011 (entering into force in January 2012) respectively. However, implementation is still pending (see below). **Moldova** adopted a new State aid Law on 15 June 2012; it entered into force in August 2013. Currently, twelve new pieces of secondary legislation are being drafted in order to implement the new Law. **Ukraine** initiated the legislative procedure for the adoption of State aid rules. The draft was approved by the Government in April 2013, together with a draft Law amending the Budget Code of Ukraine (regarding State aid for undertakings). Both documents have been submitted to the Parliament. In addition, by an Ordinance of the Government from 4 March 2013, an Action Plan for institutional reforms in the field of monitoring and control of State aid for undertakings has also been approved.

In Croatia and Montenegro amendments to the State aid legislation have been drafted but have not yet been adopted. In **Croatia**, the amendments are owed to the fact that Croatia became an EU Member State on 1 July 2013. They concern the jurisdiction/competence over approving and controlling new State aid. In **Montenegro**, the Government drafted amendments to the procedural rules for the submission of State aid notifications in October 2012 that entered into force in March 2013, adding two new requirements for information to be added in the notification. In particular, the granting authority must include in the notification the initial values and the indicators by which the effects of State aid shall be monitored. The shortcomings of the existing State aid Law in Montenegro, about which the Secretariat reported in its last Implementation Report, remain unaddressed. The definition of State aid is not compliant as it covers only expenditures and reduced revenues of the State, and does not cover any aid granted by the State or through State resources in any form whatsoever as stipulated in Article 107(1) TFEU. Compatible aid includes investment in infrastructure which is in general use, if the construction of such infrastructure is not in the exclusive interest of the beneficiary. This basically excludes all aid granted to undertakings providing services of public interest, and is thus not compliant with Article 107 TFEU. Moreover, the scope of applicability of the Law is limited to aid affecting trade between Montenegro and the European Union or CEFTA members, and, therefore, does not include all Contracting Parties (notably Ukraine).

The **Serbian** Government adopted amendments to the Regulation on Rules for State aid Granting concerning de minimis aid.

Institutional framework

Since there is no central monitoring authority, which could perform the tasks of the European Commission in the Energy Community, each Contracting Party must ensure effective State aid control domestically. This concept limits the effect of the State aid rules in the Contracting Parties significantly. Three Contracting Parties (Croatia, former Yugoslav Republic of Macedonia and Moldova) have entrusted their competition authorities with the enforcement of State aid rules, which is still the most appropriate option within a flawed system. Five Contracting Parties (Albania, Bosnia and Herzegovina, Montenegro, Serbia and Kosovo*) have tasked Government bodies with reviewing notifications and making decisions on aid granted. The decision-making bodies are commissions chaired by the Minister of Finance in four Contracting Parties; in Albania the Commission is chaired by the Minister of Economy. To put the main authority granting the aid also in charge of controlling it, leads to institutionalized conflicts of interest and ultimately proves to be inefficient. In addition, the main authorities are not equipped to deal with the many complex questions posed by State aid Law in the energy sectors, such as its application to public services or the legitimacy of price regulation for energy.

Bosnia and Herzegovina and **Kosovo***, which adopted State aid legislation upon enforcement action by the Secretariat, in this reporting period did not manage to establish fully functioning authorities enforcing this legislation. The State aid Council in Bosnia and Herzegovina, even though legally established, has only recently started operating in practice. In Kosovo* the State Aid Commission has been established with Governmental Decision in October 2012. However, it has not started operating in practice and the six officials planned to work in the State aid Office at the Kosovo* Competition Council (KCC) have not been employed. Closing the pending cases initiated by the Secretariat against these two Contracting Parties depends on the enforcement authorities becoming fully operational.

Enforcement

The fact that enforcement of State aid Law in the energy sectors is even less satisfactory than the enforcement of Competition Law is certainly related to the enforcement system adopted, but also to the importance of the energy sectors to domestic economies and the political influence traditionally exerted over them. To the knowledge of the

Secretariat, no Contracting Party has ever taken a decision to prohibit the granting of aid to an energy undertaking or ordered its recovery in the energy sector.

Only three Contracting Parties reported activities in enforcement of State aid legislation in the energy sectors. However, the decisions adopted in Albania, and to a certain extent in Montenegro, are too superficial to be considered correct implementation of the *acquis*. The State Aid Commission (SAC) in **Albania** adopted one decision assessing State aid in the amount of ALL 4.5 billion (approx. EUR 45.000) given to the state-owned electricity generation company and wholesale public supplier *KESH*, in order to facilitate the payment of imported electricity. The SAC reached a conclusion that such financial aid does not constitute State aid since *KESH* is the only entity in the country that is in charge of buying electricity from domestic sources and from import, in order to supply the retail public supplier. This decision is evidently in breach of EU State aid rules and the case law of the European Commission. For instance, in a case concerning subsidies to the transmission system operator of Poland for the construction of interconnecting lines on the border with Lithuania, the Commission decided that aid granted for projects of general interest constituted aid. This was without prejudice to the fact that there was no competition and there was only one licensed company for providing transmission services in the country. In January 2013, the Ministry of Economy of **Montenegro** notified the State Aid Control Commission (SACC) of a guarantee issued for the loan taken by the electricity transmission company *(CGES)* for the construction of the undersea cable connecting the Montenegrin and Italian electricity system. The SACC found that the guarantee fulfils the constitutive criteria of the State aid definition. However, it found the aid to be compatible, since without it the project could not be financed by the company itself at market conditions. This is based on provisions of the State aid Law, which in itself is not compliant with the *acquis*. In practical terms, the aid given to the construction of the submarine cable was permitted without any detailed analysis and against Article 107 TFEU.

The CCA in **Croatia** is currently reviewing the Ministry of Economy's plan for a new system of feed-in tariffs for renewable energy sources. This is the only notification submitted to the CCA for State aid in the energy sector in the reporting period. The CCA requested additional information from the Ministry but, since it has not received such information yet, the notification will be dismissed.

3. State of compliance and priorities

Full implementation beyond transposition requires the establishment of adequate institutions and a more rigorous enforcement.

Bosnia and Herzegovina is now the only Contracting Party that has not pursued cases applying **Articles 18(a) and (b) of the Treaty** to the energy sectors. However, that certainly is not to say that the other Contracting Parties are active enough. Besides the oil sector inquiry in Serbia, and the Albanian monitoring of the electricity market, no Contracting Party has performed a sector inquiry or specific monitoring of the electricity and/or gas markets. Only the Moldovan and the Ukrainian competition authorities have taken effective enforcement actions in the reporting period, resulting in imposition of penalties against dominant companies. The competition authority in the former Yugoslav Republic of Macedonia faced problems in effectively applying competition law to the electricity sector related to the lack of qualified staff. This was reported as a reason for extending the investigation in the electricity sector, which started already in the last reporting period. The Secretariat invites the competition authorities of all Contracting Parties to become more active in enforcing competition law to the energy sector, outside mere competition advocacy. The Secretariat will also continue monitoring the development and the performance of the newly established ACP in Montenegro.

With regard to **State aid**, Ukraine is the only Contracting Party that lags behind the others, with no primary legislation implementing the State aid *acquis* in place. The first and main priority for this Contracting Party should be to complete the process of adopting a State aid Law as quick as possible, to establish the appropriate institutions and to start enforcing it in the energy sectors. Moreover, the Secretariat recommends that the Contracting Parties in which State aid enforcement is in the hands of the ministries or governmental bodies, transfer competences to the competition authorities. The independence of the State aid enforcement system in those Contracting Parties is lacking, as both the decision-making body and the administrative unit are closely linked to the respective Governments in terms of nomination, organization, financing and interests. In most of the Contracting Parties the awareness of the public institutions about State aid rules is low. Raising awareness and more enforcement activities is what the Secretariat would expect to see is all Contracting Parties in future. Bosnia and Herzegovina and Kosovo* are expected to establish functioning enforcement authorities as soon as possible in order to complete the implementation of the State aid *acquis*. In Albania and Montenegro, the application of the State aid rules was done in a way breaching Article 107 TFEU.

Only a few of the priorities identified by the Secretariat in the last year's Implementation Report have been addressed by the Contracting Parties. Namely, Moldova adopted new Competition and State aid Laws by which it remedies the incompliance with the *acquis*. In addition, the fact that Moldova entrusted the Competition Council with enforcement of State aid rules is to be welcomed. Montenegro also established the ACP as an independent institution enforcing Competition Law and made it operational in the reporting period.

For the rest, all the recommendations from the Secretariat for the competition and State aid authorities to become more active in enforcing competition and State aid Law to the energy sectors were not addressed. Besides Moldova and Ukraine, no other country adopted substantive decisions applying Competition Law to the electricity and gas sectors, and only three decisions in the field of State aid were taken, two of which were incompliant with the *acquis* and the case law of the Court of Justice. Furthermore, none of the Contracting Parties that have entrusted governmental bodies and ministries with State aid enforcement amended their legislation to entrust the competition authorities. The most serious incompliance remained with Ukraine, which failed to adopt State aid Law, as well as Bosnia and Herzegovina and Kosovo*, which both failed to establish effective institutions to enforce the prohibition of State aid even though their newly adopted legislation provides a legal basis for it.

3.3 Gas

3.3.1 GAS – A Regional Overview

a. The *acquis* on gas

The Treaty requires the Contracting Parties to implement the following legislative documents:

1. Directive 2003/55/EC concerning Common Rules for the Internal Market of Natural Gas establishes the main principles of gas market liberalisation. This includes market opening, unbundling, third-party access to gas infrastructure, public service obligations, customer protection, the criteria and procedures for granting authorisations and licenses for transmission, distribution, supply and storage, as well as requirements for system operation and development. The Directive further specifies the functions, competences and administrative powers of regulatory authorities.

The deadline for the implementation of Directive 2003/55/EC expired on 1 July 2007 for the original Contracting Parties. For Moldova and Ukraine, the deadlines are 31 December 2009 and 1 January 2012, respectively, according to the Accession Protocols.

According to Annex I to the Energy Community Treaty, the gas markets of the original Contracting Parties had to be open for all non-household customers as of 1 January 2008, and for all households as of 1 January 2015. According to the Accession Protocols of Moldova and Ukraine, those deadlines are respectively 1 January 2013 and 1 January 2012 for all non-household customers. For household customers, the deadline for both Contracting Parties remains 1 January 2015.

2. Regulation (EC) 1775/2005 on Conditions for Access to the Natural Gas Transmission Networks has been incorporated into the *acquis* by a Ministerial Council Decision of 18 December 2007, with an implementation deadline of 31 December 2008 for the original Contracting Parties. The Regulation builds on Directive 2003/55/EC and lays down more detailed rules for access to the natural gas transmission network, such as tariff principles, third-party access services, transparency requirements, balancing rules and imbalance charges, principles on capacity allocation and congestion management including secondary market trading of capacities. According to the Accession Protocols of Moldova and Ukraine, the deadlines for implementing this Regulation expired on 31 December 2010 and 1 January 2012, respectively.

3. Directive 2004/67/EC concerning Measures to Safeguard Security of the Natural Gas supply has also been included in the binding set of *acquis* by the Decision of the Ministerial Council of 18 December 2007, with an implementation deadline of 31 December 2009 for the original Contracting Parties. The Directive establishes measures to safeguard an adequate level of security of supply, with a special focus on specific customers and a so-called community mechanism. It requires the Contracting Parties to define general, transparent and non-discriminatory security of supply policies, compatible with the requirements of the competitive market, together with the definition of the roles and responsibilities of market participants and the implementation of procedures to safeguard security of supply. According to the Accession Protocols of Moldova and Ukraine, the deadlines for implementing this Regulation were 31 December 2010 and 1 January 2012, respectively.

4. Within the European Union both Directive 2003/55/EC and Regulation (EC) 1775/2005 have been replaced by new *acquis* in the framework of the so-called "Third Energy Package". On 6 October 2011, the Ministerial Council in Chisinau adopted Decision 2011/02/MC-EnC on the implementation of Directive 2009/73/EC and Regulation (EC) 715/2009, with the general implementation deadline fixed for 1 January 2015. Despite the fact that the Contracting Parties' implementation commitments currently still relate to the "Second Energy Package", preparation for the legal and practical amendments necessary to implement the Third Energy Package should have already started in all Contracting Parties to meet the implementation deadline.

5. Additionally, Article 29. of the Treaty calls on the Contracting Parties to adopt security of supply statements starting one year after the entry into force of the Treaty. These statements describe in particular the diversity of supply, technological security and geographic origin of imported fuels. For Moldova and Ukraine, according to the Accession Protocols, the first security of supply statements should have been sent to the Secretariat by 1 May 2011 and 1 February 2012, respectively. The statements must be updated every two years; the next update is required by 1 July 2013.

b. The Energy Community gas sector

1. Implementation

The progress of Treaty implementation in the area of gas during the reporting period was moderate. Whereas a few highlights can be reported from individual Contracting Parties the most prominent example being the exemption procedure for the *TAP* project in Albania, with the Secretariat giving its first Opinion under the Third Energy Package –there has been little or no progress in other Contracting Parties. The most notorious example in this respect is the deadlock in the gas sector in Bosnia and Herzegovina, which triggered enforcement action by the Secretariat.

In recent years, the focus within the Contracting Parties has been shifting from the adoption of primary legislation to secondary legislation development such as grid codes, tariff systems and market rules. These types of activities are not to be underestimated, as they lay the foundations for functioning gas sectors, and in some cases even rudimentary markets. In the course of transposing the Third Energy Package, however, primary laws will have to be amended again. With the exception of Montenegro, the drafting has not yet really started; the bulk of work is to be expected in 2014.

Croatia is an exemption, as it adopted laws implementing the Third Package, in particular a Gas Market Law, the draft for which was significantly improved in cooperation with the Secretariat. Similar cooperation on the amendments to the primary law of Moldova, however, brought no concrete output, and this Contracting Party is facing a stalemate in its legislative process. As stated above, Bosnia and Herzegovina has been under special scrutiny for many years due to severe lack of compliance with the Treaty.

Moreover, the Secretariat was deeply involved in resolving a dispute in the gas sectors in Croatia on a distribution tariff methodology for greenfield projects, in the former Yugoslav Republic Macedonia (on the transmission tariff methodology) and Moldova (transmission and distribution tariff methodology). These cases were all initiated by complaints of market participants. In other Contracting Parties, the Secretariat has initiated or is about to initiate cases on its own motion. This has happened in Bosnia and Herzegovina, where gas legislation covering the entire country does not exist.

In Serbia, for example, the persistent lack of unbundling is a major problem. Moreover, Serbia's agreements with Russia on *South Stream* as well as on long term gas supply have been assessed by the Secretariat. On the more positive side, a Transmission Network Code was adopted by the main transmission system operator, *Srbijagas*, and approved by the regulatory authority, after many years of inertia.

Ukraine's case is certainly the most complex one. A very ambitious agenda has been announced for almost all market segments in gas, with very disparate outcomes. The trends of diversifying Ukraine's gas supply helped in enabling real market opening and introduced reverse gas flow with the two neighbouring EU Member States. However, take-or-pay provisions from long term supply contracts with, *Gazprom*, incur *Naftogaz* financial obligations to its main supplier. On the other hand, a number of issues related to compliance remained open. The most encouraging development is the effort to unbundle the transmission system operator *Ukrtransgaz* from its mother company *Naftogaz*, and its endeavours to start with drafting compliant network codes.

Compliance with the following elements of the *acquis* has been assessed for the present report.

1. **Authorisation criteria** for constructing or operating gas facilities are usually covered in details in primary legislation, in particular with regards to permits and licences. Whereas licensing procedures before the regulators are usually transparent, the permitting procedures, which fall in the domain of the Ministries, typically consume too much time, partially due to non-transparent procedures and complex coordination between different institutions. In some cases, the necessary secondary legislation was not adopted.

2. **Unbundling**: The transmission system operators in the Energy Community, although designated and vested with typical tasks set by the *acquis*, often fail to adopt rules for balancing. They do not procure the energy they use for carrying out their functions, as they should, according to transparent market procedures. The actual status of unbundling, so close to the deadline for transposing the Third Package still remains critical. Some Contracting Parties (Bosnia and Herzegovina, Serbia) achieved no progress in this respect. In Moldova, unbundling has been done *pro forma* but the TSO is not functionally independent from the mother company. The situation is more encouraging in Ukraine, where at least legal unbundling seems to be fully implemented by *Ukrtransgaz*. The required compliance programs do not exist in either Contracting Party.

In Croatia, the TSO is unbundled in line with the Second Package. Unbundling of the TSO in the former Yugoslav Republic of Macedonia has still not been achieved in praxis which is to be seen in the context of a case pending at the local court.

3. **Third party access**: In principle, third party access is regulated and applied without discrimination for all system users. The most notable exception is Bosnia and Herzegovina where both entities fail to impose transmission tariffs. Serbia's regulator introduced an exit-entry oriented transmission system and abolished different treatment of national and cross border flow. In Moldova and former Yugoslav Republic of Macedonia, the disputes between the TSOs and the regulators on cost-reflectivity of the tariffs are ongoing. A similar case was successfully closed in Croatia, where a newly established operator challenged the distribution tariff model.

Cross border flow in Ukraine and Moldova is not subject to regulation. Cross border (transit) and national transmission flows are also treated differently by law in Montenegro. This represents a breach of the *acquis*. Beyond the borders of the Contracting Parties, Hungary applies different fees at the exit points from its neighbouring countries' systems which puts cross-border transports to Serbia at a disadvantage. It should be recalled that any preferential or discriminatory treatment in existing gas transit contracts needs to be eliminated. Discrimination between Contracting Parties and Member States is prohibited by the Treaty also for the latter.

Furthermore, the development of network codes is not at satisfactory level. Network codes are still missing in Moldova and in one of Bosnia and Herzegovina's entities. Third party access services are well defined only in Croatia and in the former Yugoslav Republic of Macedonia.

4. **Market opening** and **eligibility**: A gradual opening of the wholesale markets to competition is the main positive development in the Energy Community (in Serbia, Ukraine, Croatia). This is however, tarnished by preferential access to transit pipelines in Moldova and Ukraine which disables the emergence of new entrants. At wholesale level, long term supply contracts – which on the one hand contribute to security of supply – must be brought in line with the competition rules. Some Contracting Parties, such as Serbia, continue to maintain destination clauses and other anti-competitive elements. The existence of only one single supply route and one supplier makes re-negotiation evidently very difficult. Another problem is the dominance of state-owned companies in the local retail markets.

5. **Balancing rules**: Regulatory authorities in most of the Contracting Parties approve, at least indirectly, balancing rules by approving network code or other document defining rules on balancing; however balancing rules are still not defined in the majority of cases or only to a certain extent i.e. explaining how balancing is performed but not including provisions on balancing gas/balancing services procurement. With the exception of Croatia - which is still only theoretical - market based procurement of balancing energy is not practiced in the Contracting Parties. This means that the procurement of balancing gas/services is mainly facilitated by long-term contracts but also by using domestic flexibility (e.g. storage).

TSOs in Moldova and Ukraine remunerate the provision of balancing services by socializing balancing related costs, i.e. including them into the transmission tariff. Imbalance charges are defined in Croatia, the former Yugoslav Republic of Macedonia and Serbia, while penalty charges are implemented in one entity in Bosnia and Herzegovina, Croatia and Serbia for imbalances outside the predefined tolerance levels. If available at all, imbalance charges in the Contracting Parties are defined as administrative fixed charges, determined by the TSO or regulator.

6. **Security of supply**: The Western Balkan region of the Energy Community today consumes less than 6 billion cubic meters per year (bcm/y). Ukraine's and Moldova's aggregated demand is almost 10 times higher, namely at 57 bcm/y.

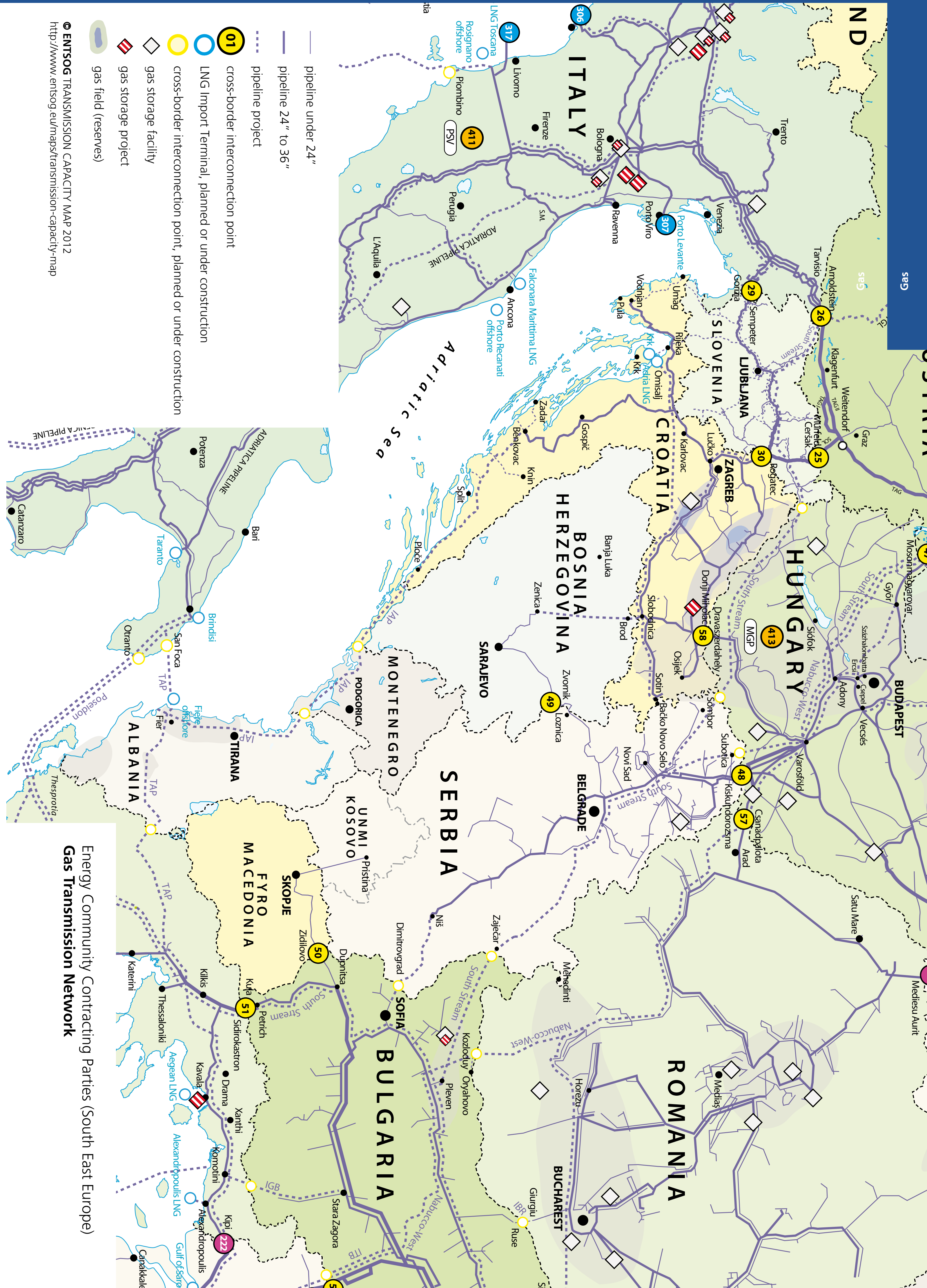
Nevertheless, the Energy Community "Study on the Implementation of the new Regulation (EU) 994/2010 concerning measures to safeguard security of gas supply" forecasts that by 2020 the Western Balkan regional gas demand will rise to 10 bcm/y, whereas in the long-term it may be as high as 19 bcm/y in 2030, thus making gas demand growth more than threefold within the next 17 years. Conversely, the aggregated demand in Moldova and Ukraine is expected to remain steady or could even decline.

Besides consumption by industry, gas is expected to play an increased role for meeting a growing electricity demand in the long term. Obviously, security of gas supply depends on timely investments in infrastructure.

There were many activities in the area of security of supply during the reporting period. The above-mentioned study revealed the importance of a regional approach. The results and recommendations of the study will constitute a guideline for the Contracting Parties in the following period for drafting their security of supply statements. That said the crucial provisions of Directive 2004/67 /EC, such as the definition of protected customers and supply standards, still have to be implemented by most of the Contracting Parties.

In 2012, the Security of Supply Coordination Group was reactivated. A subgroup was established to focus on gas-related issues. The subgroup produced an update of the list of emergency contacts, the format for an emergency questionnaire template, and updated guidelines for drafting annual security of supply statements, which it will regularly assess.

The Secretariat continued its active participation in the EU Gas Coordination Group, thus acting as a link between the EU and the Energy Community at operational level. During the reporting period, it twice presented the situation in the Energy Community in the Group's sessions on this subject.



Energy Community Contracting Parties (South East Europe)
Gas Transmission Network

2. Regional gas market

The creation of a coherent and convergent regional gas market follows the European developments.

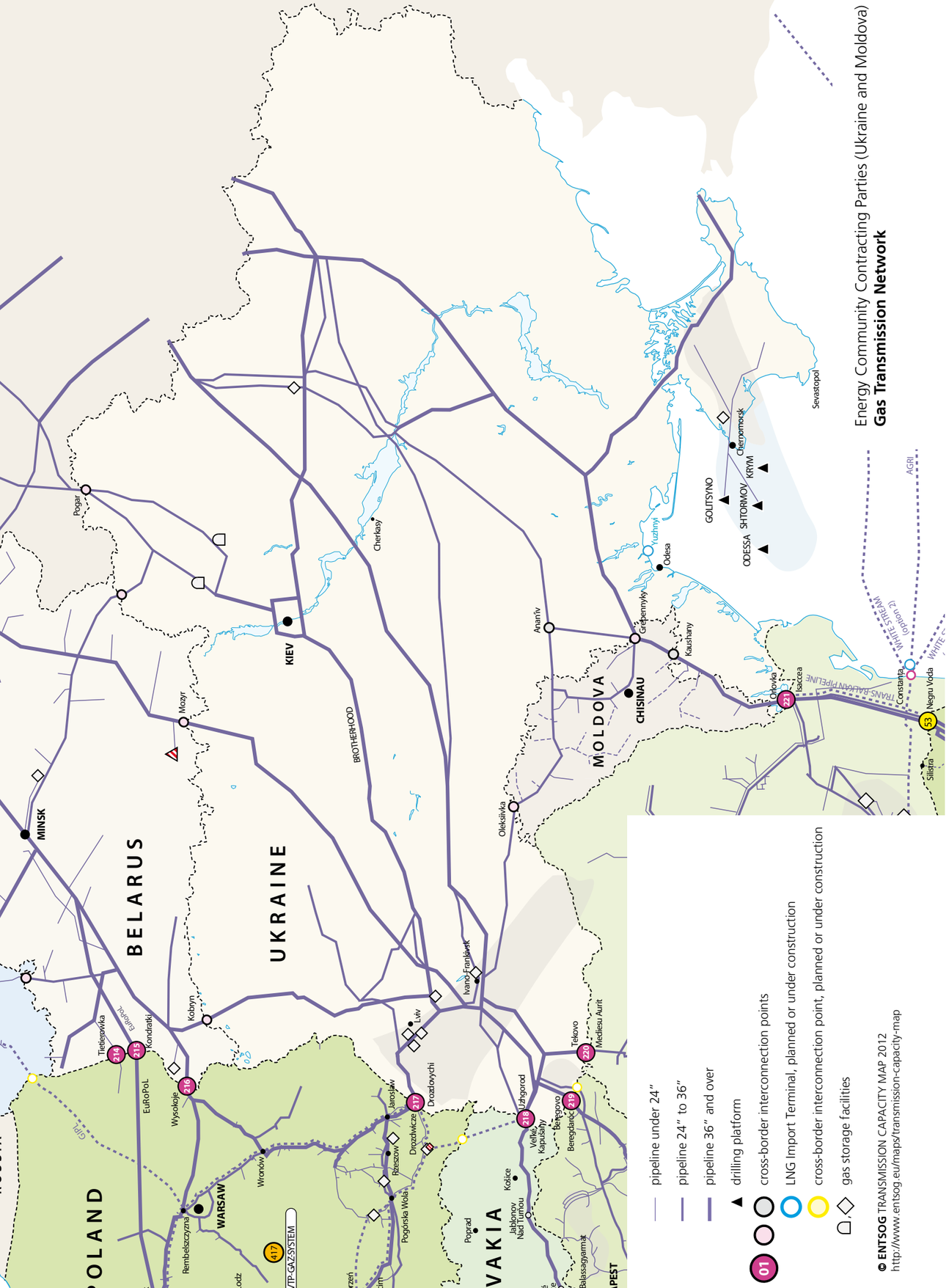
The entry into force of the Third Package together with the target of completing the internal energy market by 2014 also shapes the framework for gas market development in the Energy Community. This includes the adoption of the Network Codes in the Energy Community. In this context, the Secretariat organised Workshops with the *European Networks of Transmission System Operators for Gas (ENTSO-G)* for the Energy Community' TSOs. After *Plinacro*, *GAMA* of former Yugoslav Republic of Macedonia has also been granted an observer status in *ENTSO-G*. Ukraine's and Serbia's TSOs signalled their intention to proceed likewise. *ENTSO-G* has become an increasingly important stakeholder in the Energy Community.

The lack of a developed gas infrastructure across the region remains an obstacle in creating a regional gas market. In particular, this concerns the lack of interconnections between the Contracting Parties. On these grounds, the work on the Gas Ring concept and the Gas-to-Power Initiative, has been intensified. The Ring concept would allow gas-to-gas competition and boost security of supply. The selection of *TAP* as a project to transport *Shah Deniz II* gas to Europe through the Southern Corridor and through the territory of one Contracting Party will have significant positive consequences on the Energy Community Gas Ring and the region as a whole.

The *TAP* pipeline may also be expected to interlink with the planned *Ionian Adriatic Pipeline (IAP)*, which will further connect three Contracting Parties.

In the end, the market fundamentals have yet to materialise to allow customers to reap the potential benefits of regional markets. In order to achieve real progress, more intense work by all Contracting Parties is required to enable the creation of liquid national gas markets, under harmonised rules, which would be able to be integrated at regional level.

Energy Community Contracting Parties (Ukraine and Moldova)
Gas Transmission Network



- pipeline under 24"
- pipeline 24" to 36"
- pipeline 36" and over
- drilling platform
- cross-border interconnection points
- LNG Import Terminal, planned or under construction
- cross-border interconnection point, planned or under construction
- gas storage facilities

3.3.2 ALBANIA

Gas

a. The gas sector in Albania

There is still no gas market in Albania. However, some production is still taking place on a small scale. In 2011, natural gas production was as low as 16 mcm, which was consumed by Albania's industry sector, i.e. for technological purposes (oil production and refining). The share of natural gas in total final energy consumption was 0.05% in 2011. The existing but outdated pipeline network has a length of 498 km. These pipelines were used in the past, when Albania enjoyed a relatively high level of gas production, mainly for connecting the gas fields with industrial consumers located in Fier, Vlora, Elbasan, and Durres. Today, the pipelines are out of operation and need rehabilitation; parts of the network need to be totally substituted. Nevertheless, the pipeline corridors might be used for future gas transmission and distribution network development options.

Albania's long lasting strategic commitment towards gasification became more concrete during the reporting period, both related to the *Trans Adriatic Pipeline (TAP)* and the *Ionian Adriatic Pipeline (IAP)* project which will link Albania to more developed gas markets (Italy, Greece and Croatia). Other possible new sources of gas supply are an LNG terminal on the Albanian coast and potential new domestic wells. Albania also has several suitable gas storage sites including a salt dome in Dumrea and the depleted Divjaka gas field.

The 2013 Energy Community "Study on the Implementation of the new Regulation (EU) 994/2010 concerning measures to safeguard security of gas supply in the Energy Community" asserts that the natural gas consumption of Albania will grow up to 414 mcm/y in 2020 and to 2.27 bcm/y in 2030.

b. Progress made in 2012/2013

The Albanian institutions were particularly committed in the reporting period to promoting the realisation of new pipeline projects bringing gas to Albania. In this context, the Albanian regulatory's (ERE) successful cooperation with the regulatory authorities of Italy and Greece as well as with the Secretariat and the European Commission was a milestone for the Energy Community. In March 2013, ERE adopted a decision to grant exemptions to the *TAP* project from certain requirements of the gas *acquis*, such as unbundling, third-party access and tariff regulation. The decision was jointly developed with the regulators of Italy, and Greece. The Secretariat gave its Opinion on ERE's decision on 14 May 2013. Despite the fact that Albania (unlike Italy and Greece) is not yet bound by the provisions of the Third Package, the Secretariat considered an assessment based on Article 36 of Directive 2009/73/EC legally justified. The Secretariat's Opinion in particular calls for the construction of exit point(s) in Albania and additional measures ensuring non-discriminatory treatment and increasing transparency, as well as measures preventing the monopolization of the future gas market in Albania. The overall impact of *TAP* on competition and security of supply in the country was considered to be very positive: With an exit point expected to be built in Albania, customers can be supplied with both gas and electricity generated from gas, which at present is not the case.

In the reporting period ERE issued a gas transmission and a gas distribution licence to the Albanian oil and gas company, *Albpetrol* has yet to fulfil all legal requirements for operating as TSO. The Secretariat is not aware that any related activities have already been initiated. Other interested companies, if any, may also apply for a gas transmission license.

The Ministry of Economy, Trade and Energy, on behalf of the Albanian Government, signed two Memoranda of Understanding with two *TAP* shareholders - *AXPO* and *EON/Ruhrgas* – on gas deliveries to the Albanian market. Under a separate Gas Market Development Commitment Agreement, *TAP* will also invest in necessary technical facilities at a single agreed upon exit point, but subject to conditions such as the existence of a certain minimum level of demand and a network capable to take over the gas quantities. Furthermore, *TAP* committed to provide assistance to the Albanian Government by creating a national Gas Master Plan.

During the reporting period, Albania has also been deeply involved in work on the on-going feasibility study for *IAP*. The study produced various reports of relevance for Albania: market analysis report, draft technical study, route investigation and pipeline dimensioning. However, the selection of an *IAP* route in Albania and the *IAP* interconnection point with Montenegro is still under discussion.

c. State of compliance

Despite the lack of a gas market in real terms, the Natural Gas Sector Law in force since June 2008 – already transposes the main principles of Directive 2003/55/EC and Regulation (EC) 1775/2005 and represents a solid basis for Albania's gasification plans. Missing provisions are highlighted below.

The state of compliance with the Energy Community gas *acquis* has not changed since the last reporting period. Further progress in the implementation of the *acquis* is, however, required on several shortcomings as outlined hereinafter.

1. **Authorisation procedures**: the Albanian legislation does not provide concrete procedures for authorizing the construction of natural gas facilities other than that they should be non-discriminatory and transparent. Despite this legislative shortcoming, a licensing act, developed in cooperation with the Secretariat, is in place. Direct lines need to be approved by the Government, which violates the transparency, objective and non discriminatory criteria from Article 24 of Directive 2003/55/EC, as the criteria for such approval are not defined.

2. **Unbundling**: The Law stipulates that TSO shall be unbundled. However, in order to ensure independence of the TSO, the minimum criteria stipulated in Article 9 of Directive 2003/55/EC were not transposed. The requirements for compliance programmes have not yet been established. The accounts for tariff and eligible customers supply are not separated and auditing provisions are missing. *Albpetrol*, which is responsible for limited production of gas in Albania as depicted before, is licenced as a TSO and a DSO. To the Secretariat's knowledge, this company has not been unbundled.

3. **Third party access**: Access to upstream pipelines is not addressed in legislation. The Law stipulates only the right of producers (to supply one or more eligible customers), but does not impose on them the obligation to provide access to third parties (Article 20 of Directive 2003/55/EC). ERE ceased to work on drafting tariff methodologies due to a shift in priorities during 2011 and 2012. The exemption provisions are compliant with Directive 2003/55/EC. However, the most serious shortcoming of the Law is the different treatment of national and cross-border (transit) gas transmission, which is contrary to Directive 2003/55/EC.

4. **Market opening** and **eligibility**: Deadlines for market opening have not yet been established. Instead of granting the eligibility status to all non-household customers as required by the *acquis*, eligibility is in non-compliance with Directive 2003/55/EC, because it defers market opening by reference to additional criteria, i.e. limiting it to *„(i) final customers that consume during a year more than an amount of natural gas as defined by the ERE or (ii) plants consuming natural gas for generation of electricity; (iii) plants consuming natural gas for the combined production of electricity and heat"*.

Eligible customers still enjoy the status of tariff customers without any exception. Although without any practical effect at the moment, this situation needs to be remedied. Furthermore, the roles of public suppliers and suppliers of last resort are not clearly distinct.

5. **Third party access services, capacity allocation mechanisms, congestion management procedures and balancing rules**: the majority of the provisions of Regulation (EC) 1775/2005 have been transposed into primary legislation, including those related to third party access services, balancing, congestion management, capacity allocation, and some transparency requirements in principal terms. The missing provisions relate to specific third party access services. However, this transposition only provides a general legal basis upon which more detailed secondary rules need to be developed and adopted in the future. As regards the transmission system operation tasks, the procurement of energy needed to carry out the operator's functions according to transparent, market-based procedures is not ensured.

6. **Security of supply**: The Energy Law defines standards and measures for security of gas supply along with the key institutions and market players. ERE is responsible for monitoring security of gas supply while the Ministry of Economy, Trade and Energy is responsible for monitoring and elaborating future estimations between supply and demand on the gas market, planning of gas system development and proposing and imposing measures in case of crisis to the gas market participants. The Government is in charge of approving a Regulation on Security of Natural Gas Supply that should define measures for securing a reliable and efficient gas supply. Although required by law, such Regulation is currently not in place. The following requirements of Directive 2004/67/EC are transposed: reporting; national emergency measures; mechanisms in case of major disruption which surpasses national level. On the other hand, definition of minimum security of supply standards and protected customers as well as a list of instruments for security of gas supply is missing.

Implementation of the Third Energy Package

Up to now, Albania has neither performed a gap analysis between the present legal framework and the requirements of the Third Package nor drafted an action plan for the latter's implementation in the area of gas. In the case of Albania, the full and timely transposition of the Third Package in gas is of particular importance, as it is a precondition for the exemption granted to the *TAP* pipeline project.

UNBUNDLING

According to Directive 2009/73/EC, as adapted by the Ministerial Council, new transmission systems, in particular where transmission system operation did not belong to an existing vertically integrated undertaking on 6 October 2011, will have to transpose and apply the ownership unbundling regime. The country's only gas transmission system operator, *Albpetrol*, which holds licences for electricity trade and performs the production of gas, has not been unbundled under the ownership option.

REGULATORY AUTHORITY

Although Albania's regulator has had already the opportunity to execute some of the tasks stipulated in the Third Energy Package, the present status and competences of ERE is not in line with the majority provisions on the regulators in the Third Energy Package.

CUSTOMER PROTECTION

A notion of vulnerable customer does not exist in the gas sector. Procedures for customer switching have not been adopted. Customer protection is not implemented in line with the Third Package requirements.

d. Conclusions and Priorities

It is important for Albania now to keep the momentum after the selection of the *TAP* project by the *Shah Deniz II* consortium in June 2013 and to intensify the efforts required for smart gasification. This would require a strategic approach to market development and infrastructure-building, which is currently missing.

In legislative terms, Albania should transpose the missing provisions of the *acquis* into the legal and regulatory framework and increase the institutional capacities of ERE. Together with this, transposition of the Third Package should start in Albania with high priority through amendments to the Gas Law.

Finally, ERE should restart developing procedures on tariff methodologies development as soon as possible in order to further foster gas market development. A market model defining the roles and responsibilities of the different market players should be developed in support.

3.3.3 BOSNIA AND HERZEGOVINA

Gas

			2011	2012
Natural Gas Production [Bcm]			0	0
Imports Flows [Bcm]			0.277	0.254
Exports Flows [Bcm]			0	0
Interconnectors'capacity [Bcm]			0.75	0.75
Storage working capacity [Bcm]			0	0
Length of Transmission Network [km]			200	200
Length of Distribution Network [km]			1,510	1,510
Natural Gas Customers	Total		69,598	69,787
	out of which:	Non-households	RS: 376 FBiH: N/A	RS: 407 FBiH: N/A
		Eligible according to national legislation	RS: 376 FBiH: N/A	RS: 407 FBiH: N/A
		Active eligible customers	RS: 376 FBiH: N/A	RS: 407 FBiH: N/A
		Households	RS: 3,382 FBiH: N/A	RS: 3,980 FBiH: N/A
Natural Gas Consumption [Bcm]			0.282830	0.259736
Consumption Structure [%]	Energy transformation		0	0
	Industry and Commercial Customers		18.84	17.29
	Households		60.83	60.90
			20.33	21.81

Sources: Ministry of Energy, Mining and Industry of Federation of Bosnia and Herzegovina and Ministry of Economy, Energy and Development, Republika Srpska

a. The gas sector in Bosnia and Herzegovina

Bosnia and Herzegovina does not have its own sources of natural gas. Supply is exclusively based on import. For the time being, gas only arrives from one source (Russia) passing through Ukraine, Hungary and Serbia, entering in Zvornik, transported via Kladanj to Sarajevo and ending in Zenica.

The role of natural gas in the economy is still limited due to an insufficient network. Bosnia and Herzegovina's total gas demand added up to 280 mcm in 2011. According to the Energy Community study on the implementation of the new Regulation (EU) 994/2010, gas demand can reach 902 mcm in 2020, growing to 1.585 bcm in 2030.

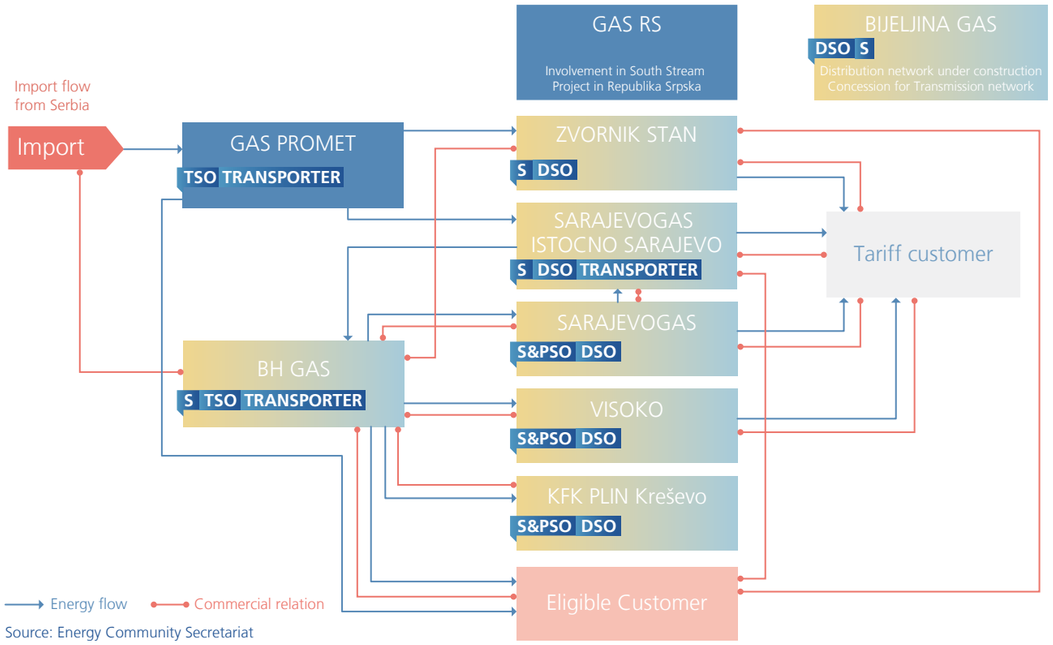
The gas market involves several key companies: In the Federation of Bosnia and Herzegovina, *BH Gas*, a fully bundled company, exclusively performs both supply and transmission system operation.

Gas Promet a.d. Istocno Sarajevo-Pale was designated by Government Decree in 2007 as Republika Srpska's transmission system operator. *Gas Promet* also holds a trading and supply license (without, however, currently supplying gas) and is owner of the smaller part of the existing transmission grid. *Sarajevogas a.d.-Istocno Sarajevo* is the owner of a bigger part of the existing transmission network in Republika Srpska and has been licensed as an operator ("gas transporter"), retail supplier and distribution system operator. Gas supply in Republika Srpska is carried out in practice by three companies, two of which are licensed for trading and supply as well as supply of tariff customers within Republika Srpska only, namely *Sarajevo-gas a.d. Istocno Sarajevo* and *A.D. Zvornik Stan*, Zvornik. The third and biggest supplier of natural gas (also) in Republika Srpska is *BH Gas*, accounting for more than 90% of the market.

Republika Srpska has developed an ambitious gasification strategy: the Government established *Gas RES. Banja Luka* in 2012 with the aim of developing a branch pipeline of the *South Stream* project in Republika Srpska, connecting to the trunk pipeline in Serbia. The company *Bijeljina gas a.d.* Bijeljina holds a concession for construction of the transport line Sepak – Bijeljina.

In the absence of state-level legislation on gas in the country, a regulatory authority in charge of gas has not been established at state-level. It is also missing in the Federation of Bosnia and Herzegovina. In Republika Srpska, the Regulatory Commission for Energy has jurisdiction over the gas sector, while in the Federation of Bosnia and Herzegovina the regulatory duties are exercised by the responsible Ministry.

Bosnia and Herzegovina's Gas Market Scheme



Source: Energy Community Secretariat

b. Progress made in 2012/2013

Little progress has been achieved as a reaction to the Secretariat's enforcement action in Case ECS-8/11. In response to the Secretariat's findings, both Republika Srpska and the Federation developed new legal acts. Republika Srpska adopted amendments to the Gas Law in January 2013. The Federation of Bosnia and Herzegovina drafted a Gas Law for the first time since the Treaty was signed. The draft Law was adopted by the Government on 15 May and has been forwarded to the Parliament. It has not been yet discussed in the responsible Parliamentary Committee.

Republika Srpska also adopted a Law on Pipeline Transport of Gaseous and Liquid Carbohydrates and Distribution of Gaseous Carbohydrates in 2012. It stipulates the conditions for safe and seamless transport of hydrocarbons (gas, oil, oil products). The Law thus transposes the provisions of Directive 2003/55/EC related to technical rules, namely technical safety criteria – and numerous criteria for construction and operation of natural gas facilities (as required under Article 4 of the Directive).

These attempts to bring the gas sectors of the two entities in compliance with the Energy Community *acquis* have, nevertheless, failed ultimately. Firstly, the amendments to the Gas Law in Republika Srpska addressed a part of the non-compliance issues as identified, and practical implementation is missing. Secondly, the Federation's pre-draft is incomplete, ambiguous and in itself not compliant with the Directive.

As regards progress in infrastructure investments, the Federation of Bosnia and Herzegovina has continued its active participation in the *Ionian Adriatic Pipeline (IAP)* project, as well as in the Southern interconnection with the neighbouring Croatian gas system project. On the other hand, Republika Srpska is considering a new interconnector to the Serbian gas system as a branch of the *South Stream* project. The construction of the Zenica - Travnik Pipeline is progressing, as well as construction of the distribution network in Bijeljina and its connection to the transport grid.

c. State of compliance

Bosnia and Herzegovina never adopted gas legislation at state-level with the purpose and effect of transposing Directive 2003/55/EC. Legislation governing the gas sector is, however, found on the level of the two constitutional entities, Republika Srpska and Federation of Bosnia and Herzegovina. They are not coherent with each other, leave significant lacunae and contain a number of non-compliances.

In 2011, the Secretariat started to address the manifold issues of non-compliance in the gas sector of Bosnia and Herzegovina through enforcement action. Following the Opening Letter sent in 2011, the Secretariat in 2013 submitted a Reasoned Opinion to Bosnia and Herzegovina and subsequently a Reasoned Request to the Ministerial Council. The Reasoned Request identifies several non-compliance issues of Bosnia and Herzegovina with the Treaty such as the lack of regulatory authorities for gas in the Federation of Bosnia and Herzegovina and at state-level; the lack of proper legal, functional and account unbundling in both entities, the lack of properly set and published network tariffs, issues related to exemptions for new infrastructure in the Federation, the lack of market opening the Federation in line with the deadlines set in Directive 2003/55/EC as well as different treatment of national and cross border transmission. The case as well as the following analysis is based on the entity's legislation in force.

1. **Authorisation procedures:** In Republika Srpska, licenses are issued by RERS according to this entity's Law on Gas and the Rulebook on Licensing. The procedure for receiving a concession to perform distribution activity is described by the Law on Concession. For the development of new transmission networks in Republika Srpska by a company other than the existing operator, a concession of 30 years may be issued. The Law on Pipeline Transport of Gaseous and Liquid Carbohydrates and Distribution of Gaseous Carbohydrates stipulates a number of necessary technical conditions for the purpose of constructing and operating a gas facility safely. The Law requires the Ministry to adopt a set of secondary acts, which has not been yet done, to the Secretariat's knowledge. At present, the Law's provisions on technical safety criteria (Article 6) and on authorisation criteria for construction and operation of natural gas facilities authorisation procedures (Article 4) of Directive 2003/55/EC are objective, non-discriminatory and in compliance with the *acquis*.

In the Federation of Bosnia and Herzegovina, the Decree on Organisation and Regulation of the Gas Sector defines the required licenses only generally and without criteria and procedures, which is not in compliance with Directive 2003/55/EC. The relevant competences are exercised by the Federal Ministry of Energy, Mining and Industry. The Decree also requires a concession for distribution.

2. **The legal and functional unbundling** requirements are not fulfilled by Bosnia and Herzegovina. In Republika Srpska: the 2013 amendments to the Law on Gas transposed provisions for legal and functional unbundling, though these have not been implemented in practice. Both *Gas Promet* and *Sarajevo-gas a.d. Istocno Sarajevo* continue to hold licenses for transmission system operation as well as for trading and supply. While *Gas Promet* does not exercise supply activities in praxis, *Sarajevo-gas a.d. Istocno Sarajevo* carries out both supply and transmission functions. In both companies, the managers of the transmission sectors are at the same time members of the Board of Directors and thus participate in the company structures for the supply activities. No measures have been taken to ensure that these persons act independently for both activities. Compliance programs are not in place in either company.

In the Federation of Bosnia and Herzegovina: the Gas Decree requires legal unbundling from supply for all system operators; an exception stipulated by the Decree expired in November 2012 but was prolonged through a loan agreement between *BH Gas* and *EBRD* until 31 December 2014. This deadline is not in line with the Treaty's. As regards functional unbundling, *BH Gas'* company structure allows for all its activities to be performed in a unified organizational and management format.

3. **Third party access** tariffs and exemptions are also not properly implemented in Bosnia and Herzegovina. In Republika Srpska, systems operators are obliged to enable non-discriminatory and transparent access to the system. The amended Law on Gas vests the regulator with the competence to develop methodologies for calculation of grid fees. Based on this tariff system, charges are to be determined by the respective operators. The tariffs are published. However, so far only distribution tariffs and prices for supply of tariff customers have been put into force, whereas transmission tariffs are far from being applied. That being said, in April 2013 the introduction of a transmission tariff for a spur pipeline Karakaj Zvornik was adopted. The amended Law transposed provisions on third party access exemptions for new infrastructure in line with Directive 2003/55/EC.

In the Federation of Bosnia and Herzegovina system operators are obliged to ensure efficient and non-discriminatory access to the grid. However, the Federal Ministry of Energy, Mining and Industry (in the absence of a regulatory authority) decides on a case-by-case basis whether access should be provided in a regulated or negotiated manner, which is a severe violation of both Directive 2003/55/EC and Regulation (EC) 1775/2005. The draft Law does not remedy the situation as it leaves it for the jurisdiction of a future State regulatory authority, on which there is no consensus among the entities. In practice, the "bundled" prices for transmission and supply are set by that entity's Ministry, for the vertically integrated *BH Gas*, and the cantonal Ministry sets prices for distribution and supply, in both cases upon the companies' proposals. At this point in time, neither separate network tariffs for gas transmission and distribution nor the methodology for their calculation have been adopted, published or applied in the Federation of Bosnia and Herzegovina.

The Decree provides that third party access exemption decisions shall be issued by the Ministry, thus failing to involve a regulatory authority which is mandatory in such a decision. Furthermore, it does not provide for a reasoning and publication of such a decision, as required by Directive 2003/55/EC.

4. In terms of **market opening and eligibility**, Republika Srpska has transposed the Treaty's requirements within the deadlines. However, rules on supplier switching are not in place nor has any customer ever switched gas supplier.

In the Federation of Bosnia and Herzegovina, the gas market is entirely captive. As well as not exercising the eligibility right *in praxi*, the Federation did not even properly transpose it. The Decree on Gas of the Federation of Bosnia and Herzegovina is in non-compliance with Directive 2003/55/EC on market opening. It defers market opening and links it to uncertain events in the future, namely the setting up of a regulatory authority and the adoption of secondary legislation by the latter. It also defines eligibility status by reference to additional criteria, i.e. limiting it to *„a customer that uses gas for generation of electricity, regardless of quantity of yearly consumption and within the limits for gas quantities intended for such use" or (ii) an „end customer that used more than 150 million m3 of gas in the past calendar year"*. Finally, the extension of the reciprocity requirement for eligibility to transactions with a foreign supplier, as well as to inner-Bosnian situations violates the reciprocity option in the Directive 2003/55/EC in the Secretariat's view.

5. **Third party access services, capacity allocation mechanisms, congestion management procedures and balancing rules:** In Republika Srpska, a Rulebook on the Operation of Natural Gas Transmission was adopted by *Gas Promet Pale* and approved by RERS in 2010. It mainly covers technical rules and some basic principles of capacity allocation and balancing. Third party access services are offered only as firm services and only for a year ahead. Capacity allocation has been defined for each entry and exit point, using the principle of "first come, first serve".

Bosnia and Herzegovina, besides linepack, does not have flexible sources of gas for balancing. The practice in Republika Srpska also fails to make any calculation methodology for imbalance charges as well as the final tariffs public. Transparency provisions required are only implemented to a limited extent. *Gas Promet* publishes capacities and access rules for the next year.

None of the provisions of Regulation (EC) 1775/2005 have been transposed, let alone implemented, in the Federation of Bosnia and Herzegovina.

6. **Security of gas supply** In Republika Srpska, a Decree on Security of Supply and Delivery of Natural Gas (2011) transposed key elements of Directive 2004/67/EC such as the definition of protected customers, the definition of roles and responsibilities of different gas market players, a list of measures and responsibilities in case of emergency as well as the scope of reporting and cooperation with the neighbours. However, relevant definitions of supply standards and major supply disruption are missing.

In the Federation of Bosnia and Herzegovina: the Gas Decree provides a definition of protected customers and of 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 neighbours as well as definitions of supply standards and major supply disruption are missing.

Implementation of the Third Energy Package

Upon Bosnia and Herzegovina's request, the Secretariat made a gap analysis between the current situation and the Third Package requirements in the gas sector. The Third Energy Package has factually not been transposed at all. Its implementation will face severe obstacles in all relevant aspects of the gas market regulations.

UNBUNDLING

Bosnia and Herzegovina's TSOs are not unbundled in the sense of the Third Energy Package. Namely, *Gas Promet*, *BH Gas* and *Sarajevo-gas a.d. Istocno Sarajevo* continue to hold licenses for transmission system operation as well as for trading and supply. These undertakings' structure allows for all their activities to be performed in a unified organizational and management format.

REGULATORY AUTHORITY

Bosnia and Herzegovina failed to establish regulatory authorities mandated with powers in the gas sector on the entire territory of the country. In the absence of a regulator at state-level at present, it will be impossible for Bosnia to designate a single regulatory authority at this level, as required by Directive 2009/73/EC.

CUSTOMER PROTECTION

There is no single definition of vulnerable customers at the national level. However, there are customer categories protected with respect to energy usage in the Canton of Sarajevo. This is too broad to comply with the notion of vulnerability. Customer protection has not been ensured within the meaning of the Third Energy Package.

d. Conclusions and Priorities

Bosnia and Herzegovina is lagging behind all the other Contracting Parties, including the newcomers. It has proved impossible for the authorities to agree on an approach capable of achieving effective implementation. Investments, the opening of markets, and infrastructure developments suffer from this lack of an appropriate legal framework. The non-compliance issues as addressed in the Reasoned Request need to be taken seriously by the country. The absolute priority is to remedy the situation in the gas market in Bosnia and Herzegovina without any delay. The Secretariat is willing to continue its assistance to Bosnia and Herzegovina and its entities in this process.

As is the case for all Contracting Parties, timely transposition of the Third Energy Package provisions must be a key priority for Bosnia and Herzegovina. This requires a state-level Gas Law on which political consensus needs to be found within the immediate future. Otherwise the deadline of 1 January 2015 will clearly be missed.

3.3.4 CROATIA

Gas

			2011	2012
Natural Gas Production [Bcm]*			2.115	1.803
Imports Flows [Bcm]			0.874	1.129
Exports Flows [Bcm]			-	-
Interconnectors'capacity [Bcm]			5.343 / 0	5.343 / 0
Storage working capacity [Bcm]			0.553	0,553
Length of Transmission Network [km]			2,511	2,530
Length of Distribution Network [km]			18,123	18,368
Natural Gas Customers	Total		643,618	647,996
	out of which:	Non-households	53,801	53,537
		Eligible according to national legislation	643,618	647,996
		Active eligible customers**	53,801	53,537
		Households	589,817	594,459
Natural Gas Consumption [Bcm]			3.053	2.747
Consumption Structure [%]	Energy transformation		not available	not available
			not available	not available
	Industry and Commercial Customers***		not available	not available
	Households		24	24

* includes natural gas quantities being supplied at the market
** includes customers who are currently being supplied under market conditions (current switching rates are minimal)
*** determined by deducting percantages of other categories from 100
Source: HERA

a. The gas sector in Croatia

Croatia has a long-lasting tradition of gas production and a relatively low import dependency ratio in European comparison. Croatia's demand totalled 3.090 bcm in 2011. The share of domestic production was 70.7%, imports from Italy accounted for 27.7% and the rest was supplied from various sources. According to the Energy Community study on the implementation of Regulation (EU) 994/2010, consumption is likely to increase to 4.670 bcm in 2020 and to 5.958 bcm in 2030.

The main natural gas producer in Croatia is *Industrija nafte (INA)*. Natural gas is produced on 17 on-shore and nine off-shore gas fields in the Adriatic. The latter account for more than half of total gas production.

Plinacro is the state-owned transmission system operator, which owns and operates the whole transmission system in Croatia. The natural gas transmission system comprises 2,511 km of pipelines. The transmission system has ten entry points - eight from the production sites and two entries at the interconnections with Slovenia and Hungary - as well as 193 exit points.

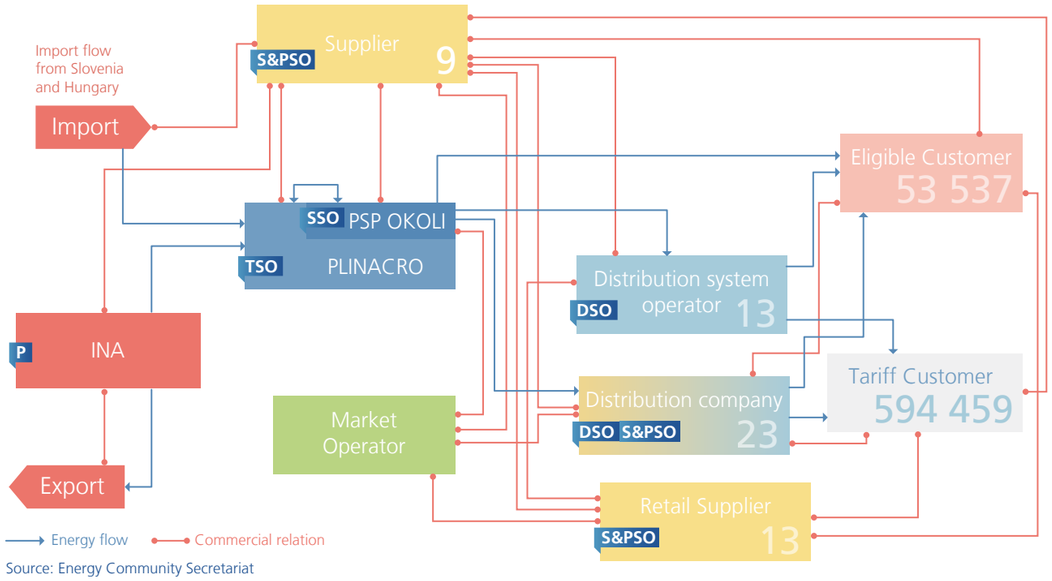
Podzemno skladiste plina (PSP) is a storage system operator and owns the underground gas storage Okoli with a capacity of 553 mcm. *PSP* is owned by Plinacro at 100%.

Croatia's gas market comprises a relatively large number of active participants, namely 54 suppliers and one trader. Distribution of gas is performed by 36 DSOs. 13 DSOs have unbundled their supply and distribution operations. They perform distribution activity in a separate legal entity. The other 23 DSOs are vertically integrated undertakings (perform both supply and distribution activities), having less than 100,000 customers. Established by the Gas Market Law, *Hrvatski Operator Trzista Energije (HROTE) is* responsible for the gas market organisation as a public service.

At present, a procurement entity *Prirodni Plin*, purchases both domestically produced gas (from *INA*) and imports gas from various sources. *Prirodni Plin* is a 100% subsidiary of *INA* and is thus controlled by the incumbent gas supplier dominating the wholesale market. In turn, the suppliers in Croatia purchase gas from *Prirodni Plin*. This company signed a contract on gas imports with Italy's *ENI* for the period 1 January 2011 - 31 December 2013. According to the new Gas Market Law, *Prirodni Plin* has been transformed from a procurement entity to a "supplier of public suppliers" and will cease to exist on 31 March 2014 in its capacity as a procurement entity.

Besides a new package of primary legislation (as will be described below), the gas sector in Croatia is regulated by the secondary legislation which requires updating. This comprises the Rulebook on the Organization of the Natural Gas Market, the Network Code for the Transmission System, the Network Code for the Distribution System, the Rules for Gas Storage, the general terms and conditions for natural gas supply, the Regulation on Security of Natural Gas Supply, the Tariff System for Distribution of Natural Gas, the Tariff System for Natural Gas Supply with the Exception of Eligible Customers, the Tariff System for Natural Gas Storage and the Tariff System for Natural Gas Transport.

Croatia's Gas Market Scheme



Source: Energy Community Secretariat

b. Progress made in 2012/2013

During the reporting period, Croatia adopted a package of new energy legislation, including the Energy Law, the Law on the Regulation of Energy Activities in 2012, as well as the Gas Market Law in February 2013. The latter is intended to transpose Directive 2009/73/EC. The Secretariat was involved in the drafting of the Gas Market Law. The Law abolished some barriers to market opening and endorsed competition, for example, it removed the price cap for gas supplies to eligible customers. This was originally intended to favour domestic industry but became regular Government practice. As a consequence all public suppliers used to purchase gas at prices regulated by the Government from the procurement entity *Prirodni Plin*, thus making the opening of the gas market pure fiction. By abandoning this model, Croatia created a level playing field for all participants. Regulations (EC) 715/2009 and (EC) 994/2010 (on security of gas supply) will not be transposed in Croatia on account of their direct effect under EU law.

Plinacro filed a certification request to *HERA* as required by the Law. The request is currently being analysed by *HERA*. *Plinacro* also submitted to HERA its next Ten-Year Network Development Plan (2013 - 2022) for approval. During the reporting period, *Plinacro* finalised the implementation of its previous Ten-Year Network Development Plan by putting into operation the transmission pipeline Benkovac-Split, which allows the gasification of the three regions Zadarski, Sibenski and Splitsko-dalmatinski.

Following a complaint by a new entrant to the Secretariat in 2012 alleging that the distribution tariff methodology fails to properly take into account the costs of greenfield projects, *HERA* made significant efforts to remedy the situation. In particular, *HERA* finalized the new distribution system gas tariff methodology which will rectify the shortcomings of the previous one and enable greenfield investments in the gas distribution sector to be economically viable.

c. State of compliance

Despite Croatia's overall satisfactory compliance with the *acquis*, including the Third Package, some barriers to competition and the entry of new market players remain even after entry into force of the legislative package adopted in 2012/13.

The practical implementation and efficient functioning of the gas market remains to be seen in its full potential.

1. The rules on **authorisation and tendering** have been transposed in line with Directive 2003/55/EC (and 2009/73/EC). What remains critical in this context is that the TSO is charged, as part of the Ten-Year Network Development Plan, with the tasks such as performing feasibility studies for the facilities which are not part of its transmission system and thus beyond its responsibility, namely production of gas and LNG.

2. As for the **unbundling requirements**, *Plinacro* has been legally and functionally unbundled in line with Directive 2003/55/EC since 2002. *Gradska Plinara Zagreb*, a DSO serving more than 100,000 customers, is legally unbundled, as well as the other 12 DSOs who serve less than 100,000 customers.

3. **Third-party access** is a legal right developed and supported by secondary regulation. The Secretariat supported the adoption of investment- and greenfield-project-friendly distribution tariffs. *HERA* announced that new tariffs will be applied from 1 January 2014 based on the new Gas Law.

4. **Market opening, eligibility and supplier switching:** The Gas Law stipulates that all customers are eligible to switch suppliers. The practical level of supplier switching, however, remained close to zero.

Several concerns remain. Firstly, *INA* has been placed under an obligation to offer its domestic production primarily to suppliers licenced to supply Croatia's customers. This provision is a discriminatory restriction of the free movement of goods. As the price of the gas quantities offered will not be regulated, it is also unclear what purpose this priority rule fulfils. In order to justify this provision as for legitimate reasons the public service obligations in question must be clearly defined and fulfil the criteria of Article 106(2) TFEU, including proportionality.

Secondly, the Gas Law stipulates that the Government will appoint suppliers with public service obligations and suppliers of last resorts upon *HERA's* opinion, without tendering procedure. However, Government acceptance of *HERA's* opinion, based on its view on the functioning of the market, is not mandatory nor is this appointment procedure performed according to transparent, non-discriminatory and verifiable criteria

5. **Capacity allocation and congestion management** procedures, as well as the balancing rules, have been implemented already under the previous Law. The relevant codes and acts of secondary legislation are in line with the gas *acquis* of the Second Package. In practice, *Plinacro* offers both short and long term capacities as well as both firm and interruptible capacities on all its entry and exit points. Capacity is allocated pro rata. However, at present, only one shipper, *Prirodni Plin*, has contracted 100% of the capacities at the entry points. Interruptible use-it-or-lose-it principle and the secondary market are used as congestion management methods.

The balancing regime is currently not market-based, which is in compliance with the Second Package, but not with the Third Energy Package. This is expected to change after 30 March 2014. Until then, balancing groups do not pay for balancing energy but only overrun charges (penalties) for the quantities exceeding a certain tolerance level. As regards transparency, *Plinacro* is publishing detailed information regarding its services offered and the relevant conditions and technical information necessary to access the network. It also publishes information on technical, contracted and available capacities for all relevant points on a regular basis.

6. **Security of supply:** Directive 2004/67/EC has been implemented by the Government's Regulation on Security of Natural Gas Supply, which defines measures to ensure safe and efficient supply of natural gas, standards and ways of determining sufficient quantities of natural gas for secure supply to protected customers, emergency measures, and reporting of gas suppliers on security of natural gas supplies. The only missing element is a community mechanism in case of major international supply disruption.

Implementation of the Third Energy Package

The Third Energy Package was transposed in Croatia by the Energy Law, the Law on the Regulation of Energy Activities and the Gas Market Law.

UNBUNDLING

In terms of unbundling, the Gas Law transposes all the three options envisaged by Directive 2009/73/EC. *Plinacro* is the operator and owner of the transmission system. It is owned and controlled entirely by the Croatian State, the Ministry of Economy. *Prirodni Plin*, the supplier with the dominant share in Croatia's market, is a member of *INA* Group, 100% owned by *INA*. *INA*, which holds 100% of domestic production, is a joint stock company with the following ownership structure: 47.26% *MOL*, Hungary; 44.83% State of Croatia; 7.91% Institutional & private investors. At present, one public body – the Ministry of Economy exercises the ownership rights on behalf of Croatia in transmission, production and supply of natural gas. Thus, the unbundling in the context of the Third Package is critical. *Plinacro* applied for certification to *HERA*, under the ownership unbundling model, on whose decision the European Commission will have to issue an opinion.

REGULATORY AUTHORITY

Croatia adopted the Law on the Regulation of Energy Activities in 2012, which vested *HERA* with the appropriate regulatory powers according to the Third Package.

CUSTOMER PROTECTION

Definitions, as well as rights of vulnerable and protected customers are defined in line with the Gas Directive and in particular its Annex I. The Law prescribes that a more detailed by-law on conditions of natural gas supply will be adopted by *HERA* by September 2013.

d. Conclusions and Priorities

Croatia transposed the Third Package by adopting the set of new energy laws in 2012 and 2013. It also fulfilled the majority of the recommendations made by the Secretariat and improved its market model. In the upcoming months, it should abandon unjustified restrictions on free trade in gas and reconfigure the roles of public supplier and supplier of last resort, in particular the appointment procedure. It should also fully implement the new balancing regime and make sure that the practice of price caps is really discontinued.

3.3.5 KOSOVO*

Gas

a. The gas sector in Kosovo*

A natural gas market does currently not exist in Kosovo*. A gas pipeline, interconnecting Kosovo* and (today's) territory of former Yugoslav Republic of Macedonia was in operation until 1986, supplying cement factories and district heating in Pristina as well as a steel plant in Skopje, with town gas produced in Obilic. The pipeline was designed for 25 bar operational pressure and a yearly capacity of 100-200 mcm. Given that the pipeline has been out of operation for more than 20 years, re-use of the pipeline would require thorough inspections along the entire route.

A general framework for the energy sector, including the role and competences of the regulatory authority, has been defined by the Law on Energy and the Law on the Energy Regulator since 2010. Among other issues, these Laws aim at facilitating large scale energy investment projects and enable smoother implementation of the gasification plans, including connections with existing and new regional pipelines. Directive 2003/55/EC was transposed by the Law on Natural Gas in 2009 which created the basis for gas market development as well as for the development of relevant secondary legislation.

According to the Energy Community's study on the implementation of Regulation (EU) 994/2010, gas demand in Kosovo* might be at 67 mcm in 2020 and grow to 581 mcm in 2030.

b. Progress made in 2012/2013

Since the Law on Natural Gas entered into force in 2009, there has been no further development on the legislative side or on the capacity building of relevant institutions. But Kosovo* expressed its general willingness to participate in regional projects, such as the Gas Ring and the related Gas-to-Power initiative, which was demonstrated through participation by the representatives of the responsible Ministry in the relevant meetings and by data submitted when requested.

c. State of compliance

The state of compliance with the Energy Community gas *acquis* has not changed during the last three years: Directive 2003/55/EC was transposed fairly well into national legislation in 2009. Transposition of Directive 2004/67/EC and Regulation (EC)1775/2005 is, however, still pending. This lack of implementation has to be considered in the context of the absence of a gas market in Kosovo*. In principle, the existing basic legal framework for gas enables Kosovo* to participate in the development of the regional gas network and develop a domestic gas market. However, the successful creation of competitive market structures will require full compliance with the *acquis* at a later stage.

1. **Authorisation criteria:** construction and operation of new gas transmission and distribution networks, and direct pipelines for supply of wholesale customers require an authorisation procedure by the regulator. Energy undertakings performing the activities of transmission, distribution, storage and supply of natural gas are obliged to have a license. The conditions and procedure for licensing have been defined in compliance with Directive 2003/55/EC by the Law on the Energy Regulator.

2. **Unbundling:** the Law on Natural Gas prescribes unbundling criteria in line with Directive 2003/55/EC for all system operators, without exemption for distribution with less than 100,000 customers.

3. **Third party access:** to networks and storage is regulated pursuant to rules and tariffs approved by the regulatory authority. In the absence of a gas market, tariff systems have not yet been developed.

The possibility for exemption from third party access to new infrastructure has been defined in line with Directive 2003/55/EC, including communication of the exemption decision of the national regulator Energy Regulatory Office (ERO) to the European Commission. However, procedures for official communication with the Energy Community Secretariat in the exemption process are not stipulated. Having in mind that the competences of the European Commission are limited to European Union Member States, the approach chosen by Kosovo*, even if formally compliant, will not function in case of cross-border exemption decisions involving EU Member States and Contracting Parties. The procedure needs to be reviewed in the context of implementing the Third Energy Package.

4. **Market opening, eligibility and supplier switching:** The market model is legally defined in line with Directive 2003/55/EC. It allows for non-discriminatory and unlimited market access of entrants once an infrastructure is constructed. Eligibility is defined according to the Treaty: all non-households have been eligible since 1 January 2008, and households will be eligible from 1 January 2015. The prices for the public service obligations licensees will be regulated in line with Directive 2003/55/EC. Still, all these provisions remain theoretical so far.

5. **Third party access services, capacity allocation mechanisms, congestion management procedures and balancing rules:** The Law on Gas defines general provisions with regard to capacity allocation, balancing and transparency for transmission system operators according to Directive 2003/55/EC. Regulation (EC) 1775/2005 has not been transposed so far and it needs to be addressed before future development of a gas infrastructure.

6. **Security of gas supply:** The provisions of Directive 2003/55/EC relevant for security of supply - i.e. roles and responsibilities of different market players, monitoring and safeguarding measures - have been transposed adequately. Directive 2004/67/EC which has not yet been transposed needs to be addressed before gas market development.

Implementation of the Third Energy Package

The time schedule for implementation of the Third Energy Package submitted by Kosovo* foresees development of a first draft of amendments to the Law on Natural Gas in the third quarter of 2013, a one year consultation period and submission to the Parliament in the third quarter of 2014.

UNBUNDLING

Kosovo* is among the Contracting Parties without a gas market, and consequently no gas transmission system operator existed on 6 October 2011. Under Directive 2009/73/EC, as adapted by the Ministerial Council, it will have to follow the ownership unbundling regime.

REGULATORY AUTHORITY

The establishment, tasks and responsibilities of the Energy Regulatory Office have been defined by the Law on Energy, the Law on Energy Regulator and by the Law on Natural Gas respectively for gas sector, imposing basic tasks and responsibilities defined by Directive 2003/55/EC, within the scope of the gas market development, i.e. non existing gas market. In that context, implementing Directive 2009/73/EC would be an additional challenge.

CUSTOMER PROTECTION

A vulnerable customer is defined by the Law on Energy Regulator as a household consumer whose low level of income, ill-health or disability qualifies him/her for protection or assistance. This is according to rules set by the regulator on the basis of guidance established by the Ministry of Labour and Social Welfare, and where a need for support was identified by the Government. The Law on Energy Regulator requires further that any support has to be provided in a transparent manner, may not distort supply competition beyond what is necessary, and that subsidies are subject to State aid control. Those basic principles can be further developed for the gas sector.

d. Conclusions and Priorities

The existing basic legal framework for natural gas enables Kosovo* to participate in the development of the regional gas network and consequently, to develop its domestic gas market.

Nevertheless, further efforts will be required, relating mostly to capacity building for the gas sector, in both the Energy Regulatory Office and the Ministry. In the course of implementing the Third Package, a focus must be put on the tasks and competences of the regulator, as well as on its effective independence. The provisions of Directive 2004/67/EC and Regulation (EC) 715/2009, as well as certification procedures for future transmission system operators should be developed well in advance of the first of gas flowing in and through Kosovo*.

3.3.6 FORMER YUGOSLAV REPUBLIC OF MACEDONIA

Gas

			2011	2012
Natural Gas Production [Bcm]			-	-
Imports Flows [Bcm]			0.1358	0.1366
Exports Flows [Bcm]			0	0
Interconnectors'capacity [Bcm]			0.8	0.8
Storage working capacity [Bcm]			0	0
Length of Transmission Network [km]			165	165
Length of Distribution Network [km]			7.25	19.97
Natural Gas Customers [number]	Total		32	38
	out of which:	Non-households	29	34
		Eligible according to national legislation	3	4
		Active eligible customers	3	4
		Households	0	0
Natural Gas Consumption [Bcm]			0.1358	0.1366
Consumption Structure [%]	Energy transformation		17.10	49.85
			39.85	21.17
	Industry and Commercial Customers		43.05	28.98
	Households		0	0

Source: ERC

a. The gas sector in former Yugoslav Republic of Macedonia

The share of natural gas in total primary energy consumption in former Yugoslav Republic of Macedonia is rather low, at the level of 3-4%. In total figures, gas consumption was 136.6 mcm in 2012 out of which 78% was used for electricity and heat production and the rest by industrial customers. However, consumption is forecasted to increase to 1.069 bcm in 2020 and 1.875 bcm in 2030 according to Energy Community data.

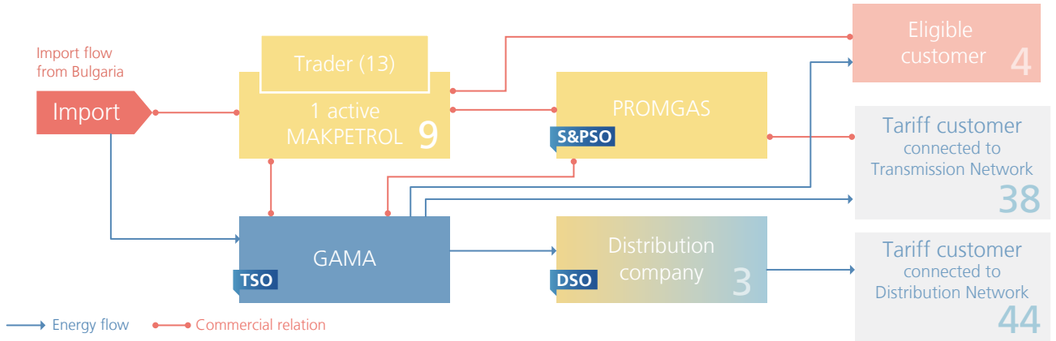
Gas market development in former Yugoslav Republic of Macedonia started more than 20 years ago with a pipeline from the Bulgarian border to Skopje, the only interconnector still in use today. This pipeline's capacity of 0.8 bcm/y has never been reached, but could be extended to 1.2 bcm/y by adding a compressor station. Actual consumption in the country remains rather limited at an average of 0.1 bcm/y. Gas is consumed for heat and electricity production and by industry. Additional demand could be driven by new gas-fired power plants constructed in the last few years.

The country is fully dependent on gas imports from Russia. It has no domestic production or proven reserves, and no underground storage facility. The entire gas system includes 98 km of transmission pipeline, one entry point, six main exit points with 41 delivery stations and more than 30 km of distribution network, developed recently.

The gas market involves the transmission operator *GAMA* - a joint venture between the private company *Makpetrol* and the State -, the exclusive wholesale supplier *Makpetrol* and a licensed retail supplier for tariff customers, *Prom Gas*, *Makpetrol's* daughter company. Several other licensees for natural gas trading exist, but are not actually active on the market. Distribution activities have started for industrial and public buildings. There are three licensees for distribution system operation and retail supply, held by *TIRZ, Kumanovogas* and - since last year - *Strumica Gas*.

A 2010 feasibility study for natural gas transmission development envisages further gasification by 2040 as well as the establishment of interconnectors with all neighbouring transmission systems. Concrete measures have, however, not been taken as far; the actual development of the system is still subject to consideration and thus pending. The feasibility study for natural gas distribution development at the state-level, that envisages further gasification by the cities, is in progress, and according the agreement it should be completed in March 2014.

Former Yugoslav Republic of Macedonia's Gas Market Scheme



Source: Energy Community Secretariat

b. Progress made in 2012/2013

The Energy Law of 2011 requires certain by-laws as a precondition for full implementation, including gas market opening. The deadline set by the Energy Law for their adoption, February 2012 was not met, even though the Energy Regulatory Commission (ERC) made significant efforts.

Having adopted the Gas Supply Rules in May 2012 and amending the Tariff System, Methodology for the Sale of Gas to Tariff Customers in July 2012, Rules on Gas Supply of Last Resort were adopted by ERC in September 2012. The latter were accompanied by a Rulebook on Prices of Gas by the Supplier of Last Resort and a related Methodology, both adopted in January 2013. The Rulebook on the Method and Conditions for Regulating Prices for Transport, Distribution and Supply of Gas of 2009 was amended in 2011 and 2012 and the Rulebook on the Method and Conditions for Regulating Tariffs for Transmission, Transmission System Operation and Distribution of Natural Gas adopted in October 2011. On these grounds, the Tariff System for Gas Transmission was amended, and the first Tariff System for Gas Distribution was adopted in January 2013. ERC is currently developing Natural Gas Market Rules.

Although the Energy Law entered into force more than two years ago, licences in gas sector have not been harmonised with it yet. This is a direct consequence of the long and ongoing dispute between the State and *Makpetrol* about the ownership of the transmission system. The Energy Law requires a license for natural gas transmission network operators and for natural gas transmission system operators, but does not allow the same entity to hold both licenses, thus imposing the establishment of two different undertakings. At present, *GAMA* holds licenses as natural gas network owner and a natural gas transmission system operator, still valid according to the Energy Law of 2006 (amended in 2007, 2008 and in 2010) and will be valid by the moment of issuing a new licence in line with the Energy Law as of 2011. At the beginning of 2012, a new state-owned company, *Macedonian Energy Resources*, applied for the transmission system operator license based on the Law of 2011. According to the Law, issuing the new license entails transfer of the governance over parts of the transmission system necessary for system operation to the new transmission operator by the previous one. It seems as if the same result may be achieved through the Law on Expropriations adopted in early 2012, on which the Secretariat expressed its concerns. In any event, the unresolved dispute paralyses the gas sector, has triggered delays in the implementation of the new Energy Law and challenged further infrastructure development.

Some steps towards the further implementation of Directive 2004/67/EC have been made by the Ministry of Economy. In the reported period last year a Decree on Gas Crisis was developed in close cooperation with the Secretariat. The Decree is currently under public consultation before adoption.

The development of the gas market and infrastructure has continued during the last year. The Government signed a cooperation agreement on the construction of a South Stream branch and delivery of gas with the Government of the Russian Federation in July 2013. Some steps were taken at the level of distribution: in the city of Strumica in the South of the country, a local company has continued to develop a distribution network. In the absence of interconnection to the transmission grid, supply takes place by CNG trucks from Bulgaria. The distribution network has also been further developed in the city of Kumanovo. *GAMA* continued to connect new customers in Skopje to the transmission network.

Furthermore, all the three DSOs developed Distribution Grid Codes and submitted them to ERC for approval. The Transmission Network Code of 2009 still needs to be adjusted in accordance with the responsibilities for system operation as defined by the Energy Law of 2011.

During the reporting period, the transmission operator *GAMA* continued to challenge the transmission tariff, set by ERC for the next five years. The tariffs are determined on a rolling

basis, including a correction factor for revenue losses collected in the last year. However, planned significant increases of consumption for electricity production (taken into account for tariff calculations) did not happen and instead of being recovered on a year-by-year rolling basis as foreseen by the methodology, the revenue losses cumulated over several years due to big discrepancies between foreseen and actual capacity use which remains very low. Without prejudice to a final analysis by the Secretariat, the principle of cost-reflectivity needs to be respected and implemented by ERC as a precondition for the functional system operation and necessary investments in system development.

c. State of compliance

The Energy Law transposes the majority of the provisions of Directive 2003/55/EC. However, there are still shortcomings in regard to all required details on data confidentiality, refusal of access, customer protection and safeguarding measures.

1. **Authorisation criteria**: The construction of a new transmission and distribution network requires authorisation by the Government and local authorities. The amendments to the Energy Law in May 2013, introduced Public Private Partnership (PPP) as a general model for constructing gas distribution grids. The Secretariat is concerned that this discriminates against other forms of investment, namely without State involvement.

2. **Unbundling** is in line with the *acquis*, including an exemption from unbundling for distribution companies with less than 100,000 customers. As explained above, a transmission owner licensee cannot hold a license for transmission system operation, and control over the transmission infrastructure has been divided between system and network operators. The ensuing conflicts should be resolved in the course of implementing the Third Energy Package.

3. The provisions on **third party access** are transposed in line with the *acquis*. The regulatory authority approves both the methodology and the tariffs for access to the transmission system. However, the Rulebook on the Method and Conditions for Regulating Tariffs for Transmission, Transmission System Operation and Distribution of Natural Gas defines different levels of return for different transported quantities, *i.e.* the level of return is directly dependent on transported quantities and usage of capacity. This provision might lead to discrimination in the future for new network operators which may have low capacity usage in the first years. Furthermore, the implementation of the cost-reflectivity principle is the subject of a complaint submitted to the Secretariat, as described above.

The conditions for the exemption of new infrastructure from third party access have been defined in line with Directive 2003/55/EC.

4. **Market opening, eligibility and supplier switching:** According to the Energy Law, all customers have been granted eligibility status. It will be functional only after the approval of relevant secondary legislation which is still not fully accomplished. For the time being, market opening only exists according to the rules established before the Energy Law of 2011, *i.e.* according to the Rulebook on the Status of Eligible Gas Customers. In practical terms, only four customers have the status of eligible customers. Furthermore, only one customer, a new electricity producer, exercised eligibility and changed the supplier. Rules on switching suppliers have yet to be developed, as a part of the Market Rules currently under preparation. To conclude, eligibility and market opening are not in compliance with Directive 2003/55/EC.

5. **Third party access services, capacity allocation mechanisms, congestion management procedures and balancing rules:** the requirements on capacity allocation, balancing and transparency have already been transposed by the Transmission Grid Code in 2009, in compliance with Regulation (EC) 1775/2005 and according to the level of market development. Only provisions on interruptible capacity and secondary market have not been implemented.

6. **Security of supply:** The Energy Law does not fully transpose Directive 2004/67/EC. The missing elements include measures for specific customers, definition of supply standards and reporting obligations, list of instruments for security of gas supply, national emergency measures and community measures. These shortcomings will be rectified by a draft Decree, which still has to be adopted.

Implementation of the Third Energy Package

The Energy Law is expected to be amended starting in the second half of 2013. This will include also amendments to the existing technical rules, market rules, tariff methodologies and relevant by-laws.

UNBUNDLING

On 6 October 2011, the transmission system was operated by *GAMA*, controlled by *Makpetrol*. At the same time, *Makpetrol* has a licence for gas trade, being the biggest importer of Russian gas, and owns a daughter company *Promgas* which supplies to tariff customers and has public service obligations. In other words, a vertically integrated company is currently involved in supply and system operation. This is not in line with Directive 2009/73/EC.

REGULATORY AUTHORITY

For the time being, the role of the regulatory authority has been defined in line with Directive 2003/55/EC. To ensure a compliance with Directive 2009/73/EC, additional tasks have to be given to ERC and some exiting competences – in regards to customer protection and regional cooperation – have to be strengthened.

CUSTOMER PROTECTION

General measures for customer protection have been described by the Energy Law as of 2011, and elaborated further by the Supply Rules in 2012. Vulnerable customers, as required by the Third Package have not yet been defined.

d. Conclusions and Priorities

The most important priority for former Yugoslav Republic of Macedonia must be the resolution of the longstanding dispute between *Makpetrol* and the State through fair and transparent procedures, and without jeopardizing security of supply. This will unblock many of the current shortcomings and compliance problems. Only after clear responsibilities are allocated, can the Law and relevant secondary legislation be properly and effectively implemented.

Besides the non-solved issues on transmission system operation, the dual responsibility in national administration – split between the Ministry of Economy and the Ministry of Transport and Communications - for infrastructure development also impedes the country's interconnection developments with its neighbours. Moreover, the Government should overcome its reluctance to support improvements in the southern part of the Gas Ring; in particular it should support a feasibility study for an interconnector with the neighbouring Contracting Parties within the *Western Balkan Investment Framework*. Former Yugoslav Republic of Macedonia is also the only Contracting Party with an existing gas market which did not submit any gas project for the Projects of Common Interest of the Energy Community.

As is the case for all Contracting Parties, transposition of the Third Package provisions is a key priority for former Yugoslav Republic of Macedonia.

3.3.7 MOLDOVA

Gas

			2011	2012
Natural Gas Production [Bcm]			0.000102	0.000107
Imports Flows [Bcm]			21.3371	21.0085
Exports Flows [Bcm]			20.185	19.913
Interconnectors'capacity [Bcm]			44.6	44.6
Storage working capacity [Bcm]			0	0
Length of Transmission Network [km]			1560	1560
Length of Distribution Network [km]			21,635	22,126
Natural Gas Customers [number]	Total		630,306	661,171
	out of which:	Non-households	10,088	12,016
		Eligible according to national legislation	630,306	661,171
		Active eligible customers	0	0
		Households	620,218	649,155
Natural Gas Consumption [Bcm]			1.036345	0.989576
Consumption Structure [%]	Energy transformation		42.9	43.3
	Industry and Commercial Customers		26.9	26.5
	Households		30.3	30.2

Source: ANRE

a. The gas sector in Moldova

Moldova is an important transit country for Russian gas, being on the route from Ukraine to Romania, Bulgaria and Turkey, including branches to Greece and former Yugoslav Republic of Macedonia. The total length of Moldova's three transit pipelines is 246.9 km with a total capacity of 34.6 bcm/y. Another pipeline interconnection with Ukraine in the north of the country traverses through Moldova to connect two parts of the Ukrainian network. This pipeline, with a capacity of 9.1 bcm/y, has an important role in security of supply for Moldova, as it connects to the storage facilities Bogorodchany in Ukraine. Moldova itself does not have storage facilities.

In practice, the capacity utilization rate of all cross-border pipelines is only about 45–55%, i.e. ca 20 bcm/y of natural gas is transited through the Southern route and 1.3–2 bcm/y through the Northern route. The national network is only partly used as well. The internal transmission network stretches over 1550 km.

After a significant drop in the 1990s, gas consumption in Moldova begun recovering since 2008, and nowadays amounts to 3 bcm/y, out of which approximately 1 bcm/y is consumed on the right bank of the Dniester river. Consumption is concentrated in the capital Chisinau, which consumes approximately 60%. Natural gas consumed on the left bank of the Dniester is mainly used for electricity production. Consumption is almost 100% covered by imports from Russia. Moldova has a very high share of natural gas used in total primary energy consumption (58.7%) and is among the countries with the highest share of natural gas in electricity and heat production (accounting for 96.1%).

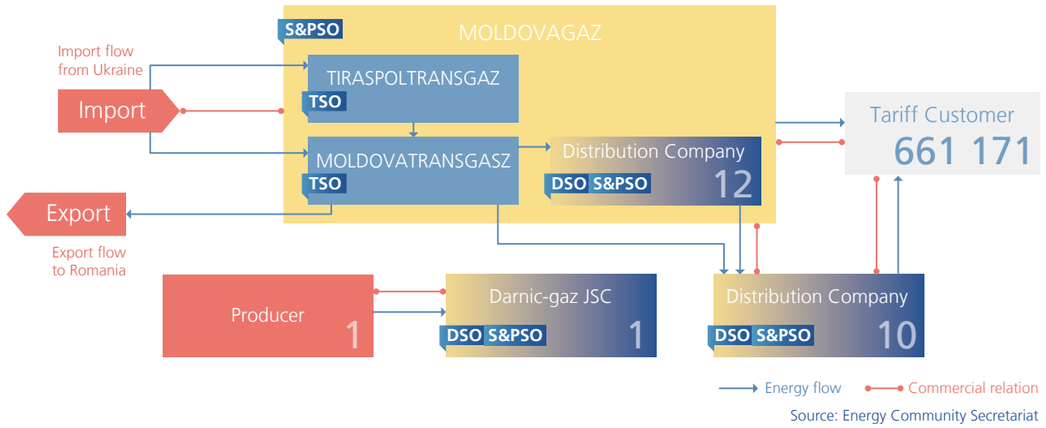
Besides imports from Russia, one domestic producer ensures a low level of domestic production. It is directly connected to the distribution network.

Most of the activities in the gas market – import, supply, cross-border and national transmission, distribution, retail supply are performed by one vertically integrated company, *Moldovagaz*. *Moldovagaz* is the dominant supplier of natural gas in Moldova. It signed an import contract with *Gazprom* and an agreement for the use of storage in Ukraine. *Moldovagaz's* shares are divided between the State (36.6%), authorities in Transnistria (13.4%) and *Gazprom* (50%).

The mother company *Moldovagaz* operates as supplier but also has two daughter companies operating transmission systems: *Moldovatransgaz* and *Tiraspoltransgaz*. Another 12 daughter companies of *Moldovagaz* act as distribution companies. In addition to those 12, another 11 distribution companies exist. However, their total market share is rather negligible, with less than 2%.

The Natural Gas Law, adopted in December 2009, established the basic legislative framework for the gas market in line with Directive 2003/55/EC. Several acts of secondary legislation – namely the Regulation on Natural Gas Supply and Use, the Technical Rules for Networks and the Regulations on Quality of Natural Gas Transportation and Distribution Services - define technical rules in the gas sector.

Moldova's Gas Market Scheme



Source: Energy Community Secretariat

b. Progress made in 2012/2013

After having initiated the process of transposing Directive 2004/67/EC and the missing elements of Directive 2003/55/EC and Regulation (EC) 1775/2005 by drafting amendments to the Natural Gas Law during 2011 and 2012, the Government has slowed down its reform activities during 2013. The updated Technical Norms for Natural Gas Transmission Networks and the Decision on Approving the Regulations on the Quality of Natural Gas Transportation and Distribution Services remain limited to technical rules (which are important), and fail to transpose the requirements of Regulation (EC) 1775/2005. The National Energy Regulatory Agency (ANRE) already drafted a Regulation on Conditions for Access to Natural Gas Transmission Networks during the previous reporting period. Approval of this act is still pending due to the deadlock regarding the amendments to the Natural Gas Law.

In late 2011, the board of *Moldovagaz* decided on the company's reorganization in line with the Natural Gas Law. Accordingly, *Moldovagaz* should have been transformed into a holding company with separate daughter companies for supply and transmission as well as four distribution companies. However, the actual implementation of the decision has not been further fostered and according to the Secretariat's knowledge, little progress – if any – has been achieved.

During the reporting period the Secretariat was engaged in resolving several disputes related to the implementation of transmission and distribution tariffs, and in particular the treatment of grid losses. *Moldovagaz* challenged several of ANRE's decisions relating to the actual transmission tariff as well as the level of recognized losses in the distribution tariff methodology.

With regard to the transmission tariffs, the current methodology uses a uniform method for calculation of both national and cross-border flows, i.e. taking into account all transmitted quantities through the entire system. ANRE's methodology is based on equal treatment of internal transmission and transit under the *acquis*. In practical terms, this means that much larger quantities (*cca* 95% of the overall volume) pass through a much smaller part of the grid (*cca* 14% of the overall network), while the remaining 5% of the gas passes through a much larger part of the grid. The approved transmission tariff, applied for entire transmission network, is transferred to the supply price for distribution companies/final customers, but collects its full amount only for much smaller amounts of gas transmitted and consumed in the country (*i.e.* for only 5% of total quantities). The disproportion causes financial problems to *Moldovagaz* as a supplier. It must pay a higher transmission tariff to the operator *Moldovatransgaz* for the total gas quantities while receiving a lower price from *Gazprom* for transited quantities (*i.e.* for 95% of overall quantities).

Different treatment of transit and transmission has been abolished within the Energy Community, with the provisions of the Second Energy Package. From this point of view, the ANRE's approach to the methodology is appropriate to the extent that it would also take into account the need for system integrity and its improvement. A final solution has so far not been reached.

As regards the distribution tariffs, the dispute has been related to the level of accepted losses, both, technical and commercial. In this respect, ANRE and *Moldovagaz*, under mediation by the Secretariat, came close to a final solution at the last meeting in April 2013. Namely, it has been agreed that

the level of commercial losses has to be decreased in the following 3 years, by installing certain additional equipment for which costs will be recognized by the tariff methodology. For the technical losses, *Moldovagaz* should have come up with elaborated details on maintenance and investment costs related to decrease of technical losses to ANRE. The Secretariat was not informed if the latter had happened.

As concerns infrastructure development, construction works on the interconnector with Romania (Iasi–Ungheni) started on 27 August this year. The Ministry of Economy decided to extend the pipeline for 130 km on the Moldavian side from Ungheni to Chisinau. With this extension, the new source of supply from Romania will be connected with the biggest consumption area, Chisinau. The Ministry started with preliminary talks with International Financial Institutions (IFIs), seeking at first support for the feasibility study and environmental and social impact assessment. An appropriate business model for this project still needs to be defined. It will either be the establishment of a new transmission system operator or the conclusion of a service contract with the existing operator.

c. State of compliance

Since no new legislation has been adopted within the last year, the state of compliance has not changed as compared to the previous report. The Gas Law of 2009 transposed the majority of the provisions of Directive 2003/55/EC, with key missing elements being outlined in the following. Most provisions of Directive 2004/67/EC and Regulation (EC) 1775/2005 have not been transposed.

1. **Authorisation and tendering:** A license issued by the regulatory authority is required for performing any gas related activity. Authorization procedures for new infrastructure investments are ambiguous. The Law only stipulates a procedure for concessions for projects financed from the State budget. To what extent private investment is covered is not clear.

2. The **unbundling** provisions in the Gas Law are in line with Directive 2003/55/EC, but they are not implemented. Although *Moldovatransgaz* has been set up as a daughter company in the vertically integrated company *Moldovagaz*, a practical functional unbundling of the TSO has not been achieved. *Moldovagaz* takes decisions on behalf of its transmission system operator. A compliance programme on meeting the unbundling requirements has not been established yet.

In line with Article 13 of Directive 2003/55/EC, suppliers with less than 100,000 customers can operate bundled with distribution system operation functions.

3. **Third party access** is defined in line with Directive 2003/55/EC. However, secondary legislation on access to the network as defined by Regulation (EC) 1775/2005 is lacking.

Grid tariffs are approved by ANRE according to the methodology in force. The grid tariffs differentiate according to the pressure level of the network to which users are connected. Even though ANRE approves transmission and distribution network tariffs, the grid component is not explicitly shown on the bill for the final consumers.

Rules on exemption from third party access have not been included in the Gas Law. This violates Directive 2003/55/EC. Potential investors in infrastructure thus lack an important incentive to engage in Moldova.

4. **Market opening, eligibility and supplier switching**: A clear definition of eligibility is missing in the Natural Gas Law, as well as deadlines for market opening. All customers are supplied under regulated prices. Moldova is thus in breach of Article 23 of Directive 2003/55/EC read together with its Accession Protocol. In practice, *Moldovagaz* is the only supplier in operation in the country.

5. A contractual tolerance level, some transparency requirements, as well as procedures for access to the network and for monitoring of gas quality are included in the Technical Norms for Natural Gas Transmission Networks, but **capacity allocation and congestion management** procedures, as well as the **balancing** in compliance with Regulation (EC) 1775/2005 have not been put in place.

6. General responsibilities for **security of supply** policy as well as monitoring and reporting on security of supply are allocated to the Ministry of Economy by the Natural Gas Act. However the following elements of Directive 2004/67/EC have not been transposed nor implemented: minimum of security of supply standards, definition of protected customers, national emergency measures and full list of instruments for security of gas supply.

Moldova has not communicated its Security of Supply Statement to the Secretariat since the deadline passed in 2011. It is thus also in breach of Article 29 of the Treaty.

Implementation of the Third Energy Package

According to its implementation plan, the transposition of Directive 2009/73/EC by the Ministry of Economy should take place between the second quarter of 2014 and the second quarter of 2015. The regulatory authority was charged with the transposition of Regulation (EC) 715/2009, which should be finalised by the end of 2014.

UNBUNDLING

Currently, Moldova's TSOs are not unbundled in the context of the Third Energy Package. Both *Moldovatransgaz* and *Tiraspoltransgaz*, have been set up as daughter companies in a vertically integrated company – *Moldovagaz*, but a practical functional unbundling of TSOs has not been achieved. *Moldovatransgaz* is not independent in decision-making; whereas, *Tiraspoltransgaz* is more independent from the mother company but is involved in both transmission and trade activities in the region of Transnistria.
The Ministerial Council in December 2012 granted Moldova a derogation from Article 9(1) of Directive 2009/73/EC until 1 January 2020. Moldova envisages practical unbundling in the first quarter of 2020, and its certification by the end of 2020.

REGULATORY AUTHORITY

As explained, tasks and responsibilities have been defined by the Gas Law in line with Directive 2003/55/EC, with a few missing tasks, eg. the right to order the TSO to modify third party access terms and conditions, involvement in cross border disputes and the right to impose penalties. Thus, to be compliant with Directive 2009/73/EC, those tasks have to be introduced.

CUSTOMER PROTECTION

A definition of a vulnerable customer exists in a Government Decision. Procedures for customer switching have not been adopted. Customer protection is not implemented in line with the Third Package requirements.

d. Conclusions and Priorities

Given that no development can be reported over the last year, the situation and priorities remain the same as noted in last year's Implementation Report:

Moldova should finally adopt the amendments to the Gas Law and of the Regulation on Conditions for Access to the Natural Gas Transmission Networks.

Moldovagaz needs to be restructured in line with the requirements of Directive 2003/55/EC (not yet the Third Package!), and the Gas Law of 2009.

The parties involved should settle the dispute between ANRE and *Moldovagaz*.

3.3.8 MONTENEGRO

Gas

a. The gas sector in Montenegro

Montenegro currently has no gas market. According to the Energy Community study on the Implementation of Regulation (EU) 994/2010, gas demand in Montenegro could reach 55 mcm in the first years of gasification (around 2020), growing to 357 mcm in 2030.

The country is currently developing its national energy strategy for 2030, which includes various scenarios for gasification.

One supply option for a future gas market is the *Ionian Adriatic Pipeline (IAP)* project, a part of the Energy Community Gas Ring. The costs of the *IAP* over Montenegro territory have been estimated at EUR 60 million. Another possibility is offshore gas resources in the South Adriatic. This option is uncertain; in any event it is not likely to be available before 2025.

No gas company has been licensed so far.

b. Progress made in 2012/2013

During the reporting period, Montenegro has been involved in the work related to the on-going *IAP* feasibility study. The study spun off various reports of relevance for Montenegro, namely a market analysis report, a draft technical study, a route investigation and pipeline dimensioning study. The Ministry of Economy agreed that the *IAP* route will run along the Montenegro coast.

In addition, the consultant engaged in the *IAP* feasibility study drafted Terms of Reference for a gas development and project identification (master gasification) plan. Montenegro will apply in September 2013 to the relevant EU grant funds for the execution of this study.

No activities have been reported to upgrade the regulator's capacity to draft secondary legislation.

c. State of compliance

The Energy Law of 2010 (amended in 2011 and 2013) provides the legal and regulatory framework for the gas sector.

The Law transposes most of the provisions of Directive 2003/55/EC, Regulation (EC) 1775/2005 and Directive 2004/67/EC. The key missing elements are outlined in the following.

1. **Authorisation procedures:** The authorisation procedure is in compliance, except the fact that the reasons for any refusal to grant an authorisation are not objective and non discriminatory or given to the applicant.

2. **Unbundling** requirements have been transposed in line with Directive 2003/55/EC.

3. The provisions for **third party access** have been transposed generally in line with the *acquis*, except for the obligation on network operators to purchase the energy needed for system operation based on transparent, market-based procedures. However, the most serious shortcoming of the Law is the different treatment of national and cross-border (transit) gas transmission, which is contrary to Directive 2003/55/EC. Finally, the missing obligation (of the regulator) to reason exemption decisions and to publish them with all the relevant details is incompliant with the rules on exemption procedures for new infrastructure.

4. **Market opening, eligibility:** the Law grants eligibility to all customers with the exception of households which will be eligible as of 1 January 2015. Bearing in mind the current lack of gas market development in Montenegro, more detailed switching rules are not required yet.

5. **Third party access services, capacity allocation mechanisms, congestion management procedures and balancing rules:** The provisions for capacity allocation, balancing and transparency have been transposed in accordance with the *acquis* at a rudimentary level in the Law. The definitions according to the Regulation (EC) 1775/2005 are missing. The Gas Transmission System Code will have to be yet developed. Until then, the Regulation (EC) 1775/2005 has not been implemented.

6. **Security of supply:** Although Montenegro does not have any gas infrastructure, the Energy Law defines standards and measures for security of gas supply. It defines the role of key institutions and market players. The Energy Law requires the development of emergency plans by the gas system operator in case of an emergency. All requirements of Directive 2004/67/EC are transposed. Montenegro announced it would bring its legal framework for security of gas supply in line with Regulation (EC) 994/2010 during the process of implementing the Third Package.

Implementation of the Third Energy Package

Montenegro has started drafting the new Energy Law aiming to transpose the Third Energy Package. Its intention is to have a Law adopted by end of this year. The Montenegrin authorities and their consultant are collaborating closely with the Secretariat.

UNBUNDLING

Montenegro is among the Contracting Parties without a gas market, and consequently no gas transmission system operator existed on 6 October 2011. Under Directive 2009/73/EC, as adapted by the Ministerial Council, it will have to follow the ownership unbundling regime.

REGULATORY AUTHORITY

The legal framework set a high degree of autonomy of the regulator. According to the Law, the regulator's decisions must be independent of the Government or any other public or private entity. Decisions are immediately binding and directly applicable and are not subject to review, suspension or veto by the Government, the Ministry or by any entity controlled by those. However, the tasks and competences of the regulatory authority are not in line with the Third Package yet.

CUSTOMER PROTECTION

The Law has envisaged different customer protection measures attributable to suppliers as well as to the supply of vulnerable customers. The amendments should define a single point of contact for all customers to receive information on their rights. In addition, supplier switching rules needs to be defined.

d. Conclusions and Priorities

The legal framework is currently considered appropriate and sufficient for the initial development of a gas market. The next activities should focus on capacity-building in the regulatory authority capacity related to the gas sector (staff training), as well as the development of secondary legislation, tariff methodologies and a grid code.

As is the case for all Contracting Parties, transposition of the Third Energy Package provisions is a key priority for Montenegro.

3.3.9 SERBIA

Gas

			2011	2012
Natural Gas Production [Bcm]			0.462	0.484
Imports Flows [Bcm]			2.314	2.122
Exports Flows [Bcm]			0.283	0.261
Interconnectors'capacity			*cca* (13+2) mcm/day	*cca* (13+2) mcm/day
Storage working capacity [Bcm]			0.450	0.450
Length of Transmission Network [km]			2,321	2,391
Length of Distribution Network [km]			14,628	15,348
Natural Gas Customers [number]	Total		257,145	258,971
	out of which:	Non-households	12,864	11,584
		Eligible according to national legislation	12,864	11,584
		Active eligible customers	10	7
		Households	244,281	247,387
Natural Gas Consumption [Bcm]			2.312	2.004
Consumption Structure [%]	Energy transformation		n.a.	6
			23	23
	Industry and Commercial Customers		65	59
	Households		12	12

Source: AERS

a. The gas sector in Serbia

Serbia has a relatively well developed gas market and a long tradition in the transmission and cross-border transport of gas. The country's gasification followed the discovery of domestic gas fields as well as the import routes. Consequently, Northern Serbia is fully gasified, Western and Central Serbia are partly gasified, while the Southern region has limited access to gas.

Natural gas is not widely represented in the energy sector of Serbia: the share in final energy consumption amounts to 10%, and gas contributes only 8.6% to heat and electricity production 2011. Several projects - such as the CCGT in Pancevo and rehabilitation and upgrading of CHP Novi Sad - are under consideration which might translate into a bigger share of gas to power. Total gas consumption in Serbia amounted to 2.191 bcm in 2012. It is forecasted to increase to 3.8 bcm in 2020 and 6.43 bcm in 2030.

The only natural gas producer in Serbia is *Naftna Industrija Srbije (NIS)*, which also has a licence for supply. The share of domestic production increased from 8% in the past to 24% of the total demand in 2012. The Serbian domestic gas reserves remain unknown. It is thus difficult to estimate whether the positive trend will be sustainable in a mid-term period or represent an episode. Imports have been reduced to 70%, whereas the remaining 6% of demand was met by the underground storage Banatski Dvor. There is only one existing interconnector with Hungary, with a daily capacity of 13 mcm, and another one with Bosnia and Herzegovina.

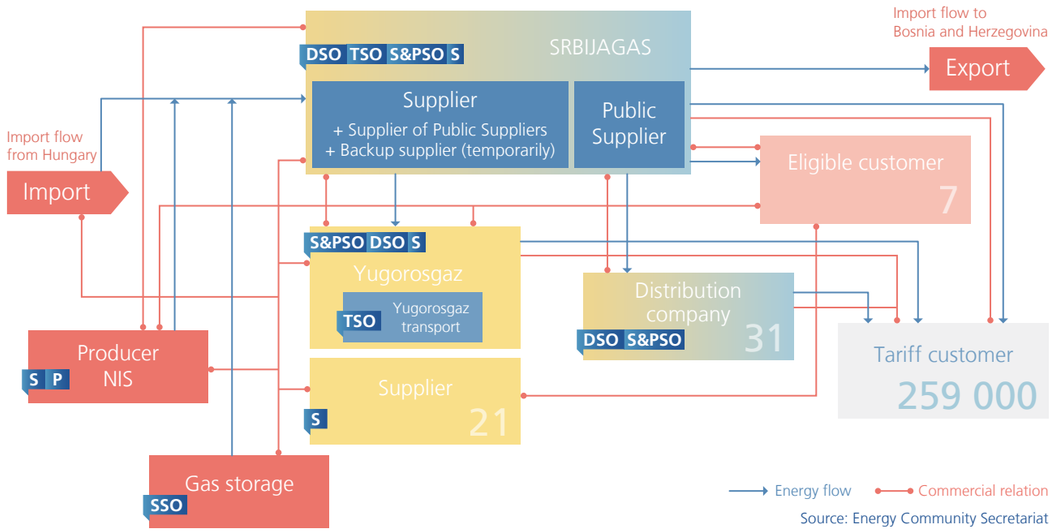
The incumbent *Srbijagas* is a vertically integrated utility owned by the Government. *Srbijagas* holds licenses and is active in the business of natural gas transmission, distribution and supply. The company owns and operates 95% of the gas transmission network in Serbia. In retail gas supply, *Srbijagas* is the dominant market player, accounting for 69% of total natural gas sales in 2012. In August 2013 the Government selected *Srbijagas*, upon tender procedure, as a supplier of public suppliers. The public suppliers, nevertheless, can opt for purchasing gas from suppliers other than *Srbijagas*. In line with the tender conditions, the national gas price established for public suppliers' supply was adopted by the Government. The company was also designated as gas supplier of last resort.

Srbijagas also holds 49% of shares in the underground gas storage *Banatski Dvor* and 25% of shares in *Yugorosgaz*, a company established in 1996; *Yugorosgaz'* other shareholders are *Gazprom* (50%) and *Central ME Energy and Gas Vienna* (25%). Like *Srbijagas*, *Yugorosgaz* holds licenses and is active in the business of natural gas distribution and supply.

Yugorosgaz Transport has been established as a subsidiary company of *Yugorosgaz* and obtained a transmission license on 28 August 2013.

Serbia's gas market consists of 33 public suppliers and 23 suppliers.

Serbia's Gas Market Scheme



Source: Energy Community Secretariat

b. Progress made in 2012/2013

The Energy Law of 2011 was amended twice during 2012 but without relevance for the gas sector.

A Transmission Network Code was adopted by the system operator *Srbijagas* and approved by the regulatory authority in August 2013. The Secretariat commented on the draft Network Code in the course of the public consultation procedure. The Network Code constitutes major step forward in implementation of the Energy Law.

During the reporting period, the regulatory authority AERS, in complying with the deadlines from the Law, adopted in September 2012 a Rulebook on Supplier Switching, a Methodology on the Price for Access to the Transmission System and a Methodology for the Price for Public Supply of Natural Gas. AERS also adopted the Methodology for the Price for Access to the Distribution System in December 2012. Finally, AERS adopted a new Methodology on Connection Costs to Natural Gas Transportation and Distribution System in 2012.

Distribution Network Codes and Rules on Underground Gas Storage are still missing, as well as a network code by *Yugorosgaz Transport*.

The Rulebook on Conditions for Issuing, Changing and Withdrawal of Energy Activity Licenses was adopted by the Ministry of Energy, Development and Environmental Protection in the course of harmonisation of secondary legislation with the Energy Law in 2013.

Serbia continued supporting regional gas projects with the main motivation to gasify its regions without access to gas and to diversify supply routes. For the Serbia-Bulgaria interconnector a feasibility study and an environmental impact assessment have been finalised. A joint statement between Serbia's and Bulgaria's Prime Ministers was signed on 14 December 2012 committing to the construction of this gas interconnector. Furthermore, interconnectors with all the neighbouring Contracting Parties and Participants have been unilaterally announced during the preparation of the Regional Energy Strategy, i.e. with Romania, former Yugoslav Republic of Macedonia, Kosovo*, Montenegro, as well as with Bosnia and Herzegovina, Croatia and Bulgaria.

Serbia is also committed to the *South Stream* project, formalized in the Law on Public Interest Determination and Special Procedures of Expropriation and Documents Issuing in Realisation of Natural Gas Transmission System South Stream adopted in 2013. The Secretariat already raised in 2010 serious concerns about compliance of certain provisions in the inter-governmental agreement between Serbia and Russia on the *South Stream* project, for, *inter alia*, excluding third party access *per se*.

In October 2012, the Serbian Government signed another inter-governmental agreement with Russia as a framework for

long-term gas supplies to Serbia up to 2021. In the Secretariat's analysis, this agreement contains destination clauses prohibiting the export of Russian gas outside Serbia and thus contravenes the *acquis* on competition in the Energy Community.

Over the last year, Serbia's security of gas supply has been strengthened through continuous capacity upgrades of the underground storage Banatski Dvor up to the rate of withdrawal of 5 mcm/day.

c. State of compliance

The Energy Law of July 2011 is largely in line with Directive 2003/55/EC and transposes some elements of Directive 2004/67/EC as well as of Regulation (EC) 1775/2005. Other elements of Directive 2004/67/EC and Regulation (EC) 1775/2005 still need to be implemented through secondary acts. The missing acts include, *inter alia*, Terms and Conditions of Delivery and Supply of Natural Gas, Report about Security of Natural Gas Supply, Rules for Underground Gas Storage, Rules on Monitoring Technical and Commercial Indicators and Regulation of Gas Supply Quality.

1. **Authorisation criteria:** 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 Energy, Development and Environment). More details have been prescribed by the Rulebook on Conditions for Issuing, Changing and Withdrawal of Energy Activity Licenses, amended in the first half of 2013.

2. **Unbundling** provisions in the Law are in line with Directive 2003/55/EC, requiring legal and functional unbundling between supply and system operation and allowing exemptions for distribution with less than 100,000 customers.

In practice, however, unbundling is not implemented. *Srbijagas* is not legally or functionally unbundled. Plans by the Government to unbundle *Srbijagas* have not been implemented.

At present, *Srbijagas* is not unbundled legally or in terms of management from wholesale and retail supply, which represents a severe non-compliance with the *acquis*. The Secretariat is currently preparing enforcement action to rectify this failure.

As *Yugorosgaz Transport* obtained a transmission license only on 28 August 2013, the Secretariat could not assess whether this undertaking has fulfilled all the unbundling requirements from the *acquis*.

3. **Third party access:** the Law defines non-discriminatory network access as a principle rule.

Rules on access to the transmission network have been implemented within *Srbijagas'* Network Code. Drafting of a similar network code of *Yugorosgaz* is underway. On the other hand, *Banatski Dvor*, a storage operator, has not started drafting a storage code, as stipulated by the Law.

Possibilities to exempt new gas infrastructure from third party access are defined in line with Directive 2003/55/EC.

The regulatory agency approves network tariffs and energy prices for energy deliveries provided by the public suppliers, based on methodologies defined and published in advance. The Methodology for Determination of the Price for Access to Natural Gas Transportation System introduced an entry-exit tariff system, transposing the relevant Third Energy Package requirements.

4. **Market opening, eligibility and supplier switching**: The right to freely choose a supplier in the market can be exercised by all customers, except households, which will be eligible as of 1 January 2015. The legal set up is in line with the Treaty.

In 2012, seven eligible customers accounting for a market share of 16.2% purchased gas under market conditions from a newly active supplier, *Russian Serbian Trading Corporation* and *Srbijagas* (acting as licensed supplier trader on the free market). The third company active in the wholesale market is *Yugorosgaz*.

Since 1 January 2013, final customers connected to the gas transmission network (representing 34% of the market) lost the right to be supplied by the public supplier and started purchasing gas under market conditions.

Small customers, as defined by the Energy Law, i.e. legal entities with less than 50 employees, a yearly income of less than EUR 10 million and which are connected to the distribution system have the right to be supplied by the public supplier.

5. **Third Party Access services, capacity allocation mechanisms, congestion management procedures and balancing rules:** the Energy Law stipulates provisions on capacity allocation, balancing and transparency as general obligations of transmission system operators.

The Network Code of *Srbijagas* elaborates more in detail on capacity allocations, congestion management and balancing. The main incompliance with Regulation 1775/2005 (EC) is that the company has to agree on the transfer of capacity rights on monthly and daily basis.

The code also envisages flexible contracts with suppliers and interruptible ones with customers. The balancing regime is in compliance with the Second Package and includes a tolerance level and an indexed imbalance fee.

The Code defines necessary information which needs to be published, in line with transparency requirements, but on-line implementation of those is still pending.

6. **Security of supply:** The requirements of the *acquis* relating to security of supply are partially transposed. Some provisions on monitoring and reporting, as required by Directive 2003/55/EC, have been included in the Energy Law. Other provisions have been 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 concerning, for example, protected customers who cannot be disconnected from supply. However Directive 2004/67/EC has still not been fully transposed. The Law still needs to define a major supply disruption, minimum supply standards and relevant community mechanisms. The reporting obligations have to include the competitive impact of the measures on all market players and more instruments to ensure security of gas supply, such as the levels of storage capacity, the extent of long-term supply contracts and the regulatory framework related to incentives for investments in gas transport capacities.

Implementation of the Third Energy Package

So far, a gap analysis between the current legal framework and the requirements of the Third Energy Package has been carried out and Serbia submitted a plan on its implementation to the Secretariat.

UNBUNDLING

Serbia's TSOs are not unbundled in the sense of the Third Energy Package. *Srbijagas* is 100% owned by the Government and is a vertically integrated undertaking, performing trade, supply, transmission and distribution activities in natural gas. *Yugorosgaz-Transport* has been established as a subsidiary of *Yugorosgaz* and is thus only legally unbundled.

REGULATORY AUTHORITY

The Serbian legal framework set a high degree of autonomy of the regulator. It is independent from other stakeholders, be it industry or a public body. However, Serbia must enlarge the competences of the regulator, especially in the domain of certification, monitoring the TSOs independence and regional cooperation in order to comply with the Third Energy Package.

CUSTOMER PROTECTION

Customer protection is mostly ensured. The vulnerable customers have been defined. Supply-switching procedures are in place. However, a single point of contact for all customers to receive information on their rights needs to be introduced in the course of drafting amendments.

d. Conclusions and Priorities

Despite a relatively high degree of transposition, the practical implementation of the Energy Community *acquis* in the Serbian gas sector is insufficient and has been raising concerns for quite some time.

The priority tasks for Serbia, remaining to be done since 2007, should be full unbundling of the transmission system operators *Srbijagas* and *Yugorosgaz-Transport*. Given the timeline, this should be done immediately in accordance with the Third Package. Furthermore, the secondary legislation required for full and practical implementation of the Energy Law (such as storage code, grid code of *Yugorosgaz-Transport*) should be finalized as soon as possible. Moreover, the noncompliant inter-governmental agreements with Russia need to be brought in compliance with the Treaty. The relevant plans and reports on security of supply should be implemented and stronger cooperation with the *ENTSO-G* is suggested. As is the case for all Contracting Parties, transposition of the Third Package provisions is a key priority for Serbia.

3.3.10 UKRAINE

Gas

			2011	2012
Natural Gas Production [Bcm]			20.6	20.5
Imports Flows [Bcm]			40*	24.9*
Exports Flows [Bcm]			n/a	n/a
Interconnectors'capacity [Bcm]			n/a	n/a
Storage working capacity [Bcm]			31	32
Length of Transmission Network [km]			39,800	39,800
Length of Distribution Network [km]			n/a	n/a
Natural Gas Customers [number]	Total		n/a	n/a
	out of which:	Non-households	n/a	n/a
		Eligible according to national legislation	n/a	n/a
		Active eligible customers	n/a	n/a
		Households	13,532,000	13,681,000
Natural Gas Consumption [Bcm]			53.95	50.83
Consumption Structure [%]	Energy transformation		n/a	n/a
			15.94	16.60
	Industry and Commercial Customers		50.10	47.48
	Households		32.25	34.10

* transit is not included

Source: NERC

a. The gas sector in Ukraine

Ukraine is one of the countries with the highest share of natural gas in total primary energy consumption in the world, namely 42.1% in 2011 according to the Energy Community Security of Gas Supply Study. The share of natural gas in electricity and heat production accumulated to 25.8%. In absolute figures, natural gas consumption in Ukraine in 2011 totalled 53.95 bcm. Production of natural gas in the same year amounted to 20.6 bcm, which represents a significant 38.2% of total natural gas consumption.

Ukraine's gas demand is supplied by imports and domestic production. The latter is performed by companies in the ownership of *NAK Naftogaz* (100% owned by the Government), and other independent producers. Independent producers account for 10% of Ukraine's total annual gas output.

Ukrgazvydobuvannya, the country's largest gas production company, was founded as a public joint stock company in 2012, and is 100% owned by *Naftogaz*. 50%+1 of the shares of *Ukrnafta*, another large gas production company, are also owned by *Naftogaz*. *Chornomornaftogaz* is a vertically integrated company operating in Crimea. It is also 100% owned by *Naftogaz*.

Exploration of unconventional gas reserves has attracted international majors such as *Shell* and *Chevron* which are considering Production Sharing Agreements with the Government.

Ukrtransgaz is the gas transmission system operator in Ukraine. In that capacity, it is in charge of the operation and maintenance of the system. *Ukrtransgaz's* license also includes cross-border transmission (i.e. transit) through Ukraine. The Ukrainian Gas Transit System requires comprehensive modernisation and rehabilitation to increase its reliability and capacity to be able to transport the huge quantities of gas needed for both Ukraine and the European Union without disruption. This is especially the case for the main Urengoy – Pomary – Uzhogorod pipeline which is in urgent need of repair. An *EBRD/EIB* loan is envisaged to partly finance these repairs. This loan is intended to be the first step in an overall programme to reform the operation of the Ukrainian gas system. As a precondition for approval of the loan, *EBRD* set a number of conditions which amount, in a nutshell, to fulfilling Ukraine's obligations under the Energy Community.

The transited volume of gas dropped to 84.2 bcm in 2012 (from 104.2 bcm in 2011), as a consequence of declining demand in Europe and the fact that transit volumes have been partly shifted to the *Nord Stream* pipeline.

Ukrtransgaz is also separately licensed as a gas storage operator. It was founded as a public joint stock company in 2012, and is 100% owned by *Naftogaz*. Ukraine has 13 underground gas storage facilitates: *Ukrtansgaz* operates 12 of them with more than 31 bcm capacity; one underground storage is operated by *Chornomornaftogaz* in Crimea with *cca* 1 bcm capacity. Underground storage geologic characteristics could allow an increase of 4 bcm in additional capacity.

52 licensed suppliers, so-called 'guaranteed' suppliers, sell gas at a regulated tariff. The number of independent suppliers, selling gas at non-regulated tariffs, fluctuates considerably with the current number being over 600, roughly half of them active. The number of DSOs overlaps with the number of guaranteed suppliers.

Ukraine applies a post stamp tariff. As a result, every final customer in Ukraine connected to the distribution grid pays the same grid tariff, irrelevant of the geographical region or any other characteristic. The aggregated grid tariff - a sum of the transmission and distribution part - remains constant, whereas the transmission and distribution components vary for different regions ("oblasts"). This could be interpreted as the introduction of some elements of an entry-exit system.

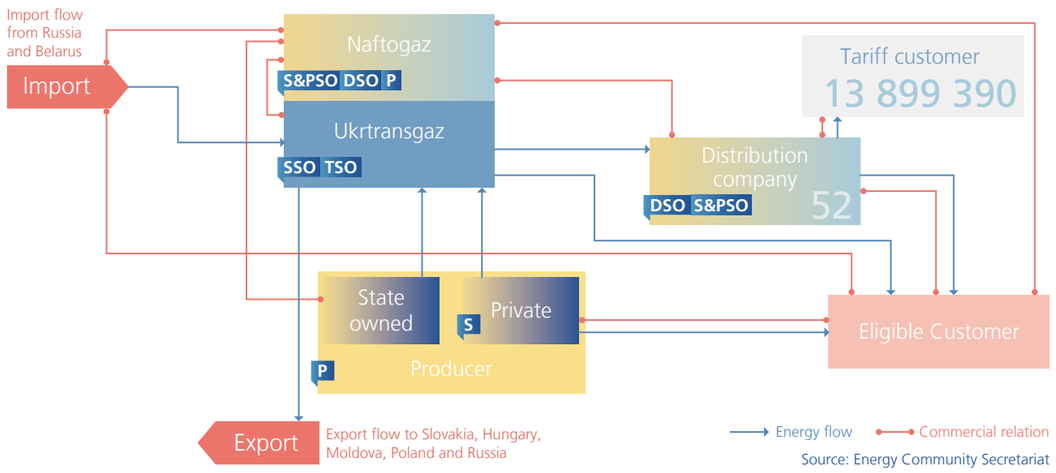
During the reporting period, the basic market structure has experienced important changes. The main characteristics of this transformation are diversification of supplies in terms of both routes and suppliers, increase of independent traders' shares on the market, intensifying efforts to release captive domestic gas reserves, both conventional and unconventional.

Firstly, the Government abolished the monopoly of *Naftogaz* on gas imports, allowing other suppliers and eligible customers to contract imported gas for their needs. The emergence of the *Ostchem* holding - a company that controls Ukraine's fertilizer sector - as the biggest single eligible customer, buying 14.9% of Ukraine's whole gas consumption in 2012 from a foreign supplier different than *Nafotgaz*, reduced the *Naftogaz* share of the market to 80.8%. Out of this, 46.7% was imported gas and 34.1% was gas produced by *Naftogaz*. Domestic independent suppliers (suppliers who are not under the control of *Naftogaz*) represented 4.4% of the market.

Secondly, *Naftogaz* and the other suppliers are diversifying their portfolios by purchasing gas from sources other than *Gazprom*, namely, from European undertakings such as *RWE*, via Hungary and Poland. The precondition for the two mentioned cases was that the interconnectors allow for physical reverse flow, and agreements were signed between *Ukrtransgaz*, and Poland and Hungary's transmission system operators on 1 November 2012 and 1 April 2013 respectively. The third potential route is from Slovakia – this interconnection point at Vel'ke Kapushany has a transmission capacity of 92 bcm/y. However, reverse flow from Slovakia to Ukraine has not started yet and is subject to further discussions between the two national TSOs.

This market openinig will be challenging for *Naftogaz* as it may be progressively losing its dominant position on the gas wholesale market, being constrained to supply gas to the public sector. As the regulated prices for supply to households and public institutions are several times lower than the price of imported gas, this will lead to permanent generation of losses in *Naftogaz*. In addition, the problem of take-or-pay contract clauses with *Gazprom* remains unsolved. Take-or-pay provisions of the 2009 *Naftogaz-Gazprom* supply contract set relatively high minimum annual gas quantities that Ukraine obliged itself to take from Russia. As Ukraine has reduced its annual demand and started to import gas from sources other

Ukraine's Gas Market Scheme



Source: Energy Community Secretariat

than *Gazprom*, this might create a situation where Ukraine receives quantities from Russia which are significantly under the contracted minimum and could be obliged to pay the difference between the said minimum and the realized annual imports.

On the consumption side, domestic producers (predominantly state-owned) - are obliged to offer their whole annual production for the supply of Ukraine's households ("population" in Ukrainian legal terms) under regulated prices. Regulated gas prices represent a major impediment to investments into gas production, especially keeping in mind Ukraine's ambitious plan to reach 90% of its needs from domestic sources by 2030. Prices determined by or under the influence of public authorities often do not reflect market fundamentals and are motivated by social or political aspects. Typically, they are between 5-6 times lower than the price of imported Russian gas.

b. Progress made in 2012/2013

Some progress has been made during the reporting period, though significantly less than what has been announced by the authorities.

Ukraine further improved the legal, fiscal and contractual framework for gas exploration and production. New Subsoil and Land Codes have been drafted. The regulatory authority, National Electricity Regulatory Commission (NERC), has adopted harmonised contracts on connection and access to the transmission system.

A Government Resolution in October 2012 abolished the monopoly of *Naftogaz* for gas imports.

The President's National Action Plan for 2013 to implement the Program of Economic Reforms 2010 - 2014, focuses, *inter alia*, on launching the reform programme for *Naftogaz* and fulfilling the obligations of the Energy Community related to unbundling. A reorganisation program is being prepared by *Ernst&Young* and *Rothschild Group*.

The Pipeline Transport Law already amended in May 2012, which allows for the restructuring of *Naftogaz* but still bans the privatization of grid assets, has been submitted to Parliament for another round of amendments this year. Now the aim is to allow for the privatization of core assets, subject to the Government's approval. It is uncertain if these amendments will ever be adopted, or rather withdrawn from the procedure. This example shows that the reform process is erratic and nontransparent, rather than being structured by a strategy with clear objectives and actions. The adoption of a strategy has already been pending for two years. In this way, transparency of the process is at stake.

One of the major obstacles in relations with the Secretariat is the lack of communication with Ukraine authorities. Almost none of the draft acts are being communicated to the Secretariat for assessment. In addition, Ukraine fails to use available donor assistance to its full scale.

c. State of compliance

Ukraine's gas legislation is characterized by a high degree of inconsistencies, overlaps and even contradictions between the different legislative acts. Even though the 2010 Law on the Principles of Functioning of the Natural Gas Market – the Gas Law upon which Ukraine joined to the Energy Community – addresses gas market organization and reflects the *acquis*' provisions in a rather systematic way, it does not derogate previous legislative acts and is contradicted by the preceding laws.

1. **Authorisation criteria:** the Gas Law does not lay down non-discriminatory criteria to obtain a license. Authorization (construction) procedures are not described either.

2. The **unbundling** provisions of Directive 2003/55/EC are transposed by the Gas Law.

Ukrtransgaz went through reorganization last year, when it was transformed into a public joint stock company still 100% owned by *Naftogaz*. Functional unbundling has not been fully implemented. The company's Board of Directors is appointed by the Government upon the proposal of *Naftogaz*. The supervisory council is comprised of representatives of the Government, *Ukrtransgaz*, and heads of departments of *Naftogaz*, including its deputy chairman. As goes for all subsidiaries and affiliates, *Ukrtransgaz* mainly carries out day-to-day operations, whereas the making of general operational and financial decisions as well as the functions of asset management is entrusted mainly to the holding company, *Naftogaz*. Finally, a compliance program is not in place.

The other vertically integrated utility, *Chornomornaftogaz*, has not yet started legal unbundling to the Secretariat's knowledge.

The Government's Resolution on Approval of the Procedure for Identification of the Guaranteed Suppliers of Natural Gas introduced the requirement of unbundling distribution activities from supply at a regulated tariff (as this act obviously treats only guaranteed supply, that is to say supply of last resort) by 1 January 2015 at the latest. This act gave NERC responsibility to monitor this process. Finally, the resolution abolished ownership of the distribution network as a precondition for a supply licence.

3. **Third Party Access** to the gas transport system is granted by law to all natural gas suppliers and consumers under regulated and non-discriminatory conditions. *Ukrtransgaz* provides third party access services to the system users.

Access can be contracted for a calendar year and is governed by NERC's Procedure for Accessing the Unified Gas Transit System of Ukraine, adopted and already amended in 2012. This document does not fully transpose the requirements of Directive 2003/55/EC or Regulation (EC) 1775/2005. In particular, priority access to the transmission grid for i) suppliers with public service obligations (who supply households, institutions and organizations funded from the State and local budgets, business entities that generate heat) and ii) natural gas market entities which contracted services with TSO on long-term basis, violates the principle of non-discrimination. It also does not abolish the distinction between transmission and cross-border flow (transit) thus denying NERC's competence to regulate the transit as contracted between *Naftogaz* and *Gazprom*. *Ukrtransgaz* however only receives a part of the "transit" revenues (the percentage is unknown), whereas the main revenue goes to *Naftogaz*. Moreover, certain elements relevant for third party access are still missing, such as access to linepack, ancillary services and upstream pipeline networks.

The Procedure was apparently revised and improved by NERC, related namely to distinguishing between supply and distribution activities. However, the updated version has not been communicated to the Secretariat and could therefore not be assessed.

New customers submitting a request for connection to the transmission grid are granted the connection under regulated tariffs, set by NERC based on a cost-plus methodology.

Access to the storage system is regulated. It is governed by NERC's Procedure for Accessing the Unified Gas Transit System of Ukraine. However, the operator claims that the tariff for storage operation is not cost-reflective, which results in a part of the storage capacity being mothballed. The Secretariat was not able to verify this.

The status of the ownership of gas distribution networks remains unclear. The Government is yet to decide which of the options will be implemented in the future: long-term lease or concession agreements, or privatization of the distribution grids.

4. **Market opening and eligibility:** according to NERC's Resolution on the Opening of the Gas Market, a timetable was introduced to authorize different clusters of customers to freely choose their gas supplier: industrial customers from 1 March 2012; Government organisations from 1 January 2013; district heating companies supplying heat to households as of 1 January 2014, and residential consumers from 1 January 2015. This timetable fails to fully meet the terms of the Accession Protocol, which set a deadline for all non household customers to become eligible by 1 January 2012. In practice, however, some eligible customers switched their supplier.

The wholesale gas market price has been capped by NERC. As the cap price is at present comparable with the gas import price, the reasons for this practice are not clear.

At present, household consumers are exclusively supplied with domestic gas at a tariff set by NERC. There continues to be a lack of metering devices available for households. According to the Gas Metering Law, 100% gas meter coverage only has to be in place by 2018, yet the current situation will impede practical market opening beyond the envisaged deadline.

Regulated gas prices below cost-recovery violate the *acquis*. They also have severe impacts on the financial viability of *Naftogaz* and affiliated companies. According to the *International Monetary Fund's* estimations, *Naftogaz* suffered deficits of 1.7% and 1.5% of GDP in 2010 and 2011 as a result of such regulation, which may have risen towards 2% in 2012. For more than three years, there has been no gas price increase to the public sector, making the prospect of gas market reform dim.

The Government's Resolution on Approval of the Procedure for Identification of the Guaranteed Suppliers of Natural Gas fails to specify the role of guaranteed suppliers after full market opening. It also introduces a territorial principle which permits only one guaranteed supplier per administrative territorial unit. This principle has been introduced as such, without any detailed reasoning and cannot be considered anything other than discriminatory. The Resolution specifies that the guaranteed supplier shall purchase gas at regulated prices, from an entity to be appointed by the Government. This provision is likely to establish a barrier for new entrants. Guaranteed suppliers should purchase the gas at the market. This provision thus introduces de facto a single buyer model and will lead to the foreclosure of the gas market.

The Government proclaimed *Naftogaz* as a guaranteed supplier for big consumers.

5. **Third Party Access services, capacity allocation mechanisms, congestion management procedures and balancing rules:** Principles for capacity allocation and congestion management, transparency requirements and rules on secondary market trading are not in place. At present, *Ukrtransgaz* offers firm capacity only on an annual basis. It does not provide services on a shorter (or longer) basis, or interruptible services. Capacity allocation has not been performed under market procedures at different time horizons (no electronic platform in place and consequently majority of transparency provisions could not have been developed). The balancing regime is indirectly approved by NERC in the Procedure for Accessing the Unified Gas Transit System of Ukraine. However, this cannot be considered sufficient as there is no methodology for the calculation of imbalance charges or final tariffs on balancing - the balancing costs are socialised over the network users. Consequently, Regulation (EC) 1775/2005 has not yet been implemented.

6. **Security of supply:** Definitions of the roles and responsibilities of different gas market players and of minimum security of supply standards are only generally in place, but should be clarified further. The Law on Supplying Customers with Natural Gas stipulates that natural gas suppliers have to ensure a security gas reserve of 10% of quarterly contracted supply volumes to customers. In this context, the Government approved Decrees on the obligations of the undertakings to ensure natural gas reserves and on forecasting the annual balance for supply/demand in Ukraine. The terms "long term gas supply contract" and "major supply disruption" still need to be defined in accordance with Directive 2004/67/EC. Furthermore, supply standards, protected customers, up-to-date national emergency measures and list of instruments for security of gas supply have to be defined, together with regional mechanisms in case of major international disruptions. There are no adequate provisions for reporting and monitoring security of supply within the existing law. Ukraine has still not fully transposed Directive 2004/67/EC.

Implementation of the Third Energy Package

The Accession Protocol stipulates that Ukraine will fulfil all obligations imposed on the Contracting Parties by the Treaty and by *"all Decisions and Procedural Acts adopted in application of the Treaty"*. Nevertheless, Ukraine stated in October 2011 that it would consider the Third Package decision binding only after completion of all necessary internal procedures. Ukraine was urged to accelerate the adoption and implementation of the Third Energy Package at the Ministerial Council meeting in 2012. It is worth mentioning that the adaptation of the Ukrainian legislation to the Third Package is envisaged by the draft Energy Strategy for 2030.

UNBUNDLING

Ukraine's TSOs are not unbundled in the context of the Third Energy Package. *Ukrtransgaz* is 100% owned by *Naftogaz*, but the functional unbundling, let alone the requirements of the Third Energy Package, have not been implemented. The other TSO, *Chornomornaftogaz*, is a vertically integrated undertaking.

REGULATORY AUTHORITY

The legal framework specifies that the regulators are subordinated to the President - NERC is "a collegial government body subordinated to the President of Ukraine and reporting to the Verkhovna Rada of Ukraine". The laws governing the functioning of the regulator need to secure a higher degree of independence. The current legal framework regarding the role of the regulator is not line with the Third Energy Package requirements.

CUSTOMER PROTECTION

The notion of vulnerable customer has not been defined in the energy sector, but in Ukraine's general social protection schemes. Aspects that would need to be reinforced in the course of implementing the Third Energy Package include a minimum content for suppliers' contracts with the consumer and a provision that consumers will not be charged for changing supplier.

d. Conclusions and Priorities

Ukraine has the potential to transform its gas sector into a modern gas market which would increase the efficiency of the economy, trigger investment cycles, boost employment and improve the quality of life of its citizens. By creating a functioning gas market, Ukraine would also improve its security of supply substantially and sustain and increase its domestic output. This process is a difficult one, including some inevitable difficulties to be surmounted. In this respect, Ukraine will have to accelerate the speed of its reforms. The faster Ukraine implements the Energy Community gas *acquis*, the more certain and favourable an outcome could be achieved.

In particular, Ukraine should consider introducing a new and comprehensive law regulating the gas sector. Experience shows that the various existing laws overlap and do not establish clear primacy. Moreover, NERC should be granted with additional competences, such as jurisdiction on international interconnections, and competence for cross-border disputes and conflicts concerning access or use of the system. Regulated prices need to be adjusted as *Naftogaz* is incurring high debts. Regulation of prices of domestic gas production (which is state-owned) must be abandoned. On the other hand, gas commodity prices should not be capped at the wholesale level. Prices should be created from demand and supply fundamentals as a result of competition between domestically produced natural gas, imported gas and alternate fuels.

Restructuring *Naftogaz* and reforming the gas market requires that *Naftogaz* be able to sell gas to the public sector (comprising of, *inter alia*, households, institutions and organizations funded from the State and local budgets) at a more cost reflective price, as is the case with the industrial sector. The State subsidies are being gradually removed.

Ukraine should also finalise the unbundling of companies operating in the gas sector (such as *Naftogaz* and the distribution companies). *Ukrtransgaz* in particular needs to be turned into a profitable company that could ultimately finance on its own much of the investments required to ensure the most effective operation of Ukraine's transmission system. Differences between transit (cross border) and transmission activities should be abolished. As a first step, the current income for transit should be transferred to *Ukrtransgaz*. Capacity allocation, balancing and transparency rules for TSOs should be developed. Finally, the status of the Third Energy Package in Ukraine should be clarified.

3.4 Oil

A Regional Overview

3.4 OIL – A Regional Overview

a. The oil sector in the Energy Community

Oil is an international commodity, and the markets in the Energy Community are closely intertwined with developments on a global level. Due to a high import dependency with a limited number of domestic producers, security of oil supply is of special concern to the Energy Community Contracting Parties. The dependency is aggravated by the lack of interconnections to facilitate oil flows, as well as insufficient storage capacities.

1. Crude oil production and trade

Domestic oil production in all Contracting Parties in 2012 was around 6 million tonnes, 1.8% higher than in 2011. This is the result of an increase in oil production by 15% in Albania, and 9.4% in Serbia. Albania is the only Contracting Party that continues to export crude oil. In 2012, Albanian exports were at 936,900 tons compared to 696,800 tons in 2011. The total imports of crude oil to all Contracting Parties in 2012 was around 6 million tons. It thus declined by around 46.8% compared to 2011, mainly due to the decline in crude oil imports to Ukraine (73%) and to the former Yugoslav Republic of Macedonia (61%). The main source of oil imports is Russia.

In **Albania**, crude oil production was around 1.03 million tonnes/year in 2012. Production is mainly in the hands of foreign investors. *Albpetrol*, the state-owned oil company, was supposed to be privatized as well. However, the Government invalidated the winning bid by *Vetro Energy* for *Albpetrol* after the company failed to make a down payment as agreed. A new tender is expected for the second half of 2013. During the reporting period, the Canadian oil company *Bankers Petroleum* continued and will continue to explore for hydrocarbons and to invest in Albania after the unsuccessful drilling at the first well in Block F. At the end of July 2013, *Bankers Petroleum* also suspended drilling at the second well as it did not encounter any hydrocarbon-bearing zones that would merit testing. Another Canadian oil company, *Petromanas*, started drilling in December 2012 at the Juban-1 well located on Block A in Northern Albania, and is continuing drilling of the Shpirag-2 well.

The exploration activities in **Bosnia and Herzegovina** (Republika Srpska) are scheduled to begin at the end of 2013 by *Jadran-Naftagas*, *Banja Luka*, owned by *Naftna Industrija Srbije (NIS)* and Russian company *Neftegazinkor*.

In **Croatia**, crude production declined in 2012 by 17% due to the natural depletion of the oilfields. Production in 2012 was around 549,000 tons. It focused mainly on two (re-entry) wells, Kal-4R and Mol-35. The enhanced oil recovery project on the Ivanić and Žutica fields and of the Medimurje project was continued. Moreover, the onshore wells Hrastilnica-3 and Deletovci-1Z (in East Slavonija) successfully finished exploration drilling during the reporting period. By contrast, the exploration drillings at wells Zalta-1 East and Antunovac-1 were considered unsuccessful.

In **Montenegro**, the announced tender for the award of the offshore hydrocarbons production concession contract was approved by the Government in July 2013. The deadline for bids' submission will be the end of February 2014.

In **Serbia**, the domestic oil production during 2012 was around 1.13 million tonnes, an increase by 9.4% compared to 2011. Serbia has some oil reserves, however, these are not sufficient to satisfy domestic consumption. Production of oil in Serbia takes place in 20 oil deposits (plus 7 oil and gas fields). They are mostly located in the territory of Vojvodina. The only company in Serbia engaged in exploration and production of oil is *Naftna Industrija Srbije (NIS)*, 56.15% owned by the Russian company *Gazprom*. *NIS* holds the license for geological explorations of oil in the exploration area of Serbia south of the Sava and Danube, as well as in the territory of Vojvodina.

Ukraine in 2012 conducted three tenders for production sharing agreements on the Yuzivska (Kharkiv and Donetsk regions), Oleske (Lviv and Ivano-Frankivsk regions) and Skyfske fields (the Black Sea shelf). Furthermore, *Naftogaz* successfully concluded tests at the exploratory well Runovshchynska #110 in the Budyshchansko-Chutovskyi acreage, already the second discovery in the Poltava region.

2. Refinery activities and trade in oil products

As regards the domestic production of petroleum products, *i.e.* refinery activities in the Contracting Parties, the volume of 10.7 million tons of petroleum products processed in 2012 constitutes a decline by 40% compared to 2011. This is to be attributed to the decrease in refinery activities in Ukraine (-62%) and in the former Yugoslav Republic of Macedonia (-65%).

In **Croatia**, the introduction of an isomerisation unit at the Sisak Refinery in 2012 has significantly improved the octane pool in gasoline blending. As a large scale refinery development program was already completed in 2011, the overall investment in 2012 was lower than in the previous year. In **Serbia**, *NIS* opened the modernised Pančevo Oil refinery in November 2012. The next phase of investments in its modernization has already started and will be implemented within two to three years. *NIS* will also continue with the modernization of the basic oils refinery in Novi Sad. Modernization of the Crude Oil Refinery *Brod* in **Bosnia and Herzegovina** hascontinued in 2012. No investments during the reporting took place in Albania, former Yugoslav Republic of Macedonia and Ukraine.

The export of petroleum products from the Contracting Parties in 2012 declined by 38% to 3.9 million tonnes. Again, this is to be attributed mainly to a decline of some 60% in Ukrainian exports. The same goes for the import of petroleum products which declined by 26% to a level of around 10.1 million tons in 2012. The overall consumption of petroleum products in the Contracting Parties in 2012 was 22.3 million tons (a decline of 5.6% compared to 2011).

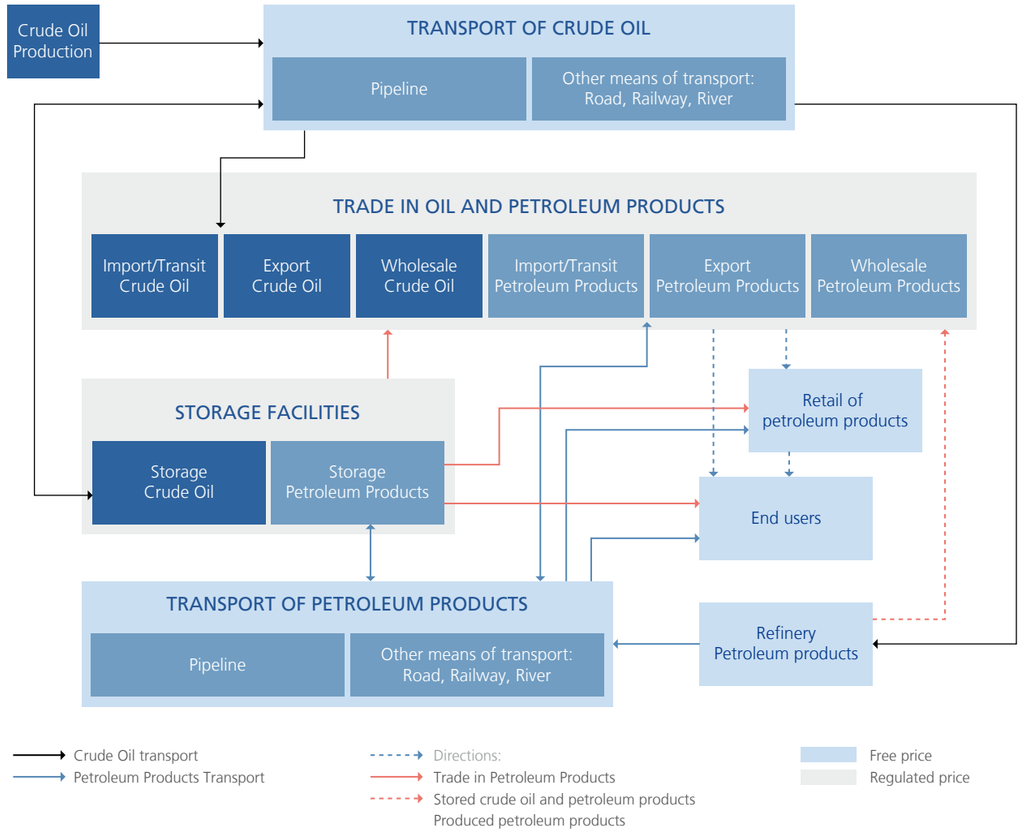
3. Oil infrastructure

With regard to the oil infrastructure, there have been no significant changes. No additional storage capacities or oil terminals were built. The existing regional oil network infrastructure remains limited. Some envisaged new oil pipelines like *PEOP* and *AMBO* remain uncertain.

Storage capacities in the Contracting Parties amount to 8.8 mcm. Most of them are in use by refineries for their daily operations. The existing storage capacity is a long way short of the additional 12.5 mcm required to comply with Directive 2009/119/EC.

4. Domestic oil markets

Markets for oil and petroleum products:



The oil markets in the Contracting Parties are relatively open. Suppliers can enter the market and gain access to networks and storage facilities. In some Contracting Parties like Croatia, the former Yugoslav Republic of Macedonia, Moldova and Montenegro, some prices are regulated whereas in others, prices are formed by the markets alone.

In **Albania** the market is free and sets the prices of petroleum products without State intervention. According to Article 7 of the Law on the Refining, Transportation and Trading of Oil, Gas and their Products, the Government may impose temporary restrictions on maximum or minimum retailed prices but this intervention has not been applied so far.

In **Bosnia and Herzegovina** the prices of petroleum products have been fully liberalised since 2000 and are formed by the oil companies without Government intervention.

In **Croatia**, a price cap for petroleum products is determined in accordance with the Ordinance on Determining the Maximum Retail Prices of Petroleum. According to this Ordinance, the maximum prices are adapted every two weeks and are published on the website of the Ministry of Economy one working day prior to the price change. Prices of petroleum products are to follow changes in their prices on the Mediterranean market and changes in the USD exchange rate, limited to a margin of 3% upwards and 6% downwards.

In the former Yugoslav Republic of **Macedonia** the establishment of petroleum products prices falls under the competence of the Energy Regulatory Commission (ERC). According to the Law on Energy, the ERC adopts acts and methodologies for oil derivatives and fuels for transport, stipulates the manner of setting, approves and controls refinery and retail prices for petrol, diesel fuels, light fuel oil and mazut, as well as retail prices for blends of fossil fuels and biofuels for transport. Prices of oil derivatives are determined every two weeks.

In **Kosovo***, the market sets the price of petroleum products apart from in cases of disturbances which may not last longer than 90 days according to the applicable legislation. For reasons of consumer protection, elimination of market distortions or other reasons in the country's interests, the Government can define maximum/minimum prices for wholesale and retail sales, define maximal trade margins for wholesale and retail sales, and take other actions.

In **Montenegro**, the prices for petroleum products are set by the State, according to the Decree on the Method of Setting Maximum Retail Prices of Petroleum Products. In addition to that, the Ministry of Economy has the right to suspend the application of maximum retail prices, or change the price formula in emergency cases or force majeure.

In **Serbia**, the liberalisation of the oil product market in January 2011 shows concrete results. Prices of petroleum products, the storage of crude oil and petroleum products, and wholesale trade are set by the market. In accordance with the Law on Trade, however, the Government may take short-term measures if there is a disturbance in the market. Also, in accordance with Energy Law, the Government could prescribe the maximum level of prices to prevent disruptions in the oil market. In August 2012, the Government increased the excises for both gasoline and diesel fuels. Prices for oil pipeline transport and oil derivative pipeline transport are regulated. Pipelines are considered natural monopolies but third-party access to the pipelines is possible.

In **Ukraine** the crude oil and petroleum products market is liberalised.

b. The *acquis* on oil

Based on the Ministerial Council's Decision 2008/03/MC-EnC in December 2008, the Treaty – which hitherto only applied to electricity and gas – was extended to include oil as well. Moreover, an Oil Forum as a regional consultation platform was created. By this decision, the Treaty's provisions on, *inter alia*, the environment, competition and the free movement of energy (Article 41 of the Treaty) have been made applicable to oil.

In October 2012, the Ministerial Council went one decisive step further by adopting the oil stocks Directive 2009/119/EC imposing an obligation on Contracting Parties to maintain minimum stocks of crude oil and/or petroleum products. The Contracting Parties are now under a legally binding obligation to fully implement this Directive by 1 January 2023.

The main objective of Directive 2009/119/EC is to maintain a high level of security for oil supply in the participating countries through reliable and transparent mechanisms based on solidarity. In more concrete terms, the Directive requires stockholding for 90 days of net imports or 61 days of inland consumption in the preceding year, whichever is greater. It also requires enabling the competent authorities to release quickly, effectively and transparently some or all of their stocks in the event of a major supply disruption.

By the incorporation of Directive 2009/119/EC into the Energy Community, the Ministerial Council acknowledged that the availability of oil stocks and the safeguarding of energy supply are essential elements of public security for the Energy Community and each Contracting Party. Currently, the oil quantities held by the Contracting Parties do not satisfy the stockholding obligation under the Directive. Taking into account the forecasted increase of consumption over the next ten years, the Contracting Parties should increase their stockholding capacities by about 12.5 mcm. The required investments for building new storage capacity and modernisation of the existing stocks have been estimated at EUR 2.9 billion. The investment for the purchase of crude oil and petroleum products for storage may amount to EUR 4.7 billion according to the Secretariat's study on emergency oil stocks conducted in 2011.

Full and timely implementation of the Directive will determine the agenda of the Oil Forum for the upcoming years. In order to implement Directive 2009/119/EC on time, the Fourth Forum called for a speedy preparation of (updated) roadmaps and setting out concrete implementation steps for each Contracting Party with a view to transpose the Directive by December 2014 at the latest. Contracting Parties were invited to submit their drafts to the Secretariat in early 2013.

c. State of implementation

In discussing the state of implementation, the present report will focus on the steps undertaken by the Contracting Parties to transpose and implement Directive 2009/119/EC. It will also briefly summarize problems with customs duties levied on oil or oil products, as prohibited by Article 41 of the Treaty. Other issues pertaining to the oil sectors, such as the implementation of the Sulphur in Fuels Directive 1999/32/EC, are discussed in the chapter on environment.

1. The state of implementation of Directive 2009/119/EC

In order to be in compliance with Directive 2009/119/EC Contracting Parties need to change their domestic legal framework, they need to implement specific measures related to oil (crude oil and products) stockholding, they need to decide about or review the stockholding structure, and they need to improve the response systems in case of an emergency.

The legal framework needs to change in particular for the method of calculating the obligatory oil stocks, the rights of the agencies/companies to delegate their stockholding obligations, procedures in case of oil supply disruptions, and the obligation to submit monthly statistical summaries of the level of commercial stocks.

The stockholding structure differs from Contracting Party to Contracting Party, reflecting the different political and oil supply structures. Some of the Contracting Parties direct companies to hold minimum levels of stocks as part of their commercial stocks, others by setting up a non-profit public body (e.g. agency or directorate).

The procedures for supply disruptions need to be amended so as to include the Secretariat and the *International Energy Agency (IEA)* in the process. The Contracting Parties must ensure that the procedures and structures in place enable their competent authorities to release quickly, effectively and transparently some or all of their emergency stocks and specific stocks in the event of a major supply disruption, and to impose general or specific restrictions on consumption. Moreover, the Contracting Parties need to have contingency plans implemented for the event of a major supply disruption.

Whilst the Contracting Parties are requested to become compliant with the Directive by 2023 through a phased programme of changes and investment, it is also important to note that some currently have no legislation on compulsory stocks of oil at all. It is important for Contracting Parties to start transposing the Directive in laws, regulations and administrative provisions, and continue to build institutions with the capacity to effectively deal with the workload stemming from implementing Directive 2009/119/EC. The current state of play regarding the stockholding policy of each Contracting Party is as follows:

In **Albania**, the Government has established an inter-institutional working group which reviewed the existing legal and institutional framework for security of oil supply. The group will present to the Government a proposal for an oil stockholding policy during 2013.

Bosnia and Herzegovina currently has no legislation on compulsory stocks of oil and petroleum products in place. However, both entities adopted/amended their oil and petroleum laws in October 2012. The Commodity Reserves will be in charge of the oil stockholding policy in both entities.

In **Croatia**, *HANDA* (the Oil Stocks Agency) has established oil stocks for 90 days of consumption. 480,000 mcm of additional storage facilities for crude oil and 270,000 mcm for petroleum products are under construction. In December 2012, Croatia adopted amendments to the Oil and Petroleum Products Market Law by which the fee for oil stocks previously collected by *HANDA* became part of the excise duty. *HANDA* is now financed from the State budget.

In the former Yugoslav Republic of **Macedonia** the compulsory oil stocks are regulated by the Law on Compulsory Reserves of Oil and Oil Derivatives of 2008, as well as by a Decree on the Method for Determining, Calculating, and the Payment of the Fee for the Compulsory Reserves. A new draft Law, meant to align national legislation with Directive 2009/119/EC, is expected to be proposed to the Government by the Ministry of Finance.

In **Kosovo***, a Division for Obligatory Oil Stocks within the Department of State Commodity Reserves is not yet established. This Division is supposed to deal with emergency oil stocks as a temporary solution and to prepare the necessary steps to form a central stockholding entity at a later stage. A draft Law on Petroleum and Petroleum Products Market was prepared by the Ministry of Trade and Industry. The draft sets out the basic conditions for development and maintenance of obligatory reserves of petroleum products and regulates wholesale and retail trade, import, storage and processing of petroleum products. A strategy for creating and maintaining the obligatory oil stocks will be drafted after the approval of this Law.

In **Moldova** no progress was reported regarding the legislative framework on oil stocks. The envisaged Decree on Strategic Reserves of Oil Products, which would include a requirement of storage covering 90 days and the manner of formation, maintenance and management of strategic stocks of oil and oil products, has not been adopted by the Government.

In **Montenegro** no progress can be reported concerning emergency oil stocks. The real situation still does not correspond to the requirements of the Energy Law. In accordance with its Article 174 and the Government's Work Program for 2010, a Decree on Mandatory Strategic Stocks of Oil and Pe-

troleum Products was supposed to be adopted. This Decree should define the requirement of 90 days coverage, including the manner of formation, maintenance and management of strategic stocks of oil and oil products. The Decree was not adopted, even though it had been announced for 2011.

In **Serbia**, the oil stockholding policy is regulated by the Commodity Reserves Law and by the Energy Law. In accordance with the Commodity Reserves Law, the Directorate for Commodity Reserves is in charge of all commodity reserves including oil stocks. A new Commodity Reserves Law in line with Directive 2009/119/EC is expected to be adopted by the end of 2013. The draft Law envisages the establishment of a more complex organisational structure. A separate sector within the Ministry of Energy, Development and Environmental Protection will manage the establishment, maintenance, investment and reporting of oil stocks. The Directorate for Commodity will remain responsible for procurement, storage, and managing the construction of new and reconstruction of existing storage capacity. The draft also foresees that the investments related to maintaining compulsory stocks as well as the necessary oil and oil products will be secured from a compensation fund to which producers and importers of oil and oil products will contribute.

In **Ukraine**, a Government Resolution from 2009 envisages the creation of emergency oil and petroleum product stocks by 2020. The country is apparently preparing a new draft Law to be in compliance with Directive 2009/119/EC. The Secretariat has no official information on this topic.

2. A regional approach to stockholding

As an alternative to implementing the stock-holding obligation on a national level, it should be possible for oil stocks to be held at any location across the Energy Community, provided that they are physically accessible and subject to cooperation in cases of emergency based on bilateral and regional agreements. A pragmatic reason for considering a regional approach to emergency oil stockholding is cost minimisation for building and operating storage facilities.

To realise such an approach, the Secretariat suggests each Contracting Party establish a national emergency oil stocks entity. These entities will be responsible for national oil emergency stockholding measures and for liaison with the Secretariat on matters of regional response to an oil supply emergency. This requires the existence of an appropriate legal framework in each Contracting Party, which must allow for efficient emergency management on both a national and regional level. The Secretariat will continue to monitor the progress in building the required storage capacities.

On this basis the Secretariat planned for 2013 - 2014 coordinated assistance to the drafting of legislation transposing Directive 2009/119/EC, legislation dealing with emergency response systems, preparation of an oil stockholding strategy, the definition of an action plan or roadmap, the establishment of a central stockholding entity, (including the internal structure, procurement procedures, tender documentation, storage contracts, delegation contracts, financing), drafting by-laws and regulations on monitoring and reporting of oil stocks, drafting intergovernmental agreements on stockholding etc. The Contracting Parties were encouraged to raise additional topics they would like to be addressed, as well as the timing for the experts' visit.

3. Customs duties on oil and oil products

Barriers to the free movement of energy between the Parties in the form of customs duties are still present in Albania, Bosnia and Herzegovina, Croatia, Kosovo* and Serbia which contravenes Article 41 of the Treaty. The Secretariat has discussed and reiterated this issue with all above mentioned Contracting Parties and it intends to take enforcement action by the end of 2013 in cases where such violations are not being brought to an end.

d. Conclusions and Priorities

After the adoption of Directive 2009/119/EC, Contracting Parties are now expected to bring into force the laws, regulations and administrative provisions necessary for compliance within 2013 and 2014. The necessary institutional adaptations to the Directive, which have to be proposed by the European Commission, are urgently needed to accomplish this task successfully and in a meaningful manner. The Secretariat is ready to provide legal assistance on the existing/new legal, organisational and management framework. This includes support in outlining efficient and concrete cooperation schemes for a regional approach (e.g. joint stock holding among Contracting Parties and coordinated stock draw to maximize the economic benefits).

Furthermore, conceptualisation and coordination of activities related to the maintenance of oil reserves and a plan for their coordinated use (i.e. stock drawdown in case of market disruption) is already important at this stage. Finally, abolishing non-compliant customs duties by the end of 2013 should be another priority for Albania, Bosnia and Herzegovina, Croatia, Kosovo* and Serbia.

3.5 Renewable Energy

3.5.1 RENEWABLE ENERGY – A Regional Overview

Renewable energy represents one of the pillars of the energy *acquis* in the Treaty. It is one of the areas, along with energy efficiency and environmental protection, where the Contracting Parties have significant potential for further development that can contribute to security of supply, diversification of the energy mix and to climate change mitigation.

Initially, Directive 2001/77/EC on the Promotion of Electricity from Renewable Energy Sources and Directive 2003/30//EC on Biofuels Used in Transport were included in Article 20 of the Treaty and the adoption of plans for the implementation of the two Directives was the only obligation assumed by the Contracting Parties.

In 2009, the European Union adopted Directive 2009/28/EC. The Energy Community followed suit and started working on the proper adaptation of the new Directive for the inclusion in its *acquis*.

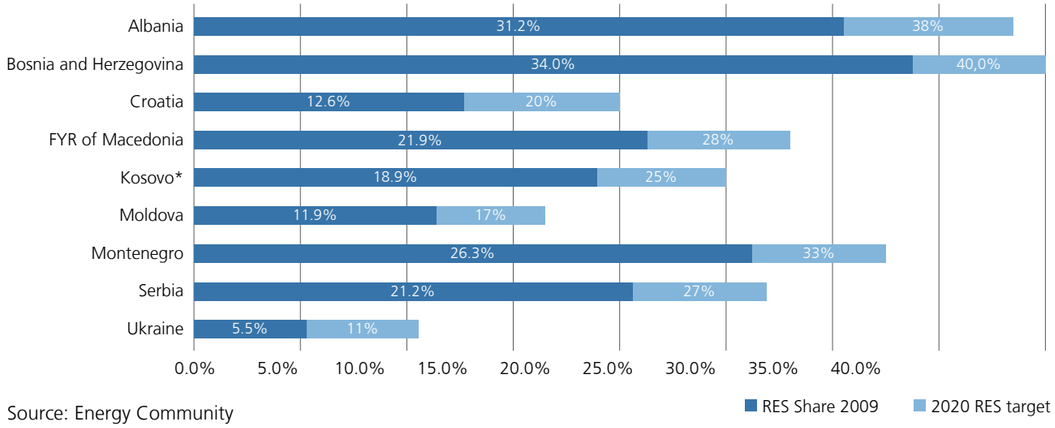
In 2009, with the exception of Ukraine, all Contracting Parties had significantly higher shares of energy from renewable sources in the gross final energy consumption compared with the 8.5% renewable energy share registered by the EU-27 in 2005. This is mostly due to hydro and biomass consumption which also represents the highest potential of all renewable energy sources in the Contracting Parties.

a. The *acquis* on renewable energy

In 2012, the Ministerial Council of the Energy Community adopted Decision 2012/04/MC-EnC on the implementation of Renewable Energy Directive 2009/28/EC and amending Article 20 of the Energy Community Treaty. Article 20 of the Treaty now includes an obligation for the Contracting Parties to implement Directive 2009/28/EC by 1 January 2014.

The Directive lays down mandatory national targets to be achieved through promoting the use of renewable energy in the electricity, heating and cooling, and transport sectors.

When incorporating Directive 2009/28/EC into the Energy Community *acquis*, the Ministerial Council adapted the Directive. Most notably, the binding targets for the share of energy from renewable sources in the gross final consumption of energy in 2020 were determined for each Contracting Party, based on a similar methodology as for EU Member States. They are as follows:



Source: Energy Community

The Directive also foresees that renewable energy, such as biofuels, electricity and hydrogen produced from renewable sources, accounts for at least 10% of the total fuel consumption in all forms of transport by 2020.

Furthermore, the adaptations also establish the framework for the cooperation mechanisms on renewable energy between EU Member States and Contracting Parties. With the acceptance of binding targets the Contracting Parties can participate in all cooperation mechanisms. Accordingly, statistical transfers for the purposes of target achievement will be possible independently from the physical flow of electricity. However, certain conditions need to be met to have the agreement of the Ministerial Council for statistical transfers or joint support schemes between EU Member States and Contracting Parties.

The development of joint projects between EU Member States and Contracting Parties will still require the physical transfer of electricity when the electricity is to count towards the EU Member State's target. The Decision also requires energy audits to be performed every two years to ensure the reliability of statistical data provided by the energy statistics.

b. Progress made in 2012/2013

The Contracting Parties should have submitted National Renewable Action Plans (NREAP) to the Secretariat by 30 June 2013; however, only Serbia actually adopted the NREAP and submitted it to the Secretariat before the deadline. All other Contracting Parties have started to draft the NREAP, with the exception of Bosnia and Herzegovina. Kosovo*, the former Yugoslav Republic of Macedonia, Moldova and Ukraine consulted with the Secretariat about the draft.

All other Contracting Parties have legal and regulatory frameworks in place to promote energy from renewable sources. Nevertheless, the transposition of Directive 2009/28/EC will have to be achieved through a comprehensive review of the existing legislation.

Despite widespread support schemes for electricity produced from renewable sources very few projects have become operational so far. Sketchy and unclear legal and regulatory frameworks contribute to this failure as well as cumbersome, non-harmonised authorisation, permitting and grid connection processes.

The existing caps on wind capacities imposed in former Yugoslav Republic of Macedonia (100 MW) and Serbia (500 MW) by 2020 should be gradually removed with the adoption of network development plans. These are designed to integrate more renewable energy into the grids with the implementation of a regional approach to balancing the electricity systems. Moreover, generation capacity limits for solar are sometimes in place to minimise the impact of electricity produced from renewable sources on the end-customers price (Croatia, former Yugoslav Republic of Macedonia, Serbia). The situation might change in the future due to a sharp decrease of the investment costs in solar PV technology in the last years.

Certification schemes for electricity produced from renewable energy sources remain to be implemented in almost all of the Contracting Parties. However, most of them have already assigned bodies to manage the system of guarantees of origin.

With regard to biofuels, the achievements are generally lagging behind the increase in electricity produced from renewable energy sources, and vary greatly among the Contracting Parties. There are Contracting Parties with well-developed legislation in place while in other cases, Contracting Parties have not even set indicative renewable targets for transport, as shown by the table below.

RES targets in the transport sector set up by the Contracting Parties

Contracting Party	2008	2009	2010	2011	2012	2013	2014	2015	2016	2020
Albania			5%					15%		
Bosnia and Herzegovina										
Federation BiH	2%	3%	5.75%							
Republika Srpska	2%	3%	5.75%	0.5%*	2.0%	2.5%	3.0%	3.5%	4.5%	10%
Croatia				1.24%	1.58%	1.83%	2.48%	3.72%	5.16%	10.05%
Former Yugoslav Republic of Macedonia			5.7%							10.3%
Kosovo*										
Moldova						6% bioethanol 5% biodiesel				20%
Montenegro										
Serbia			0.76%	1.52%	2.28%	0%*	0%	1.5%	3.2%	10%
Ukraine						5% bioethanol	5% bioethanol	5% bioethanol	7% bioethanol	

* if values in later years are lower than in previous years, it means that they were re-defined with a later act
Source: Energy Community Secretariat

Even for Contracting Parties that set the targets, there is no monitoring of the actual achievement or assessment of the effectiveness of the measures in place.

5 out of 9 Contracting Parties (Albania, Bosnia and Herzegovina, Croatia, former Yugoslav Republic of Macedonia and Serbia) have some production facilities, to produce biodiesel from vegetable and used cooking oil. Raw material is both domestically produced and imported. Furthermore, some production is exported, not contributing to the target of the Contracting Party. In Ukraine many companies export either raw material or bioethanol, and raw materials have been exported from Moldova.

8 Contracting Parties are in the very early stages of considering their approach to updating the framework for RES in the transport sector. Even those who are amending energy laws with respect to renewables (such as Albania) have not included relevant provisions on biofuels sustainability.

Furthermore, according to the draft action plans, many of the Contracting Parties count on imported biofuels, and only on liquid biofuels, and are not considering their domestic potential. Ukraine is a positive exemption in that respect.

Only Croatia set up the complete legislative framework for renewable energy in transport, fully implementing Directive 2003/30/EC and Directive 2009/28/EC. This process was faster due to accession to EU on 1 July 2013.

c. Conclusions and Priorities

All Contracting Parties, except Serbia, will have to finalise and adopt the NREAP as soon as possible. The NREAP, as a strategic document that describes the policies and measures to achieve the 2020 RES targets, is providing the necessary transparency on the pathway and sets the policy framework to the consumers, investors and other stakeholders encouraging investment, risk taking and the development of the market for renewable energy.

Furthermore, in all the Contracting Parties a review of the existing legal and regulatory framework is needed to properly transpose Directive 2009/28/EC by the end of 2013. It is highly recommended to adopt separate Renewable Energy Laws in all Contracting Parties, dealing with the sector in a consistent and integrated approach.

Most of the Contracting Parties still need to adopt proper support schemes for all forms of energy produced from renewable sources – *i.e.* electricity, heat and energy used for transport – to facilitate investments in renewable energy and be on track to meet the 2020 targets. None of the Contracting Parties have registered adequate progress in newly installed capacities in the last few years. The indicative trajectories are at risk of not being met.

The Contracting Parties have to ensure compliance with the requirements of Article 16 of Directive 2009/28/EC which requires reforms of electricity infrastructure related to the operation and development of the grids, as well as the rules for grid access and cost sharing, with a view to increasing the contribution of electricity from renewable energy sources. Special attention must be paid to review the access to and operation of the networks for electricity from renewable sources. Progress is urgently required in the areas of transparency, consistency of network rules and grid connection issues.

Furthermore the authorisation and permitting processes have to be coordinated and streamlined. Enhanced and timely cooperation between different stakeholders, especially authorities responsible for energy, economy, planning, water and environment, agriculture, transport and fiscal policies is required. Such cooperation has still not been adequately established in most of the Contracting Parties so far. The same approach to coordination and simplification of the rules has to be extended to other types of renewable energy in the transport sector, for example biogas and electricity.

For renewable energy in transport, the key issue is to introduce provisions establishing a sustainability regime for biofuels and bioliquids, including the necessary certification schemes and bodies. Without setting this framework properly, the Contracting Parties might import non-sustainable biofuels which cannot be counted towards the fulfilment of their target, and will prevent domestic producers from participating in the EU (and Energy Community) markets.

A key area for monitoring and reporting on the implementation of Directive 2009/28/EC is the determination of energy balances in accordance with *EUROSTAT* methodology. This requires the energy data to be compiled based on consumption surveys performed periodically. This aspect, most relevant for biomass consumption and solar heat needs the adequate attention of statistical offices and all institutions involved in the energy sector. Without proper consideration, the Contracting Parties might not be on track with the indicative trajectories and risk not meeting the 2020 targets.

3.5.2 ALBANIA

Renewable Energy

a. Renewable energy in Albania

1. In Albania, close to 100% of domestic electricity generation comes from hydropower plants. However, only 35% of Albania's hydropower potential is currently exploited. At present, the electricity generation is strongly dependent on the volatility of the water run-off of a major river course, the Drin.

The overall electricity capacities installed in the system reached 1726 MW at the end of 2012, thus increasing by 153 MW during the year. The increase is owed mainly to the HPP Ashta (45 MW) as well as other medium and small HPPs. So far, the Ministry has awarded concessions for 100 large, medium and small HPPs of about 1300 MW to come closer to the *ENTSO-E* requirements for generation adequacy and to reduce dependency on electricity imports.

Investments in the distribution and mainly in the transmission networks are key for supporting increased renewable energy capacities and to harvest the significant potential of the country's renewable energy sources, mostly hydro (3.2 GW), biomass (12.8 TWh/y), wind (11.4 TWh/y), and solar (33 MW).

With the adoption of Directive 2009/28/EC, Albania committed to a binding 38% target of energy from renewable sources in gross final energy consumption in 2020 compared with 31.2% in 2009.

In May 2013, Parliament adopted a Renewable Energy Law dealing mostly with electricity from renewable sources, and only marginally with energy produced from renewable sources for heating. In accordance with this Law the Government shall formally adopt the 38% mandatory target in 2020, including a 10% target of renewable energy in transport.

The Law also established a renewable energy fund financed from the State budget and international financial institutions, and potentially also private contributions. It should finance studies related to the assessment of the potential of various renewable energy sources, tender documents for concessions for power production from renewable energy sources, and promote solar heaters.

Furthermore, a national licensing centre was designated by the Law to act as a one-stop-shop for all investors who won a tender for a concession, or have been awarded an authorisation for construction pursuant to the existing laws. The Albanian Energy Regulatory Entity (ERE) is empowered to adopt simplified procedures for licensing producers with capacities below 15 MW.

The Law also includes specific provisions related to grid connection. The grid operators are required to connect with priority all renewable energy producers to the nearest point in the grid while maintaining the network security requirements for grid operation. Within three months of the Law entering into force, ERE will have to adopt the methodology for grid connection of renewable energy producers and a standard connection agreement between producers and network operators. The cost of connection is to be borne by the producers, while the upgrade and expansion of the electricity networks will be borne by the respective grid operator. A right of renewable energy producers to claim compensation in the case of lack of capacity of the network to integrate the electricity produced from renewable energy has been introduced.

The grid operators are also required to prepare plans to develop the networks in order to accommodate more renewable energy into the system, in line with the National Renewable Energy Action Plan (NREAP) and the National Energy Strategy. The wholesale public supplier was designated as a single buyer of all renewable energy and will sign power purchase agreements for a period of 15 years with the new RES producers.

The NREAP required by the Directive will set out the policies and measures necessary to reach the target of 38% in 2020 and it is currently being drafted by the Agency for Natural Resources. According to the information received, the NREAP will be submitted to the Secretariat after its adoption by the end of October 2013. The Ministry of Energy, Trade and Economy (METE) is the institution in charge of monitoring the NREAP implementation.

Secondary legislation related to issuing, transfers and cancellation of guarantees of origin remains to be adopted by ERE as the designated body.

The existing support scheme currently consists of power purchase agreements of up to 15 years for small HPPs (producing less than 15 MW), or feed-in tariffs adopted by ERE. The purchase prices for electricity from old and new small HPPs are based on the import price of electricity in the previous year, adjusted with an inflation index and approved annually by ERE. According to the new Law, the Government will adopt feed-in tariffs in the upcoming period. Another support measure, as stipulated by the Law facilitating the construction of new renewable electricity capacities of 2002, consists of a customs duty exemption for the equipment for new renewable energy facilities. Small HPPs are not obliged to pay for the water used nor State property taxes.

2. As regards biofuels, the Law for the Production, Transport and Trade of Biofuels and other Renewable Fuels in Transport of 2008 deals with the functional and organizational aspects of production, transportation and trade in biofuels. Albania set annual targets for biofuels and other renewable fuel in the market at 5%, starting in 2010. From 2015 onward, this share must increase to 15%. The final energy consumption in the transport sector in 2009 (the base year for the targets set by the Ministerial Council in adapting Directive 2009/28/EC) was 438 ktoe. However, the actual share of biofuels placed at the Albanian market is not known. The Law also gives some incentives for supporting biofuels and renewable fuels such as tax advantages for machineries, equipments and materials necessary for the construction and commissioning of biofuels plants etc.

However, the secondary legislation needed for the full application of the Law has not yet been developed or adopted. Moreover, it is difficult to assess its implementation in practice, since concrete achievements with regard to meeting the biofuels target have never been monitored or reported in compliance with the Law.

Other than setting the 10%-target, the new Law on Renewable Energy does not apply to renewable energy in transport.

An Italian-Albanian joint-venture has operated a biodiesel production plant located in Porto Romano since 2011. This biodiesel plant, with a production capacity of 100,000 tons per year, represents one of the first steps towards the production of biofuels in Albania.

b. Progress made in 2012/2013

The new Renewable Energy Law aimed at transposing Directive 2009/28/EC was adopted in May 2013.

The Law for the Production, Transport and Trade of Biofuels and other Renewable Fuels in Transport is currently under review. New legislation is expected to implement the requirements of Directive 2009/28/EC with regard to sustainability criteria and the certification system, as well as introducing adequate incentive measures.

c. State of compliance

Albania did not submit the National Renewable Electricity Action Plan (NREAP) by 30 June 2013 as required by the Ministerial Council's Decision.

As regards the implementation of Directive 2009/28/EC, only parts of it were transposed by the Renewable Energy Law. The secondary legislation related to feed-in tariffs, requirements for access and operation of the grids and guarantees of origin remain to be developed in the next period to complete the implementation of Directive 2009/28/EC as adapted by the Ministerial Council in 2012. The provisions related to possible cooperation mechanisms between Albania and Contracting Parties or EU Member States and the requirements for biannual audits are not yet transposed.

Proper feed-in tariffs for all renewable energy sources are still to be developed by ERE and submitted for approval to the Government to ensure that Albania is on track to reach the interim trajectory.

The transmission system operator and distribution system operator have to improve compliance and transparency relating to the setting and publishing of the standard rules on costs of connection to the grid or grid reinforcements, which are necessary to integrate new renewable energy producers.

As regards administrative procedures, the deadlines, reception and treatment of applications between different institutions involved will be coordinated and made available to applicants by the National Centre for Energy Applications, acting as a one-stop-shop for renewable energy projects. The forthcoming period is a key to prove the proper implementation of this integrated approach for the benefit of investors.

2. The requirements of Directive 2009/28/EC related to the transport sector have not been included by the new Renewable Energy Law, thus the existing Law of 2008 on Biofuels will have to be amended to transpose the requirements for the sustainability regime as well as the mandatory target for renewable energy in transport in 2020.

d. Conclusions and Priorities

With the adoption of the Renewable Energy Law, Albania increased compliance with the renewable energy *acquis* as adopted by the Ministerial Council in 2012 and also proves that it has decided to act further to foster the development of new renewable energy generation capacities. This is key for a country that intends to reduce its energy dependence mostly by tapping its significant renewable energy potential through investments.

The immediate adoption and submission of the NREAP should be the first priority of the Ministry. Continuing the implementation of all the requirements arising from Directive 2009/28/EC as amended by the Ministerial Council Decision, like adoption of feed-in tariffs, access and operation of the grids, guarantees of origin, should be the main priority of Albania in the coming period.

Proper feed-in tariffs for all the renewable energy sources mentioned in the Law will have to be proposed by ERE to secure investors' confidence. ERE must also implement the system for certifying energy produced from renewable sources based on guarantees of origin. The network operators have to increase compliance in relation to access and operation of the grids as well as transparency of grid connection procedures for new RES producers.

A full review of the Law for the Production, Transport and Trade of Biofuels and other Renewable Fuels in Transport and its implementation is needed before the deadline for the implementation of Directive 2009/28/EC expires at the end of 2013. Unfortunately, the technical assistance provided to Albania under *IPA* comes too late to keep this deadline. Most urgently, the missing certification system needs to be introduced as there is already biodiesel production in the country.

3.5.3 BOSNIA AND HERZEGOVINA

Renewable Energy

a. Renewable energy in Bosnia and Herzegovina

1. Bosnia and Herzegovina produces about 45% of its total electricity consumption from hydropower. Biomass used for heating was at a level of 789 ktoe in 2009. The country's renewable energy potential is estimated at 6.8 GW in small and large HPPs, 2 GW wind, 33 MW solar and 18 TWh/y from biomass. The country's geothermal potential is estimated to be the second largest in the Energy Community at about 40 GWh/y.

The technical capability for connecting wind farms to the transmission network in Bosnia and Herzegovina is 350 MW. Currently there are many more applications for the connection of wind farms pending than the existing network capacity would allow for.

Renewable energy falls within the competence of the entities, the Federation of Bosnia and Herzegovina and Republika Srpska. No strategy or legislation specifically dealing with renewable energy exists at state-level.

According to the adaptation of Directive 2009/28/EC for the Energy Community, Bosnia and Herzegovina committed to a 40% RES target for 2020, starting from 34% in 2009. The policies and measures to reach that target are expected to be described in the NREAP, which was due to be submitted to the Secretariat by 30 June 2013. Up to now, no activities are taking place at the state-level to coordinate the required input from the two entities.

Two separate Renewable Energy Laws have been adopted by the two Parliaments of Republic of Srspka and Federation of Bosnia and Herzegovina in May 2013 and July 2013 respectively.

Moreover, the Energy Law of Republika Srpska of 2009 covers incentives for renewable energy and requires the Government to issue a decree on renewable energy targets. That Decree sets an indicative target of 35.98% of energy generated from renewable energy sources in 2020, starting from a share of 29.1% in 2005. The Decree also set a 10% renewable energy target in transport and introduced a target of 33.73% of electricity from highly efficient co-generation by 2020.

In Republika Srpska, the regulatory authority adopted several rules for the promotion of renewable energy; namely rules on the certification of generation facilities using renewable energy sources or efficient co-generation producers which are entitled to the incentive schemes, and rules on support schemes for renewable energy producers. The latter comes in the form of feed-in tariffs or a premium offered on top of the electricity market price. The support given to the new RES producers is financed though an uplift charged on all final customers in Republika Srpska. The existing Regulation on the Utilisation of Renewable Energy Sources and Co-Generation adopted in Republic of Srspka includes an obligation to purchase electricity from energy producers using renewable sources. This is a 12-year contract at a guaranteed price which gives priority dispatch to electricity from renewable sources.

2. As regards biofuels, two companies producing biodiesel from pure vegetable oils and used oil are active in Bosnia and Herzegovina. Both are located on the territory of Republika Srpska and use local raw materials as well as imported stocks.

In legislative terms, both entities defined the targets in line with the old Directive 2003/30/EC, namely 2% in 2008, 3% in 2009 and 5.75% in 2010. Two Decrees on Type, Content and Quality of Biofuels used in Motor Vehicles (2007 in Republika Srpska and 2008 in the Federation of Bosnia and Herzegovina) impose blending obligations on traders.

Republika Srpska's Law on Renewable Energy does not cover the transport sector. However, a Decree on Generation and Consumption of Energy from Renewable Energy Sources of 2011 defines incentive measures and targets. The targets in the transport sector increase yearly from 0.5% in 2011 to 10% in 2020, which corresponds to an obligation imposed on all fuel distributors in the market.

b. Progress made in 2012/2013

In 2013, both entities adopted Renewable Energy Laws, however the Secretariat cannot yet assess compliance with the *acquis* in the absence of the final adopted text of the two acts. The European Commission envisages providing technical assistance to develop a Renewable Energy Law at the state-level that deals with the State obligations of the *inter alia* related to NREAP adoption as well as the binding 2020 RES target.

In a partnership between the power utility of Republika Srpska and the power utility of Serbia, foreign investors are to be attracted for the development of three large HPPs on the Drina River, with a total capacity of 193 MW. During 2012 only 9 MW were installed in small HPPs.

c. State of compliance

Bosnia and Herzegovina has not submitted the NREAP on the implementation or the forecast document as required by Directive 2009/28/EC. The complexity of the organisational structure and decision-making system hinders the effective harmonisation of the promotion of renewable energy at state-level. The two Laws recently adopted by the entities have not been assessed for compliance by the Secretariat. However, it is clear that a certification system based on guarantees of origin has yet to be established at national level.

The main provisions of Directive 2003/30/EC have been transposed at the entity levels. The Federation set up the indicative targets in line with Directive 2003/30/EC while Republika Srpska elaborated a bit more on the incentive measures, taking additional elements and the timeframe of Directive 2009/28/EC into account. However, there is no information on the realisation of targets in both entities for the period 2008 – 2010, and further in 2011 and 2012 in Republika Srpska. Sustainability criteria for liquid biofuels and a certification scheme, as required by Directive 2009/28/EC, have not been implemented and defined.

d. Conclusions and Priorities

The existing framework for the promotion of energy from renewable sources remains split at entity level without any State legislation that would deal with the obligations to adopt a NREAP or the possibility to enter into cooperation mechanisms to reach the targets in the most cost-effective way.

It is of utmost importance to start coordinating the drafting of the NREAP and to adopt national 2020 targets which can be further split at entity level.

The current revision of the state-level legislation to comply with the Third Energy Package is an opportunity to integrate the requirements for access and operation of the grids from TSO perspective and unifying the two separate regimes currently designed at entity level.

Bosnia and Herzegovina is at risk of failing to implement the *acquis* on renewable energy. The implementation of a harmonised framework for the promotion of renewable energy in both entities is key for the use of renewable energy sources on a relevant scale for the significant resource potential of the country.

The priority in the area of biofuels is to implement sustainability criteria and to set up an adequate certification system.

3.5.4 CROATIA

Renewable Energy

a. Renewable energy in Croatia

1. Currently, more than half of the electricity production in Croatia comes from hydropower, with an installed capacity of 2,129 MW in HPPs. By 2020, 1,200 MW in wind power, 100 MW in small HPPs and 85 MW electricity produced from biomass is envisaged.

During 2012, the operational capacities of renewable energy projects except hydropower increased with 58 MW reaching 193 MW, out of which 175 MW are capacities of wind farms. Several renewable energy projects are already operational: 6.7 MW based on biomass, 7.1 MW in biogas power plants and solar PV capacities reached 3.9 MW. Out of more than 6,000 MW in authorised renewable energy projects, more than 5,500 MW are wind parks.

Determined by its EU accession in 2013, Croatia agreed to a mandatory national target for renewable energy of 20% of gross final energy consumption by 2020 even before the adoption of Directive 2009/28/EC in the Energy Community.

The Energy Development Strategy adopted in 2009 includes the strategic objective of a 35% share of total electricity generation from renewable energy (including large HPPs) by 2020. The share of renewable energy in total electricity consumption is monitored annually by the Ministry of Economy.

A draft NREAP was submitted for review to the European Commission. So far the final version has not been adopted by the Government.

Among all Contracting Parties, Croatia took the most consistent approach to the promotion of renewable energy and has developed a coherent legislative and regulatory framework to support the development of renewable energy projects.

Instead of a Law on Renewable Energy, energy produced from renewable sources in electricity, heating, cooling and the transport sector are subjects of specific sectoral laws. The main requirements of Directive 2009/28/EC related to electricity are included in the Electricity Market Act adopted in February 2013, and partially in the Energy Act adopted in October 2012, as well as in a set of secondary legislation adopted by the Government and the energy regulator. In 2013, the Heat Law transposed the requirements of Directive 2009/28/EC related to energy from renewable sources for heating.

The Government adopted a revised tariff system for promoting power generation from renewable sources and cogeneration in May 2013. The support schemes take the form of feed-in tariffs. Different levels of support based on capacity and/or technology are adopted for various renewable energy sources, including cogeneration, production of biogas or biofuels. The feed-in tariff for wind projects rose to 95.2 EUR/MWh from previously 84.6 EUR/MWh. An annual adjustment of the price based on the consumer price index is envisaged. The tariffs paid to solar projects have been cut by about 30% for projects below and over 30 kV to reflect the market trends for photovoltaic technology. Preference is given to rooftop installations rather than ground-mounted solar panels. A 15% increase in incentives is made if the projects use locally produced equipment. Another important change is an extension from 12 to 14 years of the contractual period for the application of the feed-in tariff.

The Croatian Energy Regulatory Agency (HERA) is mandated to adopt methodologies for defining the cost of connection to the networks for all types of network users, including RES producers, and to take decisions on the eligibility status for renewable energy power plants guaranteeing dispatch priority and allowing participation in the feed-in scheme. HERA also issues licenses for renewable energy power plants with a capacity of over 1 MW and high efficient CHP.

The Croatian Energy Market Operator *HROTE* is obliged to buy the electricity produced from eligible producers. *HROTE* collects the incentive fees paid by final customers for the promotion of renewable energy, and distributes them to renewable energy producers. *HROTE* has also been appointed as the issuing body for guarantees of origin for electricity produced from renewable sources.

There are factual limitations on the total capacity of wind farms that can be connected to the grid due to environmental concerns and risks for the operation of the electricity system. In order to overcome the security concerns, the transmission system operator adopted Additional Technical Conditions for the Connection and Operation of Wind Power Plants in 2008. The transmission system operator is also taking the balance responsibility for the electricity produced from renewable sources.

2. As regards biofuels, several biodiesel production plants in Croatia contribute to the fulfilment of the 10% target.

The primary legislation consists of the Act on Biofuels for Transport (in force since 2009, amended in 2010, 2011 and 2012). The Biofuels Act defines a general framework for production, trade, storage and use of biofuels, including the tasks and responsibilities of various institutions. The Decree on Biofuel Quality (in force since 2005), the Ordinance on Measures for Promotion of Production and Use of Biofuels (in force since 2009), the National Action Plan 2010-2020 and a Rulebook on the Sustainability Criteria in Production and Usage of Biofuels (of 2013) completes the legislative framework.

Starting in 2011, targets have been defined by the National Action Plan. The 2020 target equals the share of 10% in line with Directive 2009/28/EC, in which electricity in transport will have a small contribution of 0.83%.

b. Progress made in 2012/2013

The Electricity Market Act adopted in February 2013, the Energy Act adopted in October 2012, the Heat Law of 2013, and the Biofuels Act from 2009 are milestones for the implementation of Directive 2009/28/EC.

During the reporting period, some steps have also been taken to enhance the administrative and institutional capacity in renewable energy, in particular in the Ministry of Economy and the other public institutions involved in authorisation, permitting and certification for new RES power plants. Some of the burdensome administrative procedures for small renewable energy capacities like the number of applications requested, the authorisations involved and the timeline for processing the applications have been streamlined to become more suitable for these kinds of projects. This concerns mostly wind and solar panels. However, the by-laws will have to be amended further to reduce the number of applications, documents and phases required, as well as the time for the authorisation of renewable energy projects.

The Ministry of Economy during the reporting period developed the Rulebook on the Sustainability Criteria in Production and Usage of Biofuels. Under this Rulebook, independent auditors have the responsibility to certify the fulfilment of sustainability criteria, and domestic producers and importers are obliged to ensure certification of their products according to the voluntary schemes recognised by the European Commission, as allowed by Directive 2009/28/EC.

In 2013, a new biodiesel plant opened in Osijek with a production capacity of 20,000 l/day. Plastic waste will be used as raw material.

c. State of compliance

Croatia did not submit a National Renewable Action Plan to the Secretariat by the deadline of 30 June 2013. No forecast document was submitted to the Secretariat according to the deadline set in Directive 2009/28/EC.

1. Most of the Articles of Directive 2009/28EC are transposed in several laws revised or adopted in the last years by the Parliament as well as Governmental Decrees. However, the provisions related to the cooperation mechanisms of Directive 2009/28/EC are not yet transposed.

Moreover, there are still some issues that need attention. This includes administrative procedures being the main barriers to the development of renewable energy projects, which have to be simplified, reduced and better coordinated among the institutions involved. A system for issuing guarantees of origin for energy produced from renewable sources has not yet been implemented.

As regards biofuels, full implementation of Directive 2009/28/EC was achieved in June 2013 by the Rulebook on the Sustainability Criteria in Production and Usage of Biofuels.

d. Conclusions and Priorities

The finalisation and adoption of the NREAP are among the main priorities for Croatia for the near future. Despite the advance taken in finalisation of renewable energy framework, Croatia is at risk of not being on track to reach the 20% target in 2020 due to slow progress in investments in renewable energy capacities that became operational until the end of 2012. Croatia has to carefully monitor being on track according to indicative RES trajectory and to take corrective measures accordingly.

The next step relating to the use of renewable energy in the transport sector should be the practical implementation of the legislative framework, as well as monitoring its effectiveness.

3.5.5 KOSOVO*

Renewable Energy

a. Renewable energy in Kosovo*

1. With the adoption of the Ministerial Council Decision in 2012 on the implementation of Directive 2009/28/EC, Kosovo* committed to a binding 25% target of energy from renewable sources in gross final energy consumption in 2020 compared with 18.9% in 2009.

The overall 25% target and the separate 10% target in transport in 2020 were transposed through the Ministry of Economic Development's Administrative Instruction in January 2013. Going beyond its binding target, Kosovo* envisages even meeting a voluntary target of 29.47% in 2020 according to the Administrative Instruction and the draft National Renewable Energy Action Plan.

Otherwise, Kosovo* intends to transpose the entire Directive 2009/28/EC through amendments to the existing legal and regulatory framework in 2014, along with the transposition of the Third Energy Package. A separate Law on Renewable Energy is not envisaged. A gap analysis was prepared for the primary legislation together with a roadmap for implementation of legislative changes.

Pursuant to the powers given to the Energy Regulatory Office (ERO) in the Law on the Energy Regulator of 2010 and the provisions relating to renewable energy in the Energy and Electricity Laws of the same year, ERO is to set feed-in tariffs. Currently feed-in tariffs have been adopted for small HPPs with a capacity of less than 10 MW, wind, biomass and biogas power plants. The feed-in tariffs for other types of renewable energy sources are missing. There is no support scheme for solar, despite the existing potential. A Government Decision provides for a five year buy-out contract with the public supplier for electricity produced from renewable sources and cogeneration, with the possibility of extension. ERO is also mandated by the Law on the Energy Regulator to issue guarantees of origin for electricity or heat produced from renewable sources. ERO has adopted rules on establishment of a system of certificates of origin for electricity produced from renewable sources.

The total installed capacity of electricity generated from renewable energy is 46.21 MW, all generated from the existing HPPs. According to the projections in the draft NREAP, meeting the 2020 target depends on increasing the renewable energy consumption in the electricity, heating and cooling sectors to 432.46 ktoe, compared to a consumption of 245.7 ktoe in 2009. It is planned to achieve this mainly through an increase in the use of renewable energy in transport (36 ktoe) and in electricity (88 ktoe). The difference concerns renewable energy in the heating sector. The Administrative Instruction of January 2013 envisages investments of 240 MW in small HPPs, 305 MW in the Zhur HPP, 10 MW in PV and 150 MW in wind by 2020. Biomass is planned to contribute to electricity production with an increase of 14 MW. Solid biomass will remain the main source of energy for heating. It is projected to increase up to 298 ktoe from 235 ktoe in 2009.

2. As regards renewable energy in transport, Kosovo* intends to achieve the 10% target with liquid biofuels exclusively. More concretely, it is envisaged 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.

b. Progress made in 2012//2013

The NREAP has been finalised and is pending adoption. Kosovo* submitted the forecast document that plans exceeding the binding 25% RES target in 2020 to a level of 29.74%. For biofuels, there has been no further activity in the adoption of the plan to implement Directive 2003/30/EC from years ago. The Ministry of Economic Development has carried out a study on the development of energy production from biofuels which was finalised by the end of 2012.

A Law on Petroleum and Petroleum Products was drafted during 2012, the adaptation of which is expected soon. However, the draft Law only allows for the usage of blended and pure biofuels, and it is far from transposing the requirements of Directive 2009/28/EC with regard to renewable energy in the transport sector. The Administrative Instruction setting out the 25% RES target in 2020 was adopted in January 2013. Another Administrative Instruction concerning sustainability criteria and a certification system is envisaged for adoption in the second half of 2014. As long as there is no domestic biofuel production, foreign certification of biofuels, recognized by the EU, will be used.

c. State of compliance

1. Kosovo* has drafted the NREAP. However, due to procedural issues, it failed to adopt it and submit it to the Secretariat, by 30 June 2013. Kosovo* submitted the forecast document that plans exceeding the binding 25% RES target in 2020 to a level of 29.47%. In the coming years it remains to be seen if Kosovo* is on track to achieve the 25% target and even going beyond to reach this challenging self-imposed target of 29.47%.

The existing legal and regulatory framework for the promotion of electricity produced from renewable energy is not sufficient to transpose all the requirements of Directive 2009/28/EC. The legal framework will be completed through the amendments to the energy laws mainly in relation to access and operation of the grids, authorisation, permitting and licensing procedures for RES plants. Other administrative decrees are planned to be adopted to transpose requirements for technical standards of RES equipment, certification of installers, information and training, the use of biofuels in transport and renewable energy in buildings.

Barriers relating to the administrative procedures for RES projects linked to the un-coordinated approach of the institutions involved have to be removed. The process for authorisation, permitting and licensing has to be streamlined, simplified and communicated transparently to the applicants.

2. For renewable energy in transport, the current situation is completely non-compliant. Not a single requirement of the old Directive 2003/30/EC has been transposed, not to mention the more demanding requirements of Directive 2009/28/EC, including its sustainability regime for biofuels and bioliquids.

d. Conclusions and Priorities

Kosovo* will have to step up the efforts to advance the use of renewable energy sources. The existing policy framework which was adopted to comply with the previous Directives 2001/77/EC and 2003/30/EC has produced no tangible results in that respect.

The adoption of the NREAP must be the main priority for the next months. Moreover, a revision of the entire legal framework must be finalized soon in order to transpose Directive 2009/28/EC on time. In this context, monitoring the achievement of the targets needs to be enforced and barriers in administrative procedures for authorisation and permitting of renewable energy projects have to be removed. In practical terms, achievement of the binding 25% RES target in 2020 will constitute a significant challenge. If the capacity of the planned power plant Zhur does not enter into operation in 2017, achievement of the target is at risk.

As regards the transport sector, a certification scheme and a certification body should be put in place even if the target of 10% may be fulfilled by imported biofuels. Otherwise biofuels cannot be calculated towards the target. It is also recommended to re-consider possibilities for domestic production – either from waste, using the significant areas of unused land and/or considering new modalities for public transport (including e-mobility).

3.5.6 FORMER YUGOSLAV REPUBLIC OF MACEDONIA

Renewable Energy

a. Renewable energy in former Yugoslav Republic of Macedonia

1. The policy on renewable energy sources is set out in the Government's Strategy for the Exploitation of Renewable Energy Resources and the Strategy for Energy Development until 2030. Both were adopted in 2010. These documents have not been revised in accordance with the Decision of the Ministerial Council of October 2012, under which the country committed to achieve a 28% target for 2020, starting from a share of 21.9% in 2009.

Renewable energy is already covered by the Energy Law. The market operator established within the transmission system operator *MEPSO* is obliged to buy all the electricity produced from renewable sources, and to cover the cost of imbalance of RES producers according to the Market Code adopted in 2012. The power purchase framework agreement was adopted by the Energy Regulatory Commission (ERC) in July 2012.

According to the Energy Law, ERC issues licenses for producing electricity from renewable energy sources and decides on the status of preferential renewable energy producers. Under the Energy Law, the Government also adopts feed-in tariffs for electricity sold by preferential producers of electricity and producers of electricity from high-efficiency cogeneration facilities. Feed-in tariffs for wind, small hydro, biomass/biogas and photovoltaic installations are set, as well as a certification system based on guarantees of origin. Power purchase agreements are offered for 20 years for hydro and wind, and 15 years for solar PV, biomass and biogas.

The Energy Agency has been appointed as the institution in charge of the implementation of the certification system for energy from renewable sources, based on guarantees of origin and as the issuing body for these types of certificates. The national program for subsidisation of households to invest in solar thermal collectors, launched in 2007, continued in 2013.

The total installed capacity of hydro power plants represents 31% of the total generating capacity and consists of eight large HPPs and several small HPPs, with a combined capacity of 639 MW, out of which 36 MW is from small HPPs.

The potential for development of new large and small hydropower plants is estimated at 1.8 GW. Wood is primarily used for household heating. In 2009, the biomass consumption based on consumption surveys was 319 ktoe. Other significant renewable energy sources are geothermal and solar power. A study for the integration of wind power into the transmission system was finalised, and a project to create a map of wind potential and a database based on the measurement of wind intensity is ongoing.

In August 2012, HPP St. Petka, with an installed capacity of 36.4 MW, entered into operation. Currently, there are 12.58 MW installed capacity in 22 small HPPs (each of them a preferential producer). 52 MW in 45 small HPPs are in the process of construction and expected to enter into operation in the period 2013 - 2015. About 7 MW is installed in solar PV (28 preferential producers). The capacity installed in PV is expected to rise to about 18 MW by September 2014. There are no wind power plants yet in operation, however, a wind park of 36.8 MW is expected to become operational in the first half of 2014.

2. The responsible Ministry for RES in transport is the Ministry of Economy. To reach 10% in 2020, biofuels and bioliquids from import and from domestic production are planned to be used. The transposition of the Directive's sustainability requirements for biofuels and bioliquids is expected to start in the coming period.

In the draft NREAP, the target is proposed to be 10.3% in 2020, which would require consumption of ca. 58 ktoe of renewable energy in transport. The share achieved in 2009 was 0.7%, falling short of the targeted 5.75% by 2010. The legislative framework for biofuels was strengthened by the Energy Law of 2011 which, amongst other things, provides the basis for determination of the mandatory targets and relevant obligations of undertakings and mandates the ERC to determine biofuel prices.

Although a small number of facilities exist in the country for the production of biofuels, some of the production is exported. Thus imported biofuels play a more significant role in the 10% biofuels share. In accordance with the Rulebook for the Quality of Liquid Fuels, Diesel and Motor Fuels may contain 5% bio fuels and more if suitable for the market. Currently diesel fuels mixed with 8% biodiesel is sold on the market. ERC also defines a methodology for the determination of biofuel prices.

b. Progress made in 2012/2013

The preparation of the NREAP is ongoing in the Ministry of Economy. The Secretariat has been consulted regarding the draft NREAP. However, the quality has to be improved significantly.

In April 2013, the Government adopted new feed-in tariffs for electricity produced from biomass, increasing it to 150 EUR/MWh and for biogas to 180 EUR/MWh. The capacity limit for preferential generators eligible to apply for feed-in tariffs has been revised, photovoltaic installations are now capped at 18 MW (from previously 10 MW). The feed-in tariff has decreased to 160 EUR/MWh for capacity lower than 50 kW and 120 EUR/MWh for capacity higher than 50 kW. The feed-in tariff for wind of 89 EUR/MWh is applied only to projects below 50 MW and for 20 years. The support scheme for RES producers is financed through a component of the market operator fee applied to all electricity suppliers.

Subsidisation (up to 30%, but not more than EUR 300) of solar thermal collectors in households has also continued in 2013 with an overall budget of around EUR 100,000. The program aims to reduce the consumption of electricity used for water heating and also envisages significant financial savings for households. So far, about 1900 households have been subsidised since the start of the program in 2007. Moreover, soft credit lines for investments in projects promoting renewable energy and energy efficiency are available at several banks for households and businesses.

The draft NREAP contains certain considerations on the certification of sustainable biofuels. However, it is without a full understanding of the sustainability criteria and does not envisage more concrete planned activities to implement Articles 17-21 of Directive 2009/28/EC.

A Decree on Liquid Fuels Quality has been under preparation during the reporting period. Its provisions on determining and monitoring the liquid fuel quality, rights and obligations of market participants and State authorities and replacing fuel reserves will apply to biofuels as well.

c. State of compliance

The National Renewable Energy Action Plan describing the policies and measures aiming to achieve 28% RES target in 2020 has not been adopted and notified to the Secretariat by the deadline of 30 June 2013.

1. The binding 28% RES target in 2020 has not yet been transposed, the same goes for the provisions related to cooperation mechanisms among Contracting Parties or with EU Member States.

In relation to grid connection and in accordance with the provisions of Article 16 of Directive 2009/28/EC, *MEPSO* and *EVN*, as network operators, have to become more transparent towards the RES producers regarding information on the estimated costs of connection, time for processing the application and for making the connection.

In the last year steps have been taken to remove some of the barriers related to authorisation and permitting procedures for RES projects, however compliance with the provisions of Article 13 has not been achieved. A more coordinated approach of all institutions or the creation of a one-stop-shop for all RES applications should create a more conducive investment climate in the country.

2. The Energy Law of 2011 constitutes a general basis for the further transposition of Directive 2003/30/EC. However, for full compliance different secondary acts - on annual targets, incentives, and promotion measures – are missing. The Rulebook on the Quality of Liquid Fuels defines the characteristics of liquid fuels which may be put on the market including biofuels (biodiesel, bioethanol, biogas and pure vegetable oil) and blended fossil fuels. However, sustainable criteria for liquid biofuels production and import, as defined by Directive 2009/28/EC, have not been implemented. Consequently, a certification scheme and body have also not been determined.

d. Conclusions and Priorities

In the last years significant steps forward have been made to improve the legal and regulatory framework for the promotion of energy from renewable sources.

Finalisation and adoption of the NREAP in line with the commitments taken to reach a 28% RES target in 2020 has to be the first priority in the upcoming period. A key aspect in this respect is to review the energy statistics on biomass consumption and to start compiling energy data 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 is required by the end of 2013 to meet the implementation deadline.

Simplification and streamlining the processes for authorisation, permitting, connection to the grids and licensing is key for the further development of energy from renewable sources. The secondary legislation regarding renewable energy in the transport sector as envisaged by the Energy Law in 2011 and by the plan on the implementation of Directive 2003/30/EC, has to be developed as soon as possible. Furthermore, the implementation of sustainability criteria and the establishment of a certification system in line with Directive 2009/28/EC is a high priority.

3.5.7 MOLDOVA

Renewable Energy

a. Renewable energy in Moldova

1. Moldova has relatively little potential for renewable energy sources. Hydro, solar, wind and other resources are estimated at about 2.7 mtoe. At the same time, using the available renewable energy sources could alleviate the high energy dependency of the country. In 2011, the two hydropower plants with a total installed capacity of 64 MW produced only 7 ktoe and contributed only marginally to the existing volumes of renewable energy consumption. The large majority of renewable energy consumed in the country is biomass used for heating.

With the adoption of Directive 2009/28/EC, Moldova committed to a binding 17% target of energy from renewable sources in gross final energy consumption in 2020 compared with 11.9% in 2009. Moreover, in the 2030 Energy Strategy of Moldova, the country foresees a RES contribution of 20% by 2020, which will be challenging to meet considering the little advancement made in the last years.

A draft Law on Renewable Energy is currently under preparation. It is supposed to replace the existing Law on Renewable Energy which has been in force since 2007. The draft transposes the binding 17% target and the 10% target of renewable energy in transport to be reached in 2020. Furthermore, the draft Law intends to comprehensively transpose requirements from Directive 2009/28/EC for the electricity, heating, cooling and transport sectors.

The NREAP is also being drafted and its adoption may be expected for autumn 2013. According to the draft NREAP, the 17% share of renewable energy by 2020 is broken down into a 10% share in electricity consumption, 10% in the transport sector and 27% in heating and cooling.

Furthermore, the draft Law introduces support schemes for energy from renewable sources, to be approved by the Ministry in charge of energy. This constitutes a paradigm shift in comparison to the existing cost-plus methodology. Support schemes for heating installations will be included in a separate Heat Law which is also under preparation.

The Law also foresees the simplification and streamlining of administrative, permitting and licensing procedures for renewable energy projects. The Law on Science and Technology Parks include tax incentives for businesses involved in manufacturing or trading equipment to be used in RES projects.

Electricity suppliers will be required to purchase the electricity produced from renewable sources from a single RES supplier that integrates the priority production of all RES generators and cogeneration plants. Guaranteed access to the grid and priority dispatch is provided for in the draft Law. The draft Law also established an energy efficiency fund to promote and support, *inter alia*, renewable energy projects including biofuels.

2. As regards renewable energy in the transport sector, the Renewable Energy Law of 2007, as amended in 2010, provides for relatively high 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 Renewable Energy Law and the NREAP will revise and reduce these targets in line with Directive 2009/28/EC. The 10% share in the transport sector is foreseen to be fulfilled mostly by imports. Still, there are several active companies in Moldova producing ethanol and biodiesel. It is worth noting that the share of renewable energy in the transport sector is currently zero. The first consumption of biofuels is expected only in 2015, at a level of 1.12%.

The only form of support for biofuels, as defined by the Renewable Energy Law in place, consists of tariffs to be approved by the National Energy Regulatory Agency (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. Whereas this might guarantee a market for biofuel producers at local level, it might also harm the full usage of the national production potential which might be available for export.

According to the draft NREAP, the Energy Efficiency Agency will be nominated as a certification body once the relevant framework is in place, including voluntary certification schemes.

b. Progress made in 2012/2013

The draft Renewable Energy Law and the NREAP are under preparation. The implementation of support mechanisms is expected to follow the adoption of the new Renewable Energy Law.

The "Energy and Biomass" project launched in 2011 with the aim to, *inter alia*, set up functioning markets for biomass technologies and fuel, was expanded to 13 more districts during 2012 with 153 projects. By the end of the project in 2014, more than 130 public institutions in rural communities and over 500 private households should be supplied with heat produced from local biomass, especially waste straw.

c. State of compliance

Moldova failed to adopt and submit the NREAP required under Directive 2009/28/EC on time, by 30 June 2013.

1. The current legal framework in force since 2007 is incomplete and proved to be unsuccessful for a significant contribution to RES development in the country. To become compliant with Directive 2009/28/EC a revised Renewable Energy Law is currently being drafted. A consistent and realistic approach for RES deployment based on potential assessment and least cost impact for electricity consumers must be considered to meet the commitments of 17% RES share in 2020.

2. As regards the transport sector, most of the provisions of Directive 2003/30/EC have been transposed by the existing legislation. Indicative targets, promotion and different kinds of incentives have been in place, while monitoring provisions are missing, in particular related to the effects of blending above 5%. The relevant provisions of Directive 2009/28/EC have yet to be transposed.

d. Conclusions and Priorities

The legal and regulatory framework for renewable energy has to undergo significant changes for an adequate compliance with the *acquis*. This is the first step to gain investors confidence and to ensure that 2020 RES objectives will be met.

The adoption of the NREAP must be the first priority of the country. Moreover, the draft Law on Renewable Energy should be adopted before the end of this year. With its adoption, Moldova will move closer to implementing Directive 2009/28/EC, and at the same time improving the framework needed to attract investment in renewable energy projects. Monitoring of the effectiveness of the measures in place will be key in the future.

The new Law should also introduce the concept of sustainability criteria and certification of biofuels. In general, the significant agricultural potential of the country should be tapped to develop domestic biofuels production as a new area of the economy, rather than relying on biofuel imports. A feasibility study on suitable land areas and crop types was developed in 2012 within EU/UNDP project "Energy and Biomass".

After the adoption of the new Renewable Energy Law, the regulatory framework will have to be completed and updated.

3.5.8 MONTENEGRO

Renewable Energy

a. Renewable energy in Montenegro

1. In Montenegro, electricity is mainly generated from hydropower. Currently, 635 MW (76% of the installed generating capacity) are generated in HPPs, out of which 9 MW in small HPPs. As Montenegro depends on significant electricity imports, the contribution of domestic electricity from renewable sources to total final electricity consumption is around 30-35%, depending on the hydrology. Montenegro still has abundant resources in hydropower estimated at 2 GW, for both large and small HPPs. Wind (400 MW), solar (33 MW) and biomass (4.2 TWh/y) also have significant potential. In 2009, biomass consumption was at 62.5 ktoe.

With the adoption of Directive 2009/28/EC, Montenegro committed to a binding 33% target of energy from renewable sources in gross final energy consumption in 2020 compared with 26.3% in 2009.

At the same time, the Energy Development Strategy 2025 still sets a target of only 20% renewable energy in primary energy consumption to be achieved between 2020 and 2025.

Provisions related to electricity generated and, to a lesser extent, to heating from renewable sources are included in the existing Energy Law from 2010. They are further implemented through a set of Governmental Decrees of 2011, namely for privileged producers, feed-in tariffs, and guarantees of origin.

Under the Law, the Ministry of Economy is responsible for the setting of the methodology for feed-in-tariffs in Montenegro. The methodology is submitted to the regulatory authority for its opinion. Governmental Decrees on feed-in tariffs for small HPPs, wind and biomass as well as for co-generation and power plants that use solid waste, biogas and waste gases are in place for so-called privileged producers. The tariffs are revised annually based on the inflation index.

The Energy Regulatory Agency (RAE) is tasked to issue guarantees of origin for electricity generated from renewable energy sources and to maintain a register of issued guarantees. It also has powers to monitor the annual contribution of renewable energy sources in the gross generation and consumption of electricity and approves the status of privileged producers.

Draft amendments to the Energy Law with the intention to transpose Directive 2009/28/EC together with the Third Energy Package are under preparation. 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, monitoring and reporting obligations.

2. Biofuels and bioliquids are currently dealt with by the national legislation at all.

b. Progress made in 2012/2013

The NREAP is still being drafted. Recent progress can be noted related to the opening of the third round of tendering for small HPP concessions on eight river streams in Montenegro. This follows the two previous successful rounds which were finalised with agreements signed for 36 small HPPs on 13 river streams, having a total installed capacity of about 100 MW and total estimated annual production of 300 GWh.

The Concession Act for the Construction of Small Hydro Power Plants in Montenegro was adopted in June 2013. In March 2013, the first small HPP out of a series of 36 small hydropower plants based on 13 previously awarded concession agreements was built and put into operation. Jezerstica HPP on river Bistrica has an installed power of 1 MW and an estimated annual production of 3 GWh. Moreover, the two wind farm projects located in Krnovo (72 MW) and Mozura (46 MW) are advancing the construction phase.

c. State of compliance

Montenegro failed to adopt and submit the NREAP required under Directive 2009/28/EC on time, by 30 June 2013.

1. The legal and regulatory frameworks are in the process of completion as Montenegro envisages full compliance through transposition and implementation of Directive 2009/28/EC.

Significant progress has been made in the last years with the adoption of three Governmental Decrees: on feed-in tariffs (adopted for wind solar, biomass, small hydro, energy from biogas and waste as well as high-efficient cogeneration), on guarantees of origin and on privileged producers.

The requirements provided for in Article 16 of Directive 2009/28/EC related to access to and operation of the grids as well as rules for connection to grids for renewable energy producers are still not entirely implemented. More transparency is required from the network operators in relation to connection to the grids of the RES power plants

2. As regards the implementation of the *acquis* related to renewable energy in the transport sector, the situation is characterised by a complete lack of compliance. Even the indicative targets required by Directive 2003/30/EC five years ago have not been set up, not to mention other measures such as promotion, incentives and monitoring of the effects. Directive 2009/28/EC defines even more complex requirements for biofuels like sustainability criteria and certification which have not been transposed yet.

d. Conclusions and Priorities

Montenegro has to step up its effort to fully implement Directive 2009/28/EC as adapted by the Ministerial Council. The progress made so far mostly related to electricity and heat produced from renewable sources has to be complemented by the proper attention given to renewable energy in transport. Moreover, the administrative capacity of the Ministry of Economy in the renewable energy sector has to be enhanced to be able to cope with the challenges of this important sector in Montenegro.

The finalisation of the NREAP and the adoption of the binding renewable energy target of 33% by 2020 should be the first priority, immediately followed by the swift adoption of amendments to the Energy Law to transpose Directive 2009/28/EC. Moreover, the access and operation regime for renewable energy as well as conditions for connections to the grids of RES producers have to be finalised and made publicly available for applicants.

Finally, the entire legal framework for renewable energy in the transport sector has to be defined from scratch, including targets, potentials, sustainable criteria, a certification scheme and a certification body, incentives, promotion, monitoring etc. Efficient cooperation among many institutions will have to be established to ensure a timely fulfillment of the target of 10% by 2020.

3.5.9 SERBIA

Renewable Energy

a. Renewable energy in Serbia

1. Serbia currently operates 44 MW in small HPPs, 2 MW in biogas power plants, 0.5 MW installed in wind and 2.4 MW in solar PV. Four plants with a total annual capacity of 81,000 tons are currently in operation for biodiesel production, of which the Victoria Oil plant alone has a capacity of 75,000 tons per year. Eleven bioethanol producers dispose of capacities around 45,000 hl per year. One Serbian biodiesel producer is active on the market.

Serbia has a promising potential for renewable energy, including a largely untapped hydro potential, mainly for medium-sized and small HPPs, of about 4.6 GW, as well as 2.3 TWh/y for wind, 50 MW for geothermal and 33 MW for solar energy. Biomass from wood and agricultural waste has arguably the highest potential in Serbia among all renewable sources, at an estimated 19 TWh/y.

With the adoption of Directive 2009/28/EC, Serbia committed to a binding 27% target of energy from renewable sources in gross final energy consumption in 2020 compared with 21.2% RES share in 2009.

Article 52 of the Energy Law adopted in 2011 stipulates the adoption of the National Renewable Energy Action Plan (NREAP) by the Government including the national RES target committed in the Energy Community. The NREAP describes the policies and measures to achieve a 27% RES share in 2020. With the adoption by the Government Serbia has implicitly transposed the 27% RES target for 2020.

The Government adopted the NREAP in June 2013, together with a revised forecast document on the measures of cooperation between EU Member States and Energy Community Contracting Parties. The NREAP foresees achieving a 27.3% RES target in 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 renewable energy consumption for heating and 246 ktoe of renewable energy in transport.

So far, Serbia is also the only Contracting Party that plans to enter into a cooperation mechanism and to transfer excessive renewable energy to an EU Member State. According to the forecast document, a joint agreement between Italy and Serbia for the development of 10 small hydro-power plants was ratified by the Serbian Parliament. It is thus possible for the electricity produced in the newly built 10 sHPPs in Serbia estimated at 84 ktoe in the years 2016 - 2020 to be physically transferred and consumed in Italy and therefore count towards Italy's target.

The legal framework for renewable energy is split among several laws and by-laws. There is no intention to adopt a separate, comprehensive renewable energy law to transpose all requirements of Directive 2009/28/EC.

The Energy Law of 2011 defines the legislative framework for renewable energy, including the transport sector. It has transposed to a great extent the main principles arising from Directive 2009/28/EC related to support measures for renewable energy producers of electricity, heat and for biofuels producers, the definition of preferential producers as being eligible for a support scheme, the introduction of guarantees of origin for the electricity and heat RES producers.

The Energy Law foresees that implementing acts are to be adopted by the Government or Ministry responsible for energy. Four Governmental Decrees deal with feed-in tariffs for RES technologies, acquiring the status of privilege producers, and the incentive fee for the promotion of electricity from RES applied to end customers. The Law defines biofuels production as an energy activity which requires a licence issued by the regulator. Furthermore, the Law stipulates a responsibility for the Government to define the mandatory RES targets in the transport sector, measures to target achievements, as well as criteria of sustainability and incentives for biofuels production.

2. Some particular elements relevant for biofuels are defined by the amended Regulation on the Energy Development Strategy Action Plan for the period of 2007 - 2012, which introduced a blending obligation and set up mandatory targets for biofuel shares in transport fuels for the years 2010 (0.76%), 2011 (1.52%) and 2012 (2.28%). The National Renewable Energy Action Plan sets up a target for the transport sector of 10% by 2020, in line with Directive 2009/28/EC. Expressed in terms of gross final energy consumption, renewable energy in the transport sector will have to reach 246 or 267 ktoe, depending on the chosen scenario.

b. Progress made in 2012/2013

Serbia was the only Contracting Party to submit the NREAP to the Secretariat by the deadline of 30 June 2013 and a forecast document envisaging reaching the 27.3% RES target in 2020.

In January 2013, four implementing regulations were adopted by the Government related to acquiring the status of privileged producers, feed-in tariffs for various renewable energy technologies, incentive fees applied to end-users' tariffs to promote renewable energy, and allocation of the fees collected to promote renewable energy. By the same regulations, the previous capacity caps for wind and solar were raised to 500 MW and 10 MW respectively. The framework based on four Governmental Decrees for the support of renewable energy technologies has been finalised with the adoption of the framework contract for power purchase agreements between the *EPS* and the new RES producers.

A revision of the Energy Law is planned in the context of the amendments required to transpose the Third Energy Package by the end of 2013. It is also expected to transpose the remaining provisions of Directive 2009/28/EC, including the cooperation mechanisms.

During the revisions made to the Energy Law in 2012, provisions requiring the Ministry's approval for the construction of small HPPs with a capacity lower than 1 MW were introduced.

The regulatory authority adopted a methodology for calculating the costs of connection to the transmission and distribution networks. A "shallow approach" (costs of connection excluding the reinforcement of the grids) is applied for medium-sized and small producers, including renewable energy.

A Law on Incentives in Agriculture and Rural Development, adopted during the reporting period, covers energy crops sustainable for biofuels production, as a part of crops supported by financial incentives to agricultural and family agricultural enterprises. The total budget for incentives, as well as 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 is not required as a precondition for eligibility for incentives.

c. State of compliance

The adopted NREAP 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.

1. According to Directive 2009/28/EC, as adapted by the Ministerial Council, Serbia still has to notify the Secretariat of the ratified agreement between the Serbian Ministry of Energy, the Italian Ministry of Economic Development and the Italian Ministry of the Environment and the Protection of Natural Resources and the Sea, for the cooperation on joint RES projects. The agreement envisages cooperation for the development of 10 small HPPs and the physical export of 84 ktoe of electricity in the period 2016 - 2020 to count towards the Italian RES target.

Feed-in tariffs for various renewable energy sources have been adopted.

Amendments in the Energy Law also have to be made to complete the renewable energy framework related to the regime of access to the grids for energy from renewable sources. Currently, the Law does not include guaranteed or priority access nor priority dispatch for the electricity or gas produced from renewable sources.

Furthermore, the procedures for authorisation, licensing and network connections need to be further simplified and coordinated by the various institutions involved. The existing procedures remain the greatest barriers to the development of renewable energy projects. Out of 80 permits issued for renewable energy projects in the last five years, very few are advancing in the construction phase.

In 2012, the Energy Law was amended to include the approval of the Ministry responsible for energy for permits given for small HHPs lower than 1 MW. The measure was intended only to limit the validity of the energy permits to three years, however, the amendments created unjustified administrative burdens for the small producers, now required to undergo an authorisation procedure like other large RES projects, as well as for the Ministry.

With the adoption of the four Governmental Decrees in January 2013, Serbia increases compliance with the requirements of the renewable energy *acquis*, however several issues like access to and operation of the grids regime for RES, simplification of administrative procedures for RES plants and cooperation mechanisms remain to be transposed during the revision of 2011 Energy Law.

2. Serbia adopted obligatory blending targets for the period 2010 - 2012 by the amendments to the Regulation on the Energy Development Strategy Action Plan for the period of 2007 - 2012. However, this was not in compliance with Directive 2003/30/EC, since the targets have been set up as much lower shares than required by the Directive. Furthermore, the NREAP shows that even those lower targets have not been reached - the share of renewable energy in the transport sector is still 0%. Thus, by not transposing provisions on promotion, monitoring and reporting and zero level of biofuels consumption, the implementation of Directive 2003/30/EC completely failed, while the relevant requirements of Directive 2009/28/EC are only planned to be implemented in the course of 2013.

d. Conclusions and Priorities

In the reporting period, Serbia has made significant steps forward for completion of the renewable energy legislation and regulations to promote energy from renewable sources. However several issues need immediate attention.

The timely revision of the Energy Law to ensure compliance with Directive 2009/28/EC should be the main focus for the upcoming months. The regulatory framework for renewable energy needs to be completed and new renewable energy projects to become operational to put Serbia on track to meet the interim trajectory before 2020.

The legal framework for renewable energy in the transport sector has still to be established, including measures already described by Directive 2003/30/EC such as monitoring, promotion and reporting requirements. The ultimate priority is the introduction of sustainability criteria and a certification system for liquid biofuels. This was recognised by the Government in the NREAP. This is of utmost importance not only to be able to fulfil the domestic target in the transport sector, but also to enable producers using Serbian stock to enter the EU biofuels market.

3.5.10 UKRAINE

Renewable Energy

a. Renewable energy in Ukraine

1. 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 5.5% in 2009.

The Energy Strategy 2030 is currently under revision; it should also set out policies and measures to reach the renewable energy target. As it currently stands, the draft envisages a fourfold increase in the share of electricity produced from renewable energy sources, mainly of biomass, wind and solar energy.

Several legislative and regulatory acts have been adopted in recent years to create the framework for the promotion of renewable energy sources. The legislative framework for renewable energy consists of the Law on Alternative Energy Sources and of the Law on Alternative Fuels. The main institution responsible for the implementation of renewable energy policy is the State Agency for Energy Efficiency and Energy Conservation (SAEEEC), under the auspices of the Ministry of Economic Development and Trade of Ukraine.

The amendments to the Electricity Law of 2009 introduced a "green tariff" for electricity produced from renewable energy sources. The amounts of the green tariffs calculated by the Ukrainian Energy Regulatory Commission (NERC) are established individually for each business entity and each renewable energy technology until 1 January 2030. The green tariff is based on a coefficient applied to the retail electricity tariff. The current amounts were set at the end of 2012. The "green" coefficients, ranging currently from 1.2 for wind and small HPPs to 4.8 for solar PV, will be cut and decreased gradually over the next 15 years to adjust to the trend of technologies cost reduction, mostly for solar PV. A revision of the support scheme for renewable energy taking the form of the Green Tariff Law entered into force in April 2013 and was extended to cover electricity generated from biogas and solid waste from households.

In June 2011, the Ukraine adopted the Law on State Guarantees to Promote the Use of Renewable Energy Sources. According to this Law, the State guarantees, for the duration of the green tariff application, that all electricity produced will be purchased at the established green tariff.

Other support schemes for renewable energy are tax incentives, namely exemptions from corporate tax, VAT exemptions on certain imports and a 75% reduction of property tax on the purchase of land for green energy projects.

A Law on Local Content Requirements was adopted in 2011. It requires the usage of locally produced raw materials, fixed assets and services in the development of renewable energy facility as a precondition for producers to receive the green tariff for the renewable electricity generated. The usage of local products must not be less than 30% starting from 1 January 2012 and growing to 50% as of 1 January 2014. This requirement also applies to the electricity produced from solar energy, where a minimum of 30% of Ukrainian raw materials has to be included in the production cost of the solar modules/panels for the producer to qualify for the green tariff.

The policies and measures introduced over the last years have started to bear fruits. The installed RES capacities in 2012 almost doubled compared with the level at the end of 2011, reaching 571,6 MW, out of which 371,6 MW was solar PV and 193,8 MW was wind. The transport sector in Ukraine has been included in this development for more than a decade, mainly the export of raw materials for biofuel production in the EU. The exports of rapeseed, for example, increased 60 times over five years. The share of renewable energy in the domestic transport sector was at a level of 3.9% for the last seven years.

2. The framework for renewable energy in the transport sector consists of several acts, namely the Law on Energy Savings, the Law on Alternative Energy Sources, the Law on Alternative Types of Liquid and Gaseous Fuels, the Order Arranging Production and Use of Biogas, the Law on Amendments to Certain Legislative Acts of Ukraine Regarding Production and Use of Motor Fuels Containing Bio-Components, the Resolution on the Procedure for Granting Privileged Loans to Implement Investment Projects for Production of Alternative Sources of Fuel. There are also different resolutions and programs, such as the Target Economic Program for Energy Efficiency and Development of Energy Production from Renewable Energy Sources and Alternative Types of Fuel for the period of 2010 - 2015, and the Target Scientific and Technical Program for Development of Biological Fuel Types Production and Use.

Renewable targets for the transport sector are defined only for one type of fuel, bioethanol. For 2013, it 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 form 2016. The draft NREAP envisages biodiesel production in the long term, as well as usage of renewable

electricity and biogas. They are supposed to contribute to the 10% target for the transport sector by 2020.

The main incentive instrument for biofuels is tax exemption. Pursuant to the Tax Code, there is a zero tax for 100% bioethanol, used for blending in the further production of biofuels. Furthermore, 80% of the profit is not taxed if it comes from sales within Ukraine of its own bioethanol production, as a measure to increase biofuels domestic production and national consumption share, but it might be discriminatory towards other traders.

b. Progress made in 2011/2012

The NREAP has been drafted and its adoption is expected in autumn 2013.

SAEEEC finalised the draft Law on Efficient Utilisation of Fuel and Energy Resources. The draft Law tasks SAEEC to develop programmes intended to increase the use of energy from renewable sources, and to monitor the progress in meeting the targets.

A new Electricity Law is in the process of being drafted. The amendments include the removal of the wholesale electricity supplier, the creation of a bilateral market plus a day-ahead market. It also establishes Cost Allocation Imbalance Fund that will enable, among other things, financing of the support schemes for renewable energy producers and cogeneration based on windfall profits of hydro and nuclear generators. The creation of a certification system based on guarantees of origin for electricity produced from renewable sources is envisaged.

In June 2012, Parliament adopted amendments to the Law on the Cost of Connection to the Networks the majority of provisions of which entered into force in January 2013. According to these amendments, the costs of connections are split 50%-50% between the network operator and the applicant, including producers of renewable energy. However, the producer will have reimbursed its 50% contribution to the network operator over 10 years. The technical Rules for Connecting Electrical Installations to Power Supply Networks have been approved by NERC in January 2013. They define the timetable for connections based on capacity, and include a model connection agreement with the network operator. NERC is also finalising the methodology on calculating the fees for connection.

In 2013, the rules applied by the transmission system operator, *Ukrenegro*, to grid users were amended. Wind and solar power producers are now obliged to notify their schedule on a day-ahead basis to the network operator.

In the context of the Law on Local Content Requirements, a procedure for the determination of the share of raw materials, materials, fixed assets, works and services of Ukrainian origin in the cost of construction of renewable power facilities has been approved by NERC in 2013. The mechanism of calculating the share of raw materials, materials, fixed assets, works and services of Ukrainian origin in the cost of construction of RES projects is providing the regulator with the tool for determination if a RES producer meets the threshold quota of 30% in 2013 and 50% starting 2014, for access to the support scheme.

Investments in new renewable energy capacities doubled in 2012 compared with 2011, mostly in wind and solar. By December 2012, the wind generation capacities installed reached 193.8 MW, and solar capacity reached 380 MW. Energy from biomass remains underutilised in view of Ukraine's significant potential.

The Law on Amendments to certain Legislative Acts of Ukraine regarding Production and Use of Motor Fuels Containing Bio-Components, setting up the targets for bioethanol, was approved during the reporting period. The Secretariat has no information as to whether the Law on Development of Production and Consumption of Biofuels, which is supposed to set up the proper framework for biofuels, has been approved since it was drafted in early 2012.

c. State of compliance

Like most other Contracting Parties, Ukraine failed to comply with the obligation to adopt a NREAP by 30 June 2013.

1. Ukraine has developed the institutional framework to promote energy from renewable sources. However, this has to be further strengthened and completed in order to comply with all the requirements of the new renewable energy *acquis*.

First of all, the binding targets following from the adapted Directive 2009/28/EC have to be transposed in the legal framework together with the remainder of the Directive.

Guaranteed access to the networks, priority dispatch of RES electricity and mandatory purchase of renewable electricity by the wholesale electricity supplier has been ensured since 2009. Nevertheless, the amendments of the Electricity Law and the implementation of the new electricity model will have to pay due attention to the access to the network issues and operation of the grids for electricity produced from renewable sources.

The appointment of the appropriate institution to implement the system of guarantees of origin for energy produced from renewable sources has to be decided.

The legislation on the mandatory use of local content in constructing renewable energy facilities has been a concern of the Secretariat for some time already on account of its negative impacts on trade in renewable energy. In 2013, the Secretariat received a complaint by private investors under its dispute settlement rules, and is currently assessing whether or not to initiate enforcement action against Ukraine on the basis of a violation of Article 41 of the Treaty.

In relation to the new rules related to the cost of connections that will be split 50:50 between the network operator and the applicant, including RES producers, there is no indication how the connection assets will be treated by the regulator in the regulatory asset base of the network operator during the 10 years pay-back period. The procedure does not determine further how the costs are distributed between power producers that connect later to the grids and benefit from the improvement of old transmission lines or construction of new lines paid for by the previous RES producer. The grid operators will have to develop network investment plans to be adopted by the regulator to accommodate for the further development of renewable energy.

The cost and non-cost barriers identified by the Ukrainian Bioenergy Association's experts to be hampering the development of bioenergy were partly removed with the adoption of green tariff rates for electricity from biogas. However, more remains to be done to streamline the administrative procedures, to ensure transparency of the public institutions to facilitate investments in bioenergy projects and to create a market for energy from renewables used for heating considering the great potential that Ukraine has.

2. Many elements of Directive 2003/30/EC are already in place – the obligation to ensure information for the public, promotion and incentive measures, as well as the recently defined targets for only one type of fuel - bioethanol. However, requirements for monitoring and reporting need to be more consistently and transparently.

Directive 2009/28/EC imposes more demanding requirements in relation (also) to liquid biofuels. The time frame established by the draft NREAP - approval of an action plan only in November 2013 and the establishment of a certification scheme and a relevant body for liquid biofuels sustainability – does not indicate a timely implementation of the Directive by the end of 2013.

d. Conclusions and Priorities

Ukraine has a comprehensive framework for the promotion of energy from renewable sources and the process of completing the legislation to increase compliance with the requirements of Renewable Energy Directive 2009/28/EC has to continue. Ukraine has recognised the importance of using the significant renewable energy potential it has to alleviate the country's dependence on fossil fuel imports.

The finalisation and the adoption of the draft NREAP describing the policies and measures on how to reach 11% RES target in 2020 and 10% RES target in transport must be the main priority for Ukraine in the upcoming period.

The local content requirement remains an issue of concern and should be modified in line with the Energy Community Treaty.

The targets for different types of biofuels must be defined so as to correspond harmoniously, ensuring the transparency of the overall target in the transport sector and the consequent monitoring of target fulfillment. Furthermore, setting up sustainability criteria and an adequate certification scheme in line with Directive 2009/28/EC is a key requirement for boosting sales of raw material and/or biofuel production and in particular their export to EU markets.

3.6 Environment

A Regional Overview

3.6 ENVIRONMENT – A Regional Overview

a. Environment in the Energy Community

Energy and environment are two closely interlinked matters. The generation, transmission and consumption of energy raise a number of questions related to the protection of different environmental media. This can mean emissions into the air, water and soil, intensive land use, waste management, etc. By including pieces of the environmental *acquis* in the Energy Community Treaty, the link between energy policy and environmental protection is formalized in a legally binding form.

In the Contracting Parties, energy production is mainly based on fossil fuels (coal, oil and natural gas). This is mainly due to the availability of resources and related infrastructure as well as historical reasons. In most of the Contracting Parties (Albania, Bosnia and Herzegovina, the former Yugoslav Republic of Macedonia, Montenegro, Serbia and Ukraine), hydropower plays a significant role. Nuclear facilities are only operated in Ukraine.

According to Yale University's 2012 *Environmental Performance Ranking*, the environmental situation in the Contracting Parties varies to a large extent and there is a difference between Contracting Parties both in terms of policy instruments and the current state of play regarding environmental issues (e.g. adverse effects of emissions from energy production on human health and the environment, share of renewable energy sources, mitigation measures for climate change). In general, industrial pollution, waste management and protection of natural habitats remain the most important challenges for most of the Contracting Parties in their respective energy sectors. However, each Contracting Party has particular challenges in the environmental domain which are, strictly speaking, not directly connected to the environmental directives listed in the Treaty but to other environmental issues related to climate change, water and river basin management, sustainable consumption and production, waste management, etc.

b. The *acquis* on environment

The environmental *acquis communautaire* relevant to the Contracting Parties is defined in Article 16 of the Treaty and consists of four pieces of legislation:

Directive 85/337/EEC of 27 June 1985 on the Assessment of the Effects of Certain Public and Private Projects on the Environment, as amended by Council Directive 97/11/EC of 3 March 1997 and Directive 2003/35/EC of the European Parliament and of the Council of 26 May 2003 (the "Environmental Impact Assessment Directive");

Directive 1999/32/EC of 26 April 1999 relating to the Reduction in the Sulphur Content of Certain Liquid Fuels and amending Directive 93/12/EEC (the "Sulphur in Fuels Directive");

Directive 2001/80/EC on the Limitation of Emissions of Certain Pollutants into the Air from Large Combustion Plants (the "Large Combustion Plants Directive") and

Article 4(2) of Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds (the "Wild Birds Directive").

Furthermore, the Contracting Parties, under Article 14 of the Treaty, shall endeavour to implement Directive 96/61/EC concerning Integrated Pollution Prevention and Control (the "IPPC Directive"). 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. In general, the environmental *acquis* is applicable only to the extent that network energy (i.e. electricity, gas and oil) is concerned.

The original Contracting Parties had to implement the Environmental Impact Assessment Directive and the Wild Birds Directive upon the entry into force of the Treaty, by 1 July 2006, whereas for Moldova the implementation deadline expired at the end of 2010. Ukraine is under an obligation to implement the Environmental Impact Assessment Directive and the Wild Birds Directive by 1 January 2013 and 1 January 2015, respectively. The implementation deadline for the Sulphur in Fuels Directive was 31 December 2011 for the original Contracting Parties, 31 December 2014 for Moldova and 1 January 2012 for Ukraine.

The Large Combustion Plants Directive needs to be implemented by the end of 2017 by all Contracting Parties. This is the most complex piece of legislation to be implemented and will require major investment in either retrofitting old non-compliant thermal power plants or in replacing them with new energy generation facilities. The Environmental Task Force established by the Ministerial Council coordinates the preparation of the timely implementation of the Directive by the Contracting Parties. The main task to be accomplished relates to stock-taking of both the emission data and the legal framework in the Contracting Parties.

The main points of the four Directives on environment are as follows:

1. The Environmental Impact Assessment Directive aims at identifying and assessing environmental consequences of projects before a building or operation permit is granted. In terms of network energy, Annexes I and II to the Directive cover projects both in energy generation and transmission/distribution as well as storage of gas and petrochemical products. The key document within the environmental impact assessment procedure is the environmental impact study to be compiled and submitted by the developer to the competent authorities for review. The procedure itself can be divided into four main parts, namely (1) screening, i.e. the determination of whether an environmental impact assessment is required for a given project covered by Annex I (mandatory) or Annex II (non-mandatory); (2) scoping, i.e. the identification of the issues to be covered by the environmental impact study; (3) the elaboration and submission of the environmental impact study by the developer; (4) a review of the study by the competent authorities and the adoption of an authorization decision, before which (domestic) authorities likely to be concerned by the project, the public concerned and other countries likely to be significantly affected by projects with a transboundary impact are to be consulted.

The codified version of the Environmental Impact Assessment Directive 2011/92/EC has not yet been incorporated into the Energy Community.

2. The key objective of the Sulphur in Fuels Directive 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. In doing so, the Directive covers two kinds of fuel oil, i.e. refined oil used for combustion with the purpose of generating heat or power. The key element of the Directive consists in setting the maximum sulphur content for heavy fuel oil and gas oil. The sulphur content of heavy fuel oil must not exceed 1% by mass. The sulphur content of gas oil must not exceed 0.10% by mass. The Directive envisages certain derogations allowing for more lenient thresholds in case the Large Combustion Plant Directive is implemented. Furthermore, the Sulphur in Fuels Directive requires enforcement, namely by sampling and analysis, and determining penalties. The Directive also obliges the Contracting Parties to report each year on the sulphur content of the fuel oils covered by the Directive and used within their territory during the preceding year.

3. The overall aim of the Large Combustion Plants Directive is to reduce emissions of acidifying pollutants, particles, and ozone precursors. Control of emissions of different pollutants (sulphur dioxide, nitrogen oxides and dust) from large combustion plants plays an important role in the European Union's efforts to combat acidification, eutrophication and ground-level ozone. The Directive covers combustion plants which have a rated thermal input equal to or greater than 50 MW.

The Directive contains different emission limit values (for SO_2, NO_x and dust) for three categories of plants. Plants licensed after 26 November 2002 (the so-called "new new" plants) have to comply with stricter emission limit values while plants licensed on or after 1 July 1987 and before 27 November 2002 (the so-called "old new" plants) have to comply with less strict ones. Significant emission reductions from the so-called "existing plants" (licensed before 1 July 1987) should be achieved either by compliance with the individual emission limit values of the Directive or by applying a national emission reduction plan that achieves an overall reduction of emissions calculated on the basis of those emission limit values, or by a combination of the two approaches. A national emission reduction plan must address all three pollutants for all plants covered by the plan.

In April 2013, the European Commission proposed to the Ministerial Council an adaptation of the Directive with the aim to provide a framework for its implementation and to make use of the Directive's flexibility. This was necessary as the Treaty does not provide dates for the procedure to implement the provisions dealing with the national emission reduction plan.

Alongside this adaptation, the European Commission also proposes the introduction of the provisions relevant for large combustion plants of Directive 2010/75/EU on industrial emissions (integrated pollution prevention and control) by including its Chapter III and Annex V in the Energy Community environmental *acquis*. By the time of the preparation of this report, negotiations on both proposals are still ongoing.

4. The main aim of the Wild Birds Directive is the long-term conservation of naturally occurring wild birds in Europe. Article 4 of the Directive is a central element in that respect. It requires the adoption of special conservation measures concerning the habitat of certain endangered species, and in particular the classification of suitable territories as special protection areas. Article 4(2) of the Wild Birds Directive, as applicable in the Energy Community, requires the Contracting Parties to take similar measures for the protection of "regularly occurring migratory species". That Article thus requires the classification of the most suitable territories in number and size, applying ornithological criteria, as special protection areas (SPAs) for breeding, moulting, wintering and the migratory birds' staging posts along the migratory routes. In doing so, particular attention is to be paid to the protection of wetlands. Once created, a protection regime for the SPAs must be established, including both measures avoiding harmful human effects and measures preserving or improving the state of the SPA.

The new Wild Birds Directive 2009/147/EC has not been incorporated into the Energy Community.

c. Main findings

1. General remarks

In general, coping with environmental requirements in the energy sector constitutes a major challenge for all Contracting Parties. Although the specific reasons may vary by country, the common characteristics include the use of outdated technological solutions, extended use of facilities over their expected operational lifetime and lack of investments in abatement techniques over the past decades. Lack of sufficient administrative capacities seems to be a general issue as well.

2. Environmental Impact Assessment

Regarding the implementation of the Environmental Impact Assessment Directive, it should be noted that all Contracting Parties (with the exception of Kosovo*) ratified the Espoo Convention on Environmental Impact Assessment in a Transboundary Context as well as the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters. Although motivation for swift implementation is high (given the strong linkages to investments in particular from public donors), intensified efforts to improve the legal framework are necessary in a number of Contracting Parties. Croatia, the former Yugoslav Republic of Macedonia, Montenegro, Serbia and Kosovo* have reached a high level of transposition whereas Albania, Bosnia and Herzegovina, Moldova and Ukraine still have to considerably improve their legal framework.

While full and complete transposition is a prerequisite for proper practical implementation of the environmental *acquis* of the Energy Community Treaty, it is not sufficient in itself to comply with the obligations arising from the Treaty. In particular, the Secretariat will carry out individual assessments on projects falling under the scope of the Directive wherever notified about potential irregularities by individuals, authorities, investors or non-governmental organisations.

In **Albania**, the new Law on Environmental Impact Assessment already adopted on 7 July 2011, entered into force on 4 February 2013.

The new Law constitutes a significant step forward compared to the former Environmental Impact Assessment Law adopted in 2003. It generally follows the structure and the provisions of the Environmental Impact Assessment Directive, although certain provisions are not yet included and still need to be adopted. For instance, its Article 10 dealing with the applications for a permit by the developer mentions that for Annex I installations, the developer should submit the in-depth environmental assessment and for Annex II installations a preliminary assessment, both of which should be designed according to the type of the project. However, it does not mention what type of information these documents should contain while Annex IV of the Directive does contain a set of information in that respect. The new Law also contains concrete provisions on public participation which are also considered as a step forward.

Annexes I and II of the new Law are fully harmonized with those of the Directive and, on certain occasions, they even go beyond the Directive's requirements (e.g. the Directive requires a mandatory assessment for combustion installations with a heat output of 300 MW or more whereas the new Albanian law sets a threshold of 20 MW.

Meanwhile, seven key legal acts concerning environmental impact assessment are being drafted, out of which the most important one on the rules, responsibilities and timeframes for the procedures of environmental impact assessment was already adopted in January 2013. The other six legal acts, which are currently under adoption, are expected to further improve the level of transposition of the Directive.

During the reporting period, seventy-seven environmental impact assessments were carried out in Albania in the energy sector, of which one concerns power generation; six electricity transmission; two gas transmission, thirteen gas storage, forty-six hydro power plants, six wind farms and three photovoltaic installations.

Overall, it can be stated that Albania reached a high level of transposition of the Environmental Impact Assessment Directive with the adoption and the recent entry into force of the new Law. It has to be pointed out, however, that enhanced efforts on the implementation of the Directive would be necessary as the regional authorities as well as the Ministry of Environment, Forests and Water Administration still lack financial and human resources.

In **Bosnia and Herzegovina**, legislation at state-level is still missing. In all entities, laws on environmental protection have been in place since 2003 (Federation of Bosnia and Herzegovina), 2004 (Brčko District) and 2007 (Republika Srpska).

In the Federation of Bosnia and Herzegovina, transposition of the Directive is already well advanced as the 2003 Law sets out provisions for screening (called prior impact assessment) mandatory assessment (called EIS), the content of their documentation (including a non-technical summary), public participation and transboundary effects. It has to be pointed out, however, that certain details regarding public participation are missing as the 2003 Law only contains the requirement to organize a public hearing but no provisions on the content of the public notice. The Law only mentions that the public hearing should be organized through newspapers disseminated Federation-wide which is not up to current standards.

A new Law on Environmental Protection is currently being drafted which is supposed to further improve the level of compliance.

Altogether, twenty environmental impact assessment procedures have been finalized in the Federation of Bosnia and Herzegovina since September 2012. One of these procedures concerns the combined heat and power generation plant KTG Zenica, a candidate Project of Energy Community Interest. Another five requests for environmental impact assessments have been submitted to the competent authorities during the reporting period. Precise numbers on the exact amount of environmental impact assessments in the energy sector were not provided.

In Republika Srpska, a new Law on Environmental Protection was already adopted on 27 July 2012. It provides general rules on, amongst other things, environmental impact assessment (with the exception of transboundary effects and access to justice). Both Annex I and Annex II of the Environmental Impact Assessment Directive, listing the projects subject to an environmental impact assessment, are fully transposed. A Decree on Projects requiring an Environmental Impact Assessment and the Criteria for Deciding on the Need for an Environmental Impact Assessment, also adopted during 2012, implements these provisions. In principle, the adoption of these pieces of legislation would make Republika Srpska capable of properly implementing the Environmental Impact Assessment Directive. The documents however have been submitted to the Secretariat in national language only which hinders their detailed review.

One environmental impact assessment procedure has been finalized in the energy sector in Republika Srpska since September 2012 which concerns the retrofitting of the thermal power plant located in Ugljevik.

As regards the Brčko District, no information on developments during the reporting period, both from legislative and implementation aspects, has been submitted to the Secretariat.

Overall, subject to the above comments, all entities in Bosnia and Herzegovina have already reached a level of transposition that would make them capable of implementing the Environmental Impact Assessment Directive. However, all entities should intensify their efforts for the proper implementation of the provisions on public participation.

In **Croatia**, environmental impact assessment is governed by the Environmental Protection Act (2007) and the Regulation on Environmental Impact Assessment (2008). Although an adequate level of transposition has already been reached through this legislative framework, as was recognized by last year's report, there are certain shortcomings to be addressed by the new Environmental Protection Act and Regulation on Environmental Impact Assessment, which are currently being drafted by the Ministry of Environment and Nature Protection. The most significant changes will be related to Annexes I to III of the Regulation on Environmental Impact Assessment (which determine projects falling under the scope of the regulation, either by requiring a mandatory assessment or a screening procedure).

Altogether, 28 environmental impact assessment procedures have been finalized in Croatia since September 2012, including two thermal power plants and five wind farms which are candidates for Projects of Energy Community Interest. No precise number for environmental impact assessments in the energy sector was provided. The environmental impact assessment of the Plomin thermal power plant, which has been given a green light during the reporting period, has received criticism from environmental organizations by stating that the new plant would undermine the CO_2 emission reduction targets of the country and that the project fails to demonstrate compliance with local spatial planning requirements.

As confirmed in last year's report, Croatia reached an adequate level of compliance with the provisions of the Directive. The legislative work in progress is expected to improve that to full compliance by harmonizing all activities falling under the scope of the Directive with its requirements.

Kosovo* already transposed the requirements of the Directive into national law by the Law on Environmental Impact Assessment of 2010 and several acts of secondary legislation adopted during 2011. The competent authority is the Ministry of Environment and Spatial Planning.

During the year 2012, 149 requests for development consent were reviewed by the Ministry of Environment and Spatial Planning. By the end of March 2013, the Ministry received another thirty-six requests of which so far thirteen have been granted the permit and six were refused. No information was provided on the number of environmental impact assessments concerning projects in the energy sector.

The Kosovo* Government plans to build the 2x300 MW Kosova e Re (New Kosovo) plant to ensure security of supply and to replace the old Kosovo A TPP which is running already beyond its planned operational lifetime. It would be worth considering that the new plant meets the emission limit values of the Industrial Emissions Directive rather than the LCP Directive.

From the legislative perspective, Kosovo* is in the position to effectively implement the provisions of the Environmental Impact Assessment Directive. However, efforts for the practical implementation must be intensified and the administrative capacities must be strengthened.

In the former Yugoslav Republic of **Macedonia**, environmental impact assessment is covered by the Environmental Law of 2005 as amended in 2010 and 2011. No legislative changes were reported since then.

The Ministry of Environment and Physical Planning organised ten public hearings in the framework of environmental impact assessment procedures, three of which concern projects in the energy domain, namely the dam at Rechani as part of the hydrological system of the Orizarska River, the transport system for wet disposal of ashes at the thermal power plant in Oslomej and a solar plant in the municipality of Novaci. Altogether, nine development consents have been issued, three of which concern projects in the energy domain, namely the Rechani dam, the Oslomej thermal power plant and the hydropower plant Boshkov Most.

The former Yugoslav Republic of Macedonia, through the amendments carried out in 2010 and 2011 to the Environmental Law and the related by-laws, essentially transposed the Environmental Impact Assessment Directive. It is therefore

in the position to effectively implement it, provided that the institutional capacities are strengthened.

In **Moldova**, a Law on Environmental Impact Assessment was submitted to Parliament in 2012. The Law is supposed to replace earlier legislation from 1996 which only partially reflects international requirements and current best practices. However, the draft is still being reviewed by the competent parliamentary committees and, therefore, no changes of the legislative framework have been carried out since last year's report.

During the reporting period, Moldova participated in transboundary environmental impact assessment procedures as an affected party in two energy projects in the neighboring Romania, namely the power station in Galati and the construction of 400 KV power line in Balti-Suceava. The Ministry of Environment was also involved in the environmental impact assessment procedure for the construction of two nuclear power plant units in Khmelnitsky, Ukraine where it delivered a negative opinion on the environmental impact assessment. It was requested that consultations should be carried out between the national authorities and that the documentation of the impact assessment should be completed. No information on follow-up steps has been reported.

The currently existing legislation on environmental impact assessment in the country fails to adequately transpose the Environmental Impact Assessment Directive as the scope of projects subject to the Directive is not harmonized, its mandatory character is questionable and there are no effective provisions to ensure public participation. Even though the draft Law pending in Parliament could rectify the situation, Moldova currently fails to comply with the *acquis* in respect of environmental impact assessment and consequently, the Secretariat may have to follow up on this by taking enforcement action.

In **Montenegro**, as confirmed by last year's implementation report, an adequate level of transposition of the Environmental Impact Assessment Directive into national law was reached by the Law on Environmental Impact Assessment (in force since 2008, amended in 2010). This Law was subject to further amendments in May 2013 in order to achieve a higher degree of compliance with the provisions of the Environmental Impact Assessment Directive. Moreover, a Decree on Projects subject to an Environmental Impact Assessment is expected to be adopted by the Government by the end of 2013.

Altogether, at state-level, 55 environmental impact assessments have been carried out in the course of 2012, while 171 environmental impact assessments have been carried out at local level (in total 226). No information was provided, however, on the amount of environmental impact assessments that concern projects from the energy sector.

Overall, Montenegro has reached a level of transposition that puts it into a position to effectively implement the provisions of the Environmental Impact Assessment Directive. Therefore, efforts should be focused on the practical implementation of the legislative measures in environmental impact assessment procedures.

In **Serbia**, a Law on Environmental Impact Assessment has been in place since 2004. Following the entry into force of the new Directive 2011/92/EC in the European Union, Serbia, in late 2013 or early 2014, plans to revise the Decree on the Lists of Projects according to its National Plan for the Adoption of the *Acquis*, a document that sets targets for the adaptation of national legislation with the requirements of EU law in connection with Serbia's candidate status. As Directive 2011/92/EC is not part of the Energy Community environmental *acquis* for the time being and since it is a result of a codification exercise after the substantial amendments made to the Directive already in the past, Serbia could achieve full compliance even without these latest amendments.

As regards environmental impact assessments in the field of energy, four requests (including screening and scoping requests as well as complete environmental impact assessment studies) were submitted to the Ministry of Energy, Development and Environmental Protection, out of which three have been completed. Furthermore, an unknown number of requests was sent to and/or processed by local authorities.

Overall, Serbia is in the position to effectively implement the provisions of the Environmental Impact Assessment Directive. Therefore, efforts should be focused on the practical implementation of the legislative measures in environmental impact assessment procedures.

In accordance with its Accession Protocol, **Ukraine** had to implement the provisions of Directive 85/337/EEC by 1 January 2013. The authorities in charge are the Ministry of Ecology and Natural Resources and the Ministry of Energy and Coal Industry.

Despite several pieces of legislation (Law on Environmental Assessment, Law on Environment Protection, Law on Ecological Expertise) currently being in place, there is no coherent legislative scheme in Ukraine governing environmental impact assessment. A recent study on the implementation of the Espoo and Aarhus Conventions in Ukraine concluded that the legislative framework seems to be even less capable of fulfilling the obligations arising from those Conventions than it was in 2010 and since then, the situation has not been improved.

In May 2013, a draft Law on the Implementation of Provisions of Convention on Environmental Impact Assessment in Transboundary Context (Espoo Convention) was submitted to the Parliament of Ukraine. The draft intends to introduce a new legal framework for environmental impact assessment. The draft also proposes an amendment to the Law of Ukraine on Environment Protection, establishing a separate chapter on environmental impact assessment, setting rules for the submission and analysis of environmental impact assessment, the scope of activities as well as public participation. The draft, however, has not been submitted to the Secretariat for review and it is not yet foreseen when the Law could be adopted.

Currently, Ukraine falls short of compliance with the provisions of the Directive by failing to provide a legislative framework covering the activities listed in Annexes I and II of the Directive and by not setting rules for the range of information covered by an environmental impact assessment as well as public participation. This situation fails to demonstrate compliance with Ukraine's obligations arising from the Energy Community Treaty and should be rectified as quickly as possible. Otherwise, the Secretariat may have to follow up on this by taking enforcement action.

3. Wild Birds

As regards the implementation of Article 4(2) of the Wilds Birds Directive, a coherent and comprehensive monitoring of all measures required to protect migratory birds is essentially not possible with respect to the network energy sectors alone. The Secretariat is not aware of sector-specific protection measures in the Contracting Parties. Furthermore, the Secretariat has no access to information on the classification of Special Protection Areas (SPAs) as well as scientific and ornithological data related to migratory birds in each Contracting Party, necessary to assess the suitability of the classification (or non-classification) of SPAs by the Contracting Parties.

That being said, it can be concluded that in terms of compliance with the *acquis*, the level of transposition is generally satisfactory, whereas practical implementation, namely by designating special protection areas for migrating birds, is still to be achieved. There were a number of steps forward on this front during the last reporting period, especially in the field of designating new sites in the framework of the Convention on Wetlands of International Importance, especially as Waterfowl Habitat (the Ramsar Convention). Three wetlands in the Federation of Bosnia and Herzegovina (Hulovo Blaod, Bardača and Livanjsko polje), one site in Serbia (Koviljsko-Petrovaradinski rit), one transboundary site covering territories in Serbia and in Romania (Iron Gate National Park) and one site in Montenegro (Tivat Saline) were included on the list.

A preliminary list of SPAs in Serbia was elaborated based on the best available data. A total of 43 sites were selected in the framework of the Twinning Project "Strengthening Administrative Capacities for Protected Areas in Serbia (NATURA 2000)". A list with insufficiently covered species was drafted including 74 species and further work would be necessary to identify potential other species. The procedures, timetables and responsibilities were fixed to finalize the preliminary List of Special Protected Areas in Serbia, which will be made through amendments to the Decree on Ecological Network. This legislative work is currently in progress.

4. Sulphur in Fuels

The Secretariat's assessment and the associated reviews of the available legislation demonstrated that the Contracting Parties have progressed with different pace towards the achievement of full transposition and implementation of the Sulphur in Fuels Directive. As pointed out in the Secretariat's Implementation Report last year, regardless of the efforts to encourage the Contracting Parties to implement the obligations resulting from this Directive, the Secretariat was of the opinion that there are reasons for concern. Since these concerns could not be fully addressed with a number of Contracting Parties through bilateral dialogue, the Secretariat had to launch infringement proceedings against the Contracting Parties concerned (Albania, Bosnia and Herzegovina, the former Yugoslav Republic of Macedonia, Serbia, Ukraine) in the course of early 2013. All these procedures are still ongoing at the time of the preparation of this report.

The cases against Bosnia and Herzegovina, the former Yugoslav Republic of Macedonia and Serbia deal with improper transposition of the Directive's provisions into national law.

In the case of **Bosnia and Herzegovina**, 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 fails to implement the provisions of the Directive with regard to heavy fuel oils. Moreover, 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 and thereby does not comply with 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 0.10% by mass.

The former Yugoslav Republic of **Macedonia** received an opening letter due to the fact that there were no legally binding requirements on the sampling and analysis of petroleum products in place. Although certain standards setting out general requirements for the competence of testing and calibration for laboratories were adopted, the standard referred to in the Directive sets out precise technical measures for the determination of the sulphur content of petroleum products. Therefore, the situation in the former Yugoslav Republic of Macedonia could have not been considered as achieving compliance with the requirements of the Directive.

In the case of **Serbia**, the Secretariat concluded that while the Rulebook on the Technical and Other Requirements for 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. Moreover, the maximum sulphur content of the categories (according to the Serbian legislation) of HFO-S and HFO-T

are 3.00% by mass and 4.00% by mass, respectively, which constitutes of a breach of the requirements 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, therefore, the applicable Serbian legislation cannot be considered as correctly transposing the Directive.

The case against **Albania** addresses a breach by which Albania, via its national law, delayed the introduction of requirements in accordance with the Sulphur in Fuels Directive until end 2014 which is not acceptable.

Ukraine received an opening letter for not transposing the requirements of the Directive into national law by the deadline set out in the Energy Community Treaty.

The Contracting Parties provided their replies to the opening letters the analysis of which is underway at the time of the preparation of this report. Should the Contracting Parties concerned not be able to meet their obligations arising from the Treaty or provide a valid justification for the delays in transposition and implementation of the provisions of the Directive, the Secretariat may need to bring the cases to a further instance.

5. Large Combustion Plants

Implementing the provisions of the Large Combustion Plants Directive in the energy sector provides a significant challenge to all Contracting Parties of the Energy Community. Therefore, one of the main tasks of the Energy Community's Environmental Task Force is stocktaking for Directive 2001/80/EC in order to prepare the Contracting Parties for the implementation deadline of the Directive which was set at 31 December 2017. Contracting Parties should adopt a legislative framework compliant to the Directive by that deadline and they should implement its provision from 1 January 2018 onwards.

It has to be pointed out that the general situation of existing plants in the Energy Community Contracting Parties is not good mainly due to the combined effects of three issues: the considerable average age of the plants (a number of which are already running beyond their planned operational lifetime), low level of maintenance and a lack of significant investment in the sector over the past two decades.

At the time of preparation of this report, the Secretariat is commissioning a study analyzing the need for modernization of large combustion plants in the Energy Community. The main purpose of this study is to support governments, decision-makers, privately and publicly owned energy companies and private and public investors in their efforts to make Contracting Parties capable to meet their commitments under the Treaty by the implementation deadline. This can be achieved either by the retrofitting of existing large combustion plants, by a change of fuels or by replacing non-compliant plants, which are close to or beyond their operational lifetime, with new capacities. The consultant is expected to develop a scenario for each option. One of the main goals of the study is to provide a realistic investment need scenario at plant and Contracting Party level, taking into account the different modernisation options explored as well as the alternative scenario of replacing capacity (by either fossil fired plants or renewable energy sources). The outcome and the final results of the study are expected to be published in the course of the fourth quarter of 2013.

Judging by the contributions of the Contracting Parties at different meetings of the Environmental Task Force as they are reflected in the respective conclusions, a large majority of Contracting Parties plan to opt for the use of a national emission reduction plan, an alternative method for compliance under Article 4(6) of the Large Combustion Plants Directive. The national emission reduction plan provides a possibility to cover all plants within a Contracting Party's territory and to reach overall emission reductions in the sector. The provisions of the Large Combustion Plants Directive on the national emission reduction plan, however, cannot be implemented in a straightforward manner in the Contracting Parties as the deadlines included therein are already in the past. This was one of the driving motives of the European Commission, when it proposed, in April 2013, adaptations to the Directive. In its proposal, the European Commission suggested that the reference year for the calculation of the national emission reduction plans should be set at 2010 for the Contracting Parties and the deadline for submitting such a plan to the Secretariat (provided that the Contracting Party would opt for its use) should be 31 December 2015.

Meanwhile, the European Commission also suggested that Chapter III and Annex V of Directive 2010/75/EU on industrial emissions (integrated pollution prevention and control) should also be included in the Energy Community environmental *acquis* as of 1 January 2018 for new plants and 1 January 2022 for existing plants. In the European Union, these provisions will replace those of the Large Combustion Plants Directive as of 1 January 2016 (for existing plants; for new plants, they are already in force since 7 January 2013).

At the time of the preparation of this report, negotiations on both proposals are still ongoing.

3.7 Energy Efficiency

3.7.1 ENERGY EFFICIENCY – A Regional Overview

a. Energy efficiency in the Energy Community

Energy efficiency is a win-win solution in Energy Community countries (including positive effects on competitiveness, environment, security of energy supply, economic development, etc.), if it is properly supported by a solid legal and institutional framework, and has well designed and implemented policy measures and programmes.

Nevertheless, Contracting Parties are facing more barriers to advancing energy efficiency than EU Member States. This is linked to the "inherited" high energy inefficiency in most production and consumption sectors, its economic structure with a higher share of intensive industry, lower income per capita, high public budget constraints also linked to the severe impact of the global economic crisis; the institutional framework, although under development remains weak, and the legal and regulatory framework is still in progress; but one of the highest barriers remains the regulated, low electricity prices, especially in the residential sector, that do not incentivize efficiency measures.

The Energy Community on average, is approximately seven times more intensive in primary energy (0.83 toe/1000 USD)[1] than average EU-27 (0.12 toe/1000 USD), and respectively six times higher in final energy intensity (0.49 toe/1000 USD) than EU-27 with 0.08 toe/1000 USD, when calculated with the exchange rate parity. This is mainly due to the degraded state of the energy infrastructure, high transformation, transmission and distribution energy losses, and also low energy efficiency in the end-use sector, especially in buildings. On the other hand, the Energy Community consumed less energy per capita (1.38 toe/capita) than the EU-27 (2.38 toe/capita) in 2010, which is not an indication of efficiency, but development. Therefore, in the future we could and should expect that energy consumption will grow at a higher speed than in other regions, making energy efficiency even more relevant.

Although many existing barriers to energy efficiency are still slowing down the implementation of energy efficiency measures in Contracting Parties of the Energy Community, and the *acquis* is still under transposition and proper implementation, some very positive developments have been noticed in the Contracting Parties, in 2012 and 2013. In order to effectively tackle the common barriers and find common solutions and actions for the development and implementation of energy efficiency policy and programmes, the Secretariat is promoting and supporting integrated actions at regional level. Furthermore, the Secretariat is promoting and supporting extensive cooperation and coordination between countries themselves, and with other players of relevance for promotion of energy efficiency, such as the EU and pan-regional organizations, donors and International Financial Institutions, etc.

1. The acquis on energy efficiency

Based on the Ministerial Council's Decisions, adopted in December 2009, September 2010 and October 2011 respectively, the following three Directives became part of the Energy Community *acquis*:

1. Directive 2006/32/EC on Energy End-use Efficiency and Energy Services requires, among other things, 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). It also promotes the exemplary role of the public sector, the setting-up of energy efficiency criteria in public procurement, energy audits, procedures for monitoring and verification of energy savings, and other measures to improve energy efficiency and related services.

2. Directive 2010/31/EU on the Energy Performance of Buildings provides the legal framework for setting minimum energy performance requirements for new and existing buildings, ensuring certification of buildings and requiring regular inspections of heating and air conditioning systems. This Directive also requires Contracting Parties to define plans to ensure that by 2021, all new buildings are "nearly zero-energy buildings".

3. 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, establishes the legal framework for labelling and consumer information regarding energy consumption for energy-related products, i.e. products which are likely to have a direct or indirect impact on energy consumption. The delegated regulations deal with the labelling of specific energy-related products in greater detail, such as air conditioners, televisions, refrigerating appliances, washing machines etc.

The deadline for the transposition of Directives 2006/32/EC and 2010/30/EU was 31 December 2011, and 30 September 2012 for the transposition of Directive 2010/31/EU. The deadline for the 2nd National Energy Efficiency Action Plan (NEEAPs) to be developed under Directive 2006/32/EC was 30 June 2013 for the "old" Contracting Parties. On the other hand, Moldova and Ukraine as "new Contracting Parties" were obliged to prepare the 1st NEEAP in 2012, and the 2nd NEEAP in 2015. The NEEAP is an important national strategic document that should propose concrete measures and report on actions to reach the energy savings target, per economic sectors.

In October 2012, the European Union adopted the comprehensive Energy Efficiency Directive 2012/27/EU, with the aim to ensure the achievement of the Union's 20% headline target on energy efficiency by 2020, and to pave the way for further energy efficiency improvements beyond that date. This Directive repeals Directive 2006/32/EC as well as the so-called Cogeneration Directive 2004/8/EC. Following the discussions on the possible incorporation of this new Directive in the Energy Community, at the meetings of the Energy Efficiency Coordination Group and the Permanent High Level Group, the Secretariat prepared an Impact Assessment and drafted a Recommendation on the Implementation of Directive 2012/27/EU for adoption by the Ministerial Council in October 2013.

2. The Energy Efficiency Coordination Group and Donors' support

The Energy Efficiency Task Force, established by the Ministerial Council in December 2007, played an important role in preparing the adoption of the energy efficiency *acquis* and its implementation. The Task Force most recently developed, *inter alia*, a template for the 2nd NEEAP to be filled in and submitted by each Contracting Party. The Task Force is succeeded by the Energy Efficiency Coordination Group established by the Permanent High Level Group in March 2013. The Coordination Group provides not only a platform for sharing experience in the implementation of the current energy efficiency *acquis*, and discusses the incorporation of the Energy Efficiency Directive 2012/27/EU. It will also play an important role as implementation partner for the technical assistance and investment programmes set up by various donors for the Contracting Parties.

Donors' support includes the *Regional Energy Efficiency Programme for the Western Balkans (REEP)*. It is supported by the *Western Balkans Investment Framework (WBIF)* with a EUR 20 million grant from the EC and an additional EUR 3.35 million from bilateral donors through the *European Western Balkans Joint Fund*. *REEP* is managed by *EBRD*, which allocated EUR 125 million of loans through its credit facilities (*WeBSEFF II* and *WeBSEDFF*). *REEP* supports energy efficiency investments in both private and public sectors, and facilitates public sectors to play an exemplary role as stipulated in NEEAPs. *REEP* includes a very important technical assistance component, aimed at either developing or enhancing national regulatory frameworks. This will address market barriers, encourage investments in energy efficiency, support energy service companies (ESCO) and help markets to emerge.

In June 2013, the *WBIF* approved a study on biomass-based heating in the Western Balkans to be implemented by the *World Bank* in close cooperation with the Secretariat. The study will investigate the potential for energy efficient heating based on biomass and identify the best opportunities for investments in this activity. The *World Bank* also supports sustainable energy efficiency developments in buildings through its new regional programme "Scaling up Energy Efficiency in Buildings in the Western Balkans".

The *Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)* runs an "Open Regional Fund for Energy Efficiency", which provides support for an integrated monitoring and a verification platform for the implementation of NEEAPs. This constitutes a very valuable tool for evaluating savings against targets and identifying the need for corrective action. Other projects include capacity building for energy management in cities towards the goals of the EU Covenant of Mayors ("Capital Cities Initiative"), as well as strengthening of public dialogue on sustainable energy between different social groups and policy-makers.

USAID support will contribute to the Energy Efficiency Coordination Group in the framework of its regional programme "Enhancing Capacity for Low Emission Development Strategies". Support to Ukraine and Moldova and Observer countries (Armenia, Georgia) to develop legislative and institutional frameworks in line with Energy Community requirements is being provided by the European Union's INOGATE programme, under its sustainable energy component.

b. State of compliance

Most of Contracting Parties made progress in transposing and implementing energy efficiency *acquis*, as presented in following chapters. The reform focus shifted from primary to secondary legislation, often assisted through various donor programmes. Nevertheless, the legal framework progress is not uniform, as is described in detail below.

However, when it comes to actions and investments the results are more visible, even in the absence of the fully functional legal and institutional framework. In this respect, the preliminary assessment of the achievement of the intermediary energy savings target of approximately 3% between 2010 and 2012, as set by the NEEAP, (on average) indicated an 80% rate, which is promising, taking into account the circumstances at national and European level. These figures will be confirmed in the 2nd NEEAP through the reporting requirement.

Although there are many possible models of implementation of energy efficiency measures especially for the public sector, in the Contracting Parties the preferred one is based on public borrowing from international financial institutions. That is not sustainable on longer term. Therefore the challenge is to set new financing models that rely less on public, and more on private funding. This approach will be further supported by most recent regional investment programmes (including *EBRD/REEP*, and the *World Bank's*). For these, further cooperation and involvement of local authorities is necessary. The Secretariat will continue to work with regional organizations like *NALAS*, and promote an active role for municipalities, including their participation in the EU flagship initiative "Covenant of Mayors", as well as in the implementation of concrete investment projects.

1 GDP expressed in USD at 2005 constant prices

1. All Contracting Parties made progress in transposing Directive 2006/32/EC during 2012 and 2013. More advanced in transposition are Bosnia and Herzegovina (Republika Srpska), Croatia, the former Yugoslav Republic of Macedonia, Moldova, Montenegro, Serbia and Kosovo*, which have all adopted legislation on energy efficiency. Albania, Bosnia and Herzegovina (Federation of Bosnia and Herzegovina) and Ukraine, on the other hand, have only prepared drafts for energy efficiency laws without yet adopting them (by the date of this report). The Secretariat is currently preparing enforcement action against these countries.

Six out of seven initial Contracting Parties have submitted the 1st NEEAPs as required by Article 14 of Directive 2006/32/EC, with the exception of Bosnia and Herzegovina. That country's draft NEEAP has still not been approved by the responsible administration(s). The Contracting Parties are now developing the 2nd NEEAP which was due by 30 June 2013. Croatia adopted the 2nd NEEAP in February 2013, while Kosovo* submitted a draft 2nd NEEAP to the Secretariat in May 2013, followed by Serbia in June 2013 and the former Yugoslav Republic of Macedonia in July 2013.

Due to their later accession to the Treaty, Moldova and Ukraine had received extended deadlines (2012) for the implementation of Directive 2006/32/EC. The 1st NEEAP of Moldova was adopted and submitted in January 2013. In Ukraine, a draft NEEAP was finalised. Its adoption by the Government is still pending.

2. Most of the Contracting Parties (excluding Bosnia and Herzegovina and Serbia) had previously transposed the (old) Labelling Directive 92/75/EEC, as well as certain implementation directives for specific household appliances. Following the incorporation of the recast Directive 2010/30/EU and Delegated Acts in the Energy Community, with an overall implementation deadline of 31 December 2011, the Contracting Parties started to update or adopt (new) legislation in 2011 and 2012.

By the date of this report, Croatia, the former Yugoslav Republic of Macedonia and Kosovo* have adopted legislation transposing the framework Directive 2010/30/EU and also, in some cases, the Delegated Regulations adopted under that Directive. Bosnia and Herzegovina (Republika Srpska) Moldova, Montenegro and Serbia have so far failed to transpose the Implementing Directives or the new Delegated Regulations. They have adopted laws that transposed the Framework Directive, but a drafted secondary legislation that implements the Delegated Regulations is pending approval by the respective Governments.

The same goes for Albania, the Federation of Bosnia and Herzegovina and Ukraine. These announced that they will transpose the main provisions of the Labelling Directive through specific laws on energy efficiency which are still at the drafting stage.

3. Directive 2010/31/EU on the Energy Performance of Buildings is generally recognized as the most complex piece of energy efficiency legislation. Its implementation requires cooperation between various stakeholders and a broader spectrum of activities. In order to support the Contracting Parties in this exercise, a regional roadmap was developed as part of the Secretariat's study on "Energy Efficiency in Buildings in the Contracting Parties of the Energy Community" (2012). Despite this, only some requirements of the Directive were transposed by the Contracting Parties, including the identification of the main responsible bodies and setting of some technical standards. Otherwise, the situation in the Energy Community is still characterized by an incomplete and insufficient legal and institutional framework. The certification of buildings is one of the most advanced areas of transposition. In this respect, progress was made by Bosnia and Herzegovina, Croatia, Moldova, Montenegro, Serbia and Ukraine. The most common problems with implementation include the development of a proper scheme for cost-optimal calculation, software for energy performance certification, preparation of national building stock inventories, the climatic data base, as well as training and education, and information campaigns. The Secretariat plans to address these issues in the Energy Efficiency Coordination Group, and prepare a "model" approach that could be used by all Contracting Parties, with the technical assistance of donors (*REEP*, *GIZ ORF Energy Efficiency*, *USAID*).

4 Network of Associations of Local Authorities (NALAS)

3.7.2 ALBANIA

Energy Efficiency

National Energy Efficiency Action Plan (NEEAP)*				
Period covered by NEEAP		2010 – 2018		
Overall energy savings target - Directive 2006/32/EC (ktoe / % / year)		168 / 9 / 2018		
Key institution(s) in charge		Ministry of Economy, Trade and Energy (METE) National Agency of Natural Resources (AKBN)		
Main data and energy efficiency indicators**		2009	2010	2011
Total primary energy supply (TPES)	ktoe	2,068	2,059	2,173
Energy Intensity (TPES/GDP)	toe / 1,000 USD	0.20	0.19	0.20
TPES/Population	toe/capita	0.65	0.64	0.68
Total final energy consumption (TFEC)	ktoe	1,911	1,937	1,925
Share of TFEC by sector – Residential	%	25%	25%	26%
Services		9%	8%	9%
Industry		12%	15%	16%
Transport		38%	38%	40%
Others		7%	8%	7%
Non-energy use		9%	6%	2%

* Source: 1st NEEAP of Albania, available under: http://www.energy-community.org/portal/page/portal/ENC_HOME/AREAS_OF_WORK/ENERGY_EFFICIENCY/NEEAPs
** Source: International Energy Agency

a. Energy efficiency in Albania

Albania's Law on Energy Efficiency of 2005 is still in force. Despite the fact that this Law addresses many important issues (such as the development of national energy efficiency programmes, energy audits, the energy efficiency fund, etc.), it has never been properly implemented. Most of the implementing norms were not adopted, and the envisaged energy efficiency fund was never created.

Albania's 1st National Energy Efficiency Action Plan (NEEAP) was adopted by the Government in September 2011. It envisages achieving 1.5% and 9% energy saving targets until 2012 and 2018 respectively. The NEEAP designates the Ministry of Economy, Trade and Energy (METE) and the Agency for Natural Resources (AKBN) as responsible bodies for the overall control and monitoring of its implementation. However, the lack of a supportive framework and dedicated public funding, especially in the public sector, combined with unclear delineation of implementation responsibilities between AKBN and METE, make implementation of most of the planned energy efficiency measures unlikely.

The Law on Indication by Labelling and Standard Product Information of the Consumption of Energy and Other Resources by Household Appliances of April 2009 transposed the old Directive 92/75/EEC. The Law puts an obligation on sellers to provide information to consumers relating to the consumption of electricity, other forms of energy and essential resources through a fiche and a label attached to household appliances.

The Law on the Conservation of Thermal Energy in Buildings of 2002 establishes the legal basis for setting up secondary rules and taking mandatory action for the conservation of thermal energy in buildings. The Energy Building Code of 2003 has still not been properly enforced.

b. Progress made in 2012/2013

No progress was achieved during the reporting period. A new and overdue Energy Efficiency Law has existed in draft form since 2011. The draft was developed in cooperation with the Secretariat. It has still not been adopted. In its last Implementation Report, the Secretariat has already identified adoption as a priority. The adoption of this framework Law is the basic precondition for the transposition of (Energy Service) Directive 2006/32/EC. The Public Procurement Law also needs to be amended for that purpose. Besides Directive 2006/32/EC, the draft Energy Efficiency Law is also needed to transpose the main provisions of the (Energy Performance of Buildings) Directive 2010/31/EU and the (Energy-Labelling) Directive 2010/30/EU. Furthermore, the Energy Building Code has not been amended, as recommended by the Secretariat, nor has implementation action been taken. The Secretariat is not aware of any institutional reinforcement, another precondition for successful implementation of the *acquis*.

The adoption of the 1st NEEAP in 2011 was not adequately followed-up and supported by the public sector, including timely adoption of the Energy Efficiency Law and development of secondary legislation, as well as allocation of financial sources for its implementation. Some small scale proj-

ects, training and pilot activities are taking place, including a programme for education and implementation of energy monitoring and management systems in municipalities. The existing barriers to the implementation of the 1st NEEAP have also been addressed under the umbrella of the Task Force and Coordination Group in 2012 and 2013 (thematic presentations and discussions, development of NEEAP template and organization of workshops on 2nd NEEAP, available financing mechanisms etc.). However, the process of preparation of the 2nd NEEAP (due by 30 June 2013) is very slow in Albania (the draft NEEAP is still not prepared), and there is a risk of serious delay in finalization and submission.

c. State of compliance

1. Due to the lack of transposition, Albania broadly fails to comply with the Directive 2006/32/EC relating to Energy End-use Efficiency and Energy Services. The Secretariat is currently preparing enforcement action against the country.

The 1st NEEAP was adopted by the Government in line with Articles 4 and 14 of Directive 2006/32/EC. It includes the calculation of the national overall and intermediate energy saving targets and the establishment of a comprehensive package of measures to achieve it, including horizontal measures and measures in each end-use sector. The submission of the 2nd NEEAP to the Energy Community Secretariat was due by 30 June 2013, but this deadline was not met by Albania, due to the slow process of preparation, and the perceived lack of commitment of the responsible institutions.

2. With regards to the Energy Community's labelling requirements, the Law on the Indication by Labelling and Standard Product Information of the Consumption of Energy and Other Resources by Household Appliances of 2009 transposed the old Directive 92/75/EEC, but not the recast Directive 2010/30/EU. The adoption of relevant secondary legislation on energy labelling of household appliances is still pending upon the adoption of the Energy Efficiency Law.

3. With regard to energy efficiency in buildings, the draft Law on Energy Efficiency (when adopted) will transpose the main provisions of the Directive 2010/31/EU, to be followed up with relevant secondary legislation. The adoption of this Law is still pending, while the deadline for transposition of Directive expired on 30 September 2012.

d. Conclusions and Priorities

Albania's performance in the area of implementing the energy efficiency *acquis* is one of the poorest in the region. For several reporting periods, no progress has been made with transposition or implementation of the *acquis*. The Secretariat will take action against this. It can only reiterate that the first priority of Albania in 2013 should be the adoption of the existing draft Energy Efficiency Law. The lack of its adoption constitutes the main bottleneck for the transposition of all three pieces of Energy Community *acquis*, as well as further implementation through implementing regulations. Furthermore, Albania immediately needs to adopt and submit the 2nd NEEAP, following requirements of the NEEAP template developed by the Energy Efficiency Coordination Group. Stronger promotion of the exemplary role of public sector is equally important for effective implementation of Directive 2006/32/EC, including the creation of proper legal, institutional and financial frameworks, incorporation of energy efficiency criteria in public procurement codes etc. Another priority should be the development of legislation and regulation dealing with energy efficiency in buildings in order to comply with Directive 2010/31/EU, by adopting the Law and updating the existing Building Code.

3.7.3 BOSNIA AND HERZEGOVINA

Energy Efficiency

National Energy Efficiency Action Plan (NEEAP)*				
Period covered by NEEAP			2010 – 2018	
Overall energy savings target - Directive 2006/32/EC (ktoe / % / year)			298 / 9 / 2018	
Key institution(s) in charge			State Ministry of Foreign Trade and Economic Relations and entity ministries in charge of energy and buildings	
Main data and energy efficiency indicators**			2009	2010	2011
Total primary energy supply (TPES)		ktoe	6,161	6,451	7,095
Energy Intensity (TPES/GDP)		toe / 1,000 USD	0.48	0.50	0.54
TPES/Population		toe/capita	1.64	1.72	1.89
Total final energy consumption (TFEC)		ktoe	3,031	3,222	3,339
Share of TFEC by sector	Residential	%	26%	26%	25%
	Services		0%	0%	0%
	Industry		17%	18%	20%
	Transport		38%	35%	34%
	Others		15%	16%	16%
	Non-energy use		5%	5%	6%

* Source: draft 1st NEEAP of Bosnia and Herzegovina
** Source: International Energy Agency

a. Energy efficiency in Bosnia and Herzegovina

In Bosnia and Herzegovina the entity Ministries are in charge of developing the energy efficiency legislation. Both entities have established an Energy Efficiency and Environmental Fund, which are funded mostly by fines imposed on environmental polluters.

The state of transposition of the *acquis* in Bosnia and Herzegovina is still not adequate. New legislation transposing Directive 2006/32/EC exists in Republika Srpska (Law on Energy Efficiency adopted in June 2013), but not in the Federation of Bosnia and Herzegovina and Brčko District.

For 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, minimum energy performance requirements for new and existing buildings, certification of buildings etc.) and creates a 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, secondary legislation on methodology for calculation of energy performance of buildings, energy audits of buildings and energy certification of buildings has been adopted, and implementation started. A training scheme for energy certification of buildings is in place. Besides that, Bosnia and Herzegovina adopted a number of European Committee for Standardization (CEN) standards which support the implementation of Directive 2010/31/EU, including the calculation of the energy performance of buildings.

As regards the transposition of the Labelling Directive 2010/30/EU, the 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 and partially in Republika Srpska (the energy efficiency law was adopted in June 2013, secondary legislation yet to be).

On a local level, 14 cities (including Sarajevo) are signatories of the EU Covenant of Mayors initiative, and consequently are committed to developing Sustainable Energy Action Plans (SEAPs).

b. Progress made in 2012/2013

Bosnia and Herzegovina achieved certain progress in transposition of the energy efficiency directives in the reporting period, especially in Republika Srpska. By the end of 2012, energy efficiency primary and secondary legislation was drafted in both entities, with the Secretariat's active involvement: Energy Efficiency Laws, NEEAPs and other by-laws. This package of legal acts is intended to transpose all three key energy efficiency directives, when adopted. The drafts also foresee institutional strengthening.

The new Law on Energy Efficiency and the Law on Spatial Planning and Construction were adopted in Republika Srpska in 2013. In the Federation of Bosnia and Herzegovina, the draft Law on Energy Efficiency was finalized and was submit-

ted to the Parliament for adoption in 2013. The Federal Ministry of Physical Planning is still working on the transposition and implementation of the Energy Performance of Buildings Directive. The new Law on Energy Efficiency will take over some main provisions of the current Law on Spatial Planning related to the implementation requirements of Directive 2010/31/EU, while the remaining ones will be transposed by amending the secondary legislation.

Other by-laws have already been drafted in both entities, and are waiting to be adopted, including a Regulation on the Content of NEEAPs, a Regulation on Labelling of Energy-Related Products, Regulation on Methodology for Calculating the Energy Performance, Setting Minimum Energy Performance Requirements and Certification of Buildings etc.

The draft of the 1st NEEAP was submitted to the Secretariat in February 2012. Besides sector-specific measures to be taken at entity level, the proposed horizontal and cross-sectoral measures would create the proper framework for effective implementation. However, 3 years after it was due, the NEEAP has still not been adopted. The reason for this failure is the fact that the state-level NEEAP must be based on the entity NEEAPs, which have not been adopted. In the Federation of Bosnia and Herzegovina, the NEEAP is stuck in parliamentary procedure. In Republika Srpska, the NEEAP is still being discussed between the competent ministries. The entities recently initiated the process of updating the 1st NEEAPs and preparing the 2nd NEEAP, with the aim of submitting both for adoption at the same time.

In Brčko District, there has been no progress on transposition of the energy efficiency *acquis* requirements into local legislation.

c. State of compliance

1. Republika Srpska recently adopted the Law on Energy Efficiency and the Federation of Bosnia and Herzegovina is in the final phase of approval of a similar Law. However, in the absence of a full package of primary and secondary legislation transposing Directive 2006/32/EC (as well as the adoption of 1st NEEAPs) in both entities and Brčko District, Bosnia and Herzegovina fails to comply with this Directive. The Secretariat is currently preparing enforcement action against the country.

2. In the absence of legislation transposing Directive 2010/30/EU, Bosnia and Herzegovina fails to comply with Directive 2010/30/EU.

3. The degree of compliance with Directive 2010/31/EU on the energy efficiency in buildings differs between the entities. Overall, Bosnia and Herzegovina still fails to comply with that Directive.

In the Federation of Bosnia and Herzegovina the Directive's requirements related to 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 respective by-laws. However, certain issues related to the Directive still need to be completed, i.e. cost-optimal calculations, definition and plans for achievement of nearly zero-energy buildings etc.

In Republika Srpska, the main requirements of Directive 2010/31/EU are transposed through the new Law on Physical Planning and Construction of April 2013, and will be further transposed through secondary legislation.

d. Conclusions and Priorities

At the date of this report, Bosnia and Herzegovina is still lagging behind the other Contracting Parties in meeting the Energy Community's requirements in the area of energy efficiency. The country has still not developed an appropriate legislative and institutional framework for energy efficiency in line with the *acquis*. Once again, the highest priorities for Bosnia and Herzegovina must be the immediate adoption of the energy efficiency laws by the remaining entity, as well as the accompanying secondary legislation.

The second priority is the adoption of the NEEAP, as well as legislation dealing with energy efficiency in buildings in the Federation of Bosnia and Herzegovina. Moreover, the coordination between authorities at entity and state-level needs to be improved as a precondition for progress in 2013 and beyond. State structures for monitoring the implementation must be established and adequate financial support be provided. This includes the setting up of energy efficiency agencies.

3.7.4 CROATIA

Energy Efficiency

National Energy Efficiency Action Plan (NEEAP)*				
Period covered by NEEAP		2008 – 2016		
Overall energy savings target - Directive 2006/32/EC (ktoe / % / year)		472 / 9 / 2016		
Key institution(s) in charge		Ministry of Economy; Ministry of Construction and Physical Planning; Ministry of Environmental and Nature Protection; Centre for Monitoring Business Activities in the Energy Sector and Investments; Environmental Protection and Energy Efficiency Fund		
Main data and energy efficiency indicators**		2009	2010	2011
Total primary energy supply (TPES)	ktoe	8,722	8,564	8,439
Energy Intensity (TPES/GDP)	toe / 1,000 USD	0.19	0.19	0.18
TPES/Population	toe/capita	1.97	1.94	1.91
Total final energy consumption (TFEC)	ktoe	6,930	6,899	6,747
Share of TFEC by sector	Residential	%	26%	27%	28%
	Services		10%	11%	11%
	Industry		21%	20%	19%
	Transport		30%	29%	29%
	Others		4%	4%	4%
	Non-energy use		9%	9%	9%

* Source: 2nd NEEAP of Croatia, available under: http://www.mingo.hr/default.aspx?id=3251
** Source: International Energy Agency

a. Energy efficiency in Croatia

The legal framework for energy efficiency in Croatia is well developed. The Act on Energy End-Use Efficiency of 2008 (amended in 2012) transposes most of the provisions of Directive 2006/32/EC. In addition, the Act on Public Procurement of 2007, as amended in 2008, determines energy efficiency as one of the possible criteria in public tenders. The Regulation dealing with public procurement still needs to be adopted to enable proper implementation.

Based on the National Energy Efficiency Programme of 2010, the 1st National Energy Efficiency Action Plan (NEEAP) was adopted in April 2010, and the 2nd NEEAP in February 2013. An energy saving target of 9% (472 ktoe) was set for 2016. The Ministry of Economy is responsible for the overall monitoring of energy efficiency policy implementation and reporting, in close cooperation with the Ministry of Construction and Physical Planning (in charge of buildings). An Environmental Protection and Energy Efficiency Fund provides financial support for the implementation of national energy efficiency policy measures, as well as the monitoring and verification of energy savings. Furthermore, a new Centre for Monitoring Business Activities in the Energy Sector and Investments was mandated to provide expertise in the process of implementing strategic projects and energy-efficiency programmes. This institution corresponds to the role of an agency for energy efficiency envisaged by Directive 2006/32/EC, and significantly strengthens the institutional framework for the implementation of the NEEAP.

The requirements of the Labelling Directive 2010/30/EU are transposed by the Ordinance on Indication by Labelling and Standard Product Information of the Consumption of Energy and other Resources by Energy-Related Products of 2011. Certain provisions (i.e. definitions and new requirements of Directive 2010/30/EU) were also inserted in the amendments made to the Energy Law in 2012. Four ordinances on the energy efficiency labelling of washing machines, dishwashers, refrigerating appliances and televisions were adopted at the same time (which updated and completed the Ordinance of 2011). A State Inspectorate is responsible for ensuring compliance with the legislation.

Directive 2010/31/EU on the Energy Performance of Buildings was transposed by the Act on Physical Planning and Construction (amended in 2012), and the Act on Energy End-Use Efficiency (provisions on certification of buildings). The buildings sector is further regulated by secondary legislation, namely a Technical Regulation on Heating and Cooling Systems for Buildings of 2008, a Technical Regulation on Rational Use of Energy and Thermal Protection in Buildings of 2008, as amended in 2009, an Ordinance on Certification of Energy Performance of Buildings of 2010, and an Ordinance on the Requirements and Criteria to be met by Energy Auditors and Energy Certifiers of Buildings of 2008, as amended in 2009.

The development of the energy services market began in 2003 when the public company *HEP-ESCO* was established. *HEP-ESCO* is still the only active Energy Savings Company (ESCO) in Croatia, a situation that might and should change

in the future. The development of an ESCO market depends on the adoption of proper regulation.

Among the information and education activities that have been systematically implemented since 2006, a toll-free info-line and energy efficiency info-points for citizens in several cities, as well as a comprehensive national media campaign, deserve to be mentioned.

b. Progress made in 2012/2013

Energy efficiency continues to play an important role in Croatian energy policy, and significant progress can be reported over the period covered by this report. Besides implementing various energy efficiency programmes, Croatia updated and strengthened its legislative, strategic and institutional framework to comply with the directives of 2010.

The recent amendments to the Act on Energy End-Use Efficiency (2012) and the Act on Physical Planning and Construction (2012) introduced several important improvements. The latter introduced a national energy management information system in public buildings that was made mandatory, which follows the requirements of the new EU Directive 2012/27/EU. The same Law also provides the basis for the establishment of a single authorisation system for energy auditors, and one single methodology for conducting energy audits and certification of buildings. Remote energy metering is now required for big public consumers. The amended Act on Energy End-Use Efficiency will further promote ESCO contracting and investments in the public sector.

In practical terms, it appears that the 3% target set for 2010 (157 ktoe) was achieved, through a combination of implementation of measures envisaged by the 1st NEEAP, their indirect impacts and technological progress. Croatia adopted its 2nd NEEAP in February 2013, in line with the European Commission's template. The Ministry of Construction and Physical Planning in 2012 established a special Directorate for Energy Efficiency and is planning ambitious measures in the buildings sector, including a comprehensive programme for retrofitting public buildings. With the adoption of the 2nd NEEAP in 2013, the Centre for Monitoring Business Activities in the Energy Sector and Investments was established as described above.

Two ongoing measures in the public sector are worth mentioning, one on "Systematic energy management in cities and counties" and "House in Order". Its objective is capacity building in the public sector, at central and local level. Further important progress achieved has been the development and involvement of regional energy agencies, as well as the increasing interest of local authorities to join the Covenant of Mayors initiative, where currently more than 20 Croatian cities are participating.

c. State of compliance

1. The requirements of Directive 2006/32/EC relating to the adoption of NEEAPs, energy savings targets, and institutional setup have been transposed with the adoption of the 2nd NEEAP and the amendments to the Act on Energy End-Use Efficiency of 2012. The latter transposed the missing requirements of Directive 2006/32/EC for proper implementation of the Directive; regulation dealing with public procurement and on energy audits should be adopted.

2. Croatia had previously transposed the "old" Labelling Directive 92/75/EEC and its implementing directives. The recast Directive 2010/30/EU was partly transposed by the Labelling Ordinance of 2011. The new Energy Law amended in October 2012 included certain missing provisions. A Regulation covering certain products such as air conditioners, so far not covered by the Ordinance of 2011, was also developed.

3. Directive 2010/31/EC on Energy Performance of Buildings is partly transposed through the Act on Energy End-Use Efficiency, the Act on Physical Planning and Construction and the above-mentioned by-laws. All relevant CEN standards were adopted. What remains to be done is the definition of reference buildings and cost optimal analysis, as well as the calculation methodology for minimum energy performance requirements, and for nearly zero-energy buildings concept and strategies.

d. Conclusions and Priorities

In addition to making significant progress and a positive overall development in the area of energy efficiency at national level, Croatia played an exemplary role for other Contracting Parties in the process of transposition and implementation of the energy efficiency *acquis*. It supported them with advise, on exchanged good and bad practices, in very concrete terms.

The priority for Croatia in the next period should be the finalisation of the remaining regulation(s) required under the Act on Energy End-Use Efficiency, with an emphasis on the stimulation of the energy services market and energy audits. The Secretariat further encourages Croatia to become a pilot country in the utilization of the new Regional Energy Efficiency Programme (REEP) managed by *EBRD*, and to implement its planned programme for the retrofitting of public building.

Another priority should be the adoption of the remaining acts regarding energy efficiency in buildings (i.e. dealing with building certification, cost-optimal calculation methodology and nearly zero-energy buildings strategies).

3.7.5 KOSOVO*

Energy Efficiency

National Energy Efficiency Action Plan (NEEAP)*				
Period covered by NEEAP			2010 – 2018	
Overall energy savings target - Directive 2006/32/EC (ktoe / % / year)			92 / 9 / 2018	
Key institution(s) in charge			Ministry of Economic Development; Kosovo Energy Efficiency Agency; Ministry of Infrastructure; Ministry of Environment and Spatial Planning	
Main data and energy efficiency indicators**			2009	2010	2011
Total primary energy supply (TPES)		ktoe	2,435	2,496	2,528
Energy Intensity (TPES/GDP)		toe / 1,000 USD	0.52	0.52	0.50
TPES/Population		toe/capita	1.38	1.41	1.41
Total final energy consumption (TFEC)		ktoe	1,172	1,190	1,317
Share of TFEC by sector	Residential	%	39%	39%	37%
	Services		10%	9%	9%
	Industry		20%	23%	23%
	Transport		29%	27%	25%
	Others		2%	2%	1%
	Non-energy use		1%	1%	4%

* Source: 1st NEEAP of Kosovo*, available under: http://www.energy-community.org/portal/page/portal/ENC_HOME/AREAS_OF_WORK/ENERGY_EFFICIENCY/NEEAPs
** Source: International Energy Agency

a. Energy efficiency in Kosovo*

The Law on Energy Efficiency of 2011 sets the legislative and institutional framework for energy efficiency in Kosovo*, as well as the legal basis for future development/amendment of secondary legislation. It provides for 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, including the establishment of the Energy Efficiency Agency (KEEA) as the main implementing body.

The Regulation on the Internal Organization of KEEA was adopted in 2011. KEEA was established and its core staff appointed in April 2012. This was an important step forward in the building of strong institutions for the promotion of energy efficiency in Kosovo*.

Based on the requirements of Directive 2006/32/EC, the 1st NEEAP was adopted in September 2011 and sets an indicative target of 9% to be achieved by 2018, and an intermediate indicative energy savings target of 3% by 2012. The focus was put on energy efficiency in the household sector, with various measures proposed, as well as the development of an appropriate legislative framework.

The Law on Public Procurement of 2010 introduced energy efficiency criteria in the public procurement of energy efficient equipment and vehicles, in line with Annex VI of Directive 2006/32/EC.

The new Law on Construction adopted in July 2012 focuses on constructions in general and leaves most of the requirements stemming from Directive 2010/31/EU to be transposed by secondary legislation. At the date of this report, this secondary legislation is still missing.

Equally, the transposition of Directive 2010/30/EU and its Delegated Acts is ongoing. An Administrative Instruction on the Labelling of Energy-Related Products was approved by the Government in June 2012. This Instruction further implements the Law on Energy Efficiency of 2011.

A programme for training energy auditors, as well as for setting up the Certification Board for energy auditors, started in 2010. This includes training programmes for municipal energy managers, as well as the development of several municipal energy plans in selected municipalities. An Administrative Instruction for Energy Auditing was adopted in January 2012, as well as the Regulation on the Establishment of the Certification Commission on Energy Auditors and Managers. A Regulation for the Establishment of a Commission for Certifying Energy Auditors and Managers was adopted in July 2012.

b. Progress made in 2012/2013

With the adoption of the Law on Energy Efficiency in June 2011, Kosovo* has made a significant step towards the creation of an appropriate legislative and institutional framework for energy efficiency. The Administrative Instruction for the Promotion of Energy Efficiency for Final Consumers and Energy Services was adopted in October 2012. However, one

of the remaining barriers for financing remains the insufficiently developed framework for innovative financial mechanisms on energy efficiency, including the setting up of the national energy efficiency fund stipulated in the Law and the development of an ESCO market.

Kosovo* was the first Contracting Party to have submitted the draft for the 2nd NEEAP in May 2013, even before the expiry of the deadline. Preliminary estimates show that the 2012 target was achieved but, due to the lack of statistical data, not all energy savings could be properly assessed and reported. The draft NEEAP is of very good quality and proposes a good package of energy efficiency measures in all sectors.

The implementation of Directive 2010/31/EU on the Energy Performance of Buildings remains one of the main challenges, since it is a joint obligation of both the Ministry of Economic Development and the Ministry of Environment and Special Planning. The amendments to the Law on Construction adopted in 2012 do not yet transpose the requirements of Directive 2010/31/EU; in July 2013, Kosovo* decided to adopt a new Law on Buildings. An inter-ministerial coordinating committee was established for that purpose. The energy auditing of public buildings is ongoing since 2012.

The transposition of Directive 2010/30/EU and Delegated Acts is also work in progress. A new Administrative Instruction for Labelling and Regulation for Labelling was approved by the Government in June 2012.

c. State of compliance

1. Certain key provisions of the Energy Service Directive 2006/32/EC were transposed by the Energy Efficiency Law and the Procurement Law and further implemented by the secondary legislation on energy audits. A set of secondary legislation (e.g. on financial instruments, metering and informative billing etc.) needs to be adopted in the near future for full implementation. The drafted 2nd NEEAP was submitted early in May 2013, and the Secretariat positively commented on this document. Nevertheless, Kosovo* still fails to comply with all requirements of the Directive 2006/32/EC.

2. In the area of labelling, the 2012 *Administrative Instruction on the Labelling of Energy Related Products* transposing Directive 2010/30/EU was approved by the Government. Nevertheless, full compliance still needs to be achieved with the adoption of certain Labelling Delegated Acts.

3. The amendments to the Law on Construction adopted in 2012 do not implement Directive 2010/31/EU, but foresees that it is transposed by secondary legislation. Until this is accomplished, Kosovo* fails to comply with Directive 2010/31/EU.

d. Conclusions and Priorities

The highest priority for Kosovo* should be the adoption of the 2nd NEEAP by the Government, as well as of the remaining secondary legislation due under the Energy Efficiency Law. This includes the development of new financing instruments and ESCOs, support of the NEEAP implementation, the preparation of local plans and the strengthening of inter-institutional cooperation.

Another priority is the development of legislation on energy efficiency in buildings.

3.7.6 FORMER YUGOSLAV REPUBLIC OF MACEDONIA

Energy Efficiency

National Energy Efficiency Action Plan (NEEAP)*				
Period covered by NEEAP			2010 – 2018	
Overall energy savings target - Directive 2006/32/EC (ktoe / % / year)			200 / 12.2 / 2018	
Key institution(s) in charge			Ministry of Economy; Energy Agency	
Main data and energy efficiency indicators**			2009	2010	2011
Total primary energy supply (TPES)		ktoe	2,811	2,883	3,122
Energy Intensity (TPES/GDP)		toe / 1,000 USD	0.41	0.41	0.43
TPES/Population		toe/capita	1.37	1.40	1.51
Total final energy consumption (TFEC)		ktoe	1,690	1,820	1,967
Share of TFEC by sector	Residential	%	32%	29%	27%
	Services		15%	13%	11%
	Industry		25%	30%	33%
	Transport		26%	25%	24%
	Others		1%	2%	1%
	Non-energy use		2%	2%	3%

* Source: 1st NEEAP of the Former Yugoslav Republic of Macedonia, available under: http://www.energy-community.org/portal/page/portal/ENC_HOME/AREAS_OF_WORK/ENERGY_EFFICIENCY/NEEAPs
** Source: International Energy Agency

a. Energy efficiency in the former Yugoslav Republic of Macedonia

The Energy Law of 2011 includes an extensive chapter on energy efficiency and establishes a good legal basis for the development of secondary legislation. Among others, it requires distribution system operators and suppliers to encourage promotion of energy efficiency by means of publishing information on energy efficiency services. The Energy Law also requires mandatory energy measures for buildings, building units, equipment and plants owned and occupied by public entities. This obligation includes: adoption of programmes on energy efficiency, monitoring system, obligatory energy audits for buildings and building units and certification of buildings. Energy audits are also required by the law, and further elaborated by the Rulebook on energy audits adopted in June 2013.

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, which, however, has not been set up so far.

The 1st National Energy Efficiency Action Plan was adopted by the Government in April 2011, and represents one of the best and most ambitious NEEAPs in the Energy Community. The Plan sets an indicative energy savings target of 12.2% of the final domestic energy consumption by 2018, and an intermediate target of 4% by 2012. It also includes a comprehensive package of energy efficiency measures in all end-use sectors. A draft for the 2nd NEEAP was sent to the Secretariat for comments in July 2013.

The Rulebook on Labelling of Energy-Related Products, amended in November 2012, requires energy efficiency labels to be attached to a range of products corresponding to those addressed by the *acquis*, namely the Delegated Regulations.

There are a significant number of energy efficiency projects supported by international donors. Several local banks provide favorable loans for energy efficiency measures in households and the private sector.

b. Progress made in 2012/2013

The former Yugoslav Republic of Macedonia has made significant progress in the reporting period.

Amendments to the Energy Law were recently drafted and will, if adopted, introduce additional important provisions on energy efficiency, including issues related to energy audits and further transposition of Directive 2010/31/EU on Energy Efficiency in Buildings. The implementation of Directive 2010/30/EU was achieved by amendments to the Rulebook on Labelling the Energy-Related Products, adopted in November 2012. This Rulebook transposed Delegated Regulation on Energy Labelling of Air-Conditioners, and with this last one, all energy related products are covered, as required by the Ministerial Council Decision of 2011.

The Rulebook on energy audits was adopted in June 2013, and it further elaborates on the implementation of an energy

audit scheme, assessment method for the baseline energy consumption, contents and template of energy audit reports, training programmes and certification for energy auditors, as well as on setting up a central registry of certified energy auditors.

The Rulebook on Building Energy Performance was also adopted in June 2013, and governs the following issues: building energy performance calculation methodology, minimal energy performance requirements for new and existing buildings and building units, energy efficiency conditions set for project design of construction of new and major renovations of existing buildings and building units, manner and dynamics of inspection of building heating and air-conditioning systems, certification of buildings etc. Moreover, a number of necessary CEN standards have been adopted, and a national database of climatic parameters has been set up.

Several important projects support the NEEAP implementation. The Government has refurbished buildings of schools, kindergartens, hospitals, State and local administrative buildings, by using State budget and international funds. Based on the 1st NEEAP, the Ministry of Economy drafted a comprehensive National Programme for Energy Efficiency in Public Buildings until 2018. The Programme provides detailed planning of energy efficiency activities for public buildings, indicating a commitment from public authorities to lead by example in achieving the national energy savings target.

The preparation of the 2nd NEEAP is ongoing, as a joint activity of the Ministry of Economy, the Energy Agency and other stakeholders.

c. State of compliance

1. Those rules of Directive 2006/32/EC relating to Energy End-use Efficiency, Energy Services requirements and the exemplary role of the public sector have either been transposed with the adoption of the Energy Law in 2011, or by secondary legislation. In accordance with the Energy Law, public sector entities are obliged to apply measures aimed at energy efficiency improvement on their premises. Specific provisions for public procurement are included in the Energy Law and the guidelines for energy efficient procurement. The NEEAP and the draft National Programme for Energy Efficiency in Public Buildings put adequate focus on public sector measures.

Compliance with the Energy Services Directive has been further advanced with the adoption of the regulation on energy audits, metering and informative billing of energy consumption, amendments of the procurement legislation, and the proposal for more sustainable funding dedicated to energy efficiency. The draft 2nd NEEAP was submitted to the Secretariat for comments in July 2013.

2. Directive 2010/30/EU and the Delegated Acts were fully transposed with the adoption of the Rulebook on Labelling of the Consumption of Energy and other Resources by Energy-Related Products, and its amendments of November 2012.

3. Some provisions of Directive 2010/31/EU were incorporated in the Energy Law of 2011, and especially in the amendments of this Law adopted in March 2013, as well as with the adoption of the Rulebook on energy performance of buildings. The 2nd NEEAP set further specific measures for the building sector.

d. Conclusions and Priorities

The former Yugoslav Republic of Macedonia made significant progress in 2012 and 2013, and the priority activities (from last reporting period) relating to updating primary and secondary legislation were completed.

The priority for the former Yugoslav Republic of Macedonia in 2013 remains to quickly adopt the 2nd NEEAP and implement its measures.

3.7.7 MOLDOVA

Energy Efficiency

National Energy Efficiency Action Plan (NEEAP)*				
Period covered by NEEAP			2013 – 2015	
Overall energy savings target - Directive 2006/32/EC (ktoe / % / year)			428 / - / 2015	
Key institution(s) in charge			Ministry of Economy; Energy Efficiency Agency; Ministry of Regional Development and Constructions	
Main data and energy efficiency indicators**			2009	2010	2011
Total primary energy supply (TPES)		ktoe	3,171	3,426	3,331
Energy Intensity (TPES/GDP)		toe / 1,000 USD	0.97	0.98	0.89
TPES/Population		toe/capita	0.89	0.96	0.94
Total final energy consumption (TFEC)		ktoe	2,074	2,323	2,329
Share of TFEC by sector	Residential	%	45%	42%	41%
	Services		6%	5%	10%
	Industry		26%	29%	27%
	Transport		14%	15%	16%
	Others		8%	8%	6%
	Non-energy use		1%	1%	1%

* Source: 1st NEEAP of Moldova, available under: http://www.energy-community.org/portal/page/portal/ENC_HOME/AREAS_OF_WORK/ENERGY_EFFICIENCY/NEEAPs
** Source: International Energy Agency

a. Energy efficiency in Moldova

The Energy Strategy of Moldova for 2030 (adopted in January 2013) acknowledges energy efficiency as one of the top priorities for the national economy and the energy sector. Furthermore, the National Energy Efficiency Program for the period 2011 - 2020, adopted in November 2011, sets up a long term energy savings target of up to 20% by 2020, as well as an intermediate target of 9% by 2016.

Moldova adopted the Energy Efficiency Law in 2010. The Law provides for the development of national and local energy efficiency programmes and action plans, as well as promoting energy audits, an energy management scheme, etc. The Law also establishes the Agency for Energy Efficiency, as the main implementing body, as well as an Energy Efficiency Fund. The Agency became operational in 2011 and drafted a set of secondary legislation based on the Energy Efficiency Law.

The Ministry of Economy, the Energy Efficiency Agency, as well as the Ministry of Construction and Regional Development are the key institutions dealing with transposition and implementation of energy efficiency *acquis* in Moldova.

The 1st National Energy Efficiency Action Plan for 2013 - 2015 (NEEAP) was developed by the Agency in collaboration with the central Government and local authorities, and adopted in February 2013. The NEEAP sets measures to complete the legal framework and to achieve energy savings of 428 ktoe, i.e. approximately 1.8% annually, until 2015.

The Energy Efficiency Fund was set up in June 2012, and it finances projects in the area of energy efficiency and renewable energy in accordance with the strategies and programs adopted by the Government. The Fund's administration made a first call for projects in summer 2012 and the second call for projects in summer 2013. It is planned to have a budget of MDL 520 millions (around EUR 32 million) for the 1st NEEAP 2013 - 2015, in addition to financial support from donors.

b. Progress made in 2012/2013

Moldova made significant progress within the reporting period. The NEEAP was developed by the Agency and adopted by the Government in February 2013. It follows the requirements of the energy efficiency *acquis*, sets an energy savings target and breaks it down to energy-consuming sectors, including the energy sector, industry, transport, services and households.

Further progress in transposition of Directive 2006/32/EC was achieved by the adoption, during the second half of 2012, of a set of regulations dealing with energy audits, authorization of energy auditors and a methodology for calculating the costs of the energy audit. Energy audits are mandatory for energy efficiency projects financed by the Energy Efficiency Fund, or by national or local authorities' budgets.

Furthermore, a package of primary and secondary legislation to transpose Directive 2010/31/EU was drafted during 2011 and 2012. The Ministry of Construction and Regional Development drafted a Law on the Energy Performance of Build-

ings. The crisis in the Government in early 2013 delayed its adoption. The following package of by-laws was also drafted but not yet adopted: a Regulation on Energy Performance of Buildings, a Regulation on Regular Inspection of Heating and Air-Conditioning Systems, a Methodology for Calculation of Energy Performance of Buildings, a Model Report of Regular Inspection of Heating and Air-conditioning Systems, Guidelines for the Application of the Calculation Tool, and a Methodology and Guidelines for Drafting the Report on Regular Inspection of Boilers and Heating systems. CEN standards required for the implementation of the Directive are expected to be gradually adopted. A national investment programme for the building sector is being developed by the Ministry of Construction and Regional Development, which will set detailed measures and investment mechanisms for the building sector.

In the area of the labelling of energy-related products, a Law on the Labelling of Energy Related Products was drafted and submitted to the Government for approval in 2013.

c. State of compliance

1. The main provisions of the Energy Service Directive have been transposed by the Energy Efficiency Law, and the secondary legislation listed above. The NEEAP for 2013 - 2015 was adopted in a proper manner in February 2013. Yet, the Directive has not been fully transposed. In order to achieve that, a set of secondary legislation dealing with ESCOs and public procurement was drafted, needs to be adopted in by the Government.

2. As regards the labelling of energy related products, the deadline for transposing the Directive 2010/30/EU expired in December 2011. A Law transposing the Directive was drafted by the Ministry of Economy and was submitted to the Government for approval. So far, however, the Directive has not been transposed by Moldova.

3. The deadline for the implementation of Directive 2010/31/EU expired in September 2012. As long as the Law on Energy Performance of Buildings, and the secondary legislation required there under, is not adopted, Moldova fails to comply with requirements of Directive 2010/31/EU.

d. Conclusions and Priorities

The institutional framework for energy efficiency in Moldova has been well developed with the establishment of the Energy Efficiency Agency and the Energy Efficiency Fund. The 1st NEEAP was adopted as the main strategic implementation document.

The first priority for the future should be the adoption of the existing draft legislation (i.e. the Law on Energy Performance of Buildings) and the regulations required for the development of energy services, public procurement and Law on Energy Labelling. The Secretariat urges the responsible institutions to timely submit all future draft documents to the Secretariat for a compliance check before it is sent to the domestic authorities for approval.

The second priority should be the implementation of the existing NEEAP and adoption of the drafted package of legislation transposing Directive 2010/31/EU.

3.7.8 MONTENEGRO

Energy Efficiency

National Energy Efficiency Action Plan (NEEAP)*				
Period covered by NEEAP			2010 – 2018	
Overall energy savings target - Directive 2006/32/EC (ktoe / % / year)			58.9 / 9 / 2018	
Key institution(s) in charge			Ministry of Economy; Ministry of Sustainable Development	
Main data and energy efficiency indicators**			2009	2010	2011
Total primary energy supply (TPES)		ktoe	994	1,174	1,179
Energy Intensity (TPES/GDP)		toe / 1,000 USD	0.36	0.42	0.41
TPES/Population		toe/capita	1.58	1.86	1.87
Total final energy consumption (TFEC)		ktoe	792	806	816
Share of TFEC by sector	Residential	%	42%	42%	41%
	Services		0%	0%	0%
	Industry		26%	24%	27%
	Transport		26%	28%	26%
	Others		1%	1%	0%
	Non-energy use		5%	5%	5%

* Source: 1st NEEAP of Montenegro, available under: http://www.energy-community.org/portal/page/portal/ENC_HOME/AREAS_OF_WORK/ENERGY_EFFICIENCY/NEEAPs
** Source: International Energy Agency

a. Energy efficiency in Montenegro

The Energy Efficiency Law was adopted in Montenegro in 2010. Subsequently, a large part of the package of by-laws was adopted in 2011 and 2012, including the Methodology for Calculating Indicative Energy Savings Target and Decision on Determining Indicative Energy Savings Target (2011), the Rulebook on the Content of the Report on Implementation of the Energy Efficiency Improvement Plan by Local Self-Government Units (2011), the Energy Efficiency Operating Plan of Public Administration Institutions (2011), the Rulebook on the Information System of Energy Consumption and on the Manner of Submission of Data on Annual Consumption of Energy (2012), the Regulation on Determining Limits for Energy Consumption to Define Big Consumer, the Content of the Energy Efficiency Improvement Plan and the Report on the Plan Implementation (2012). A set of five rulebooks on buildings was adopted in May 2013.

Montenegro adopted the 1st NEEAP as required by Directive 2006/32/EC in 2010. The NEEAP focused on the period 2010 - 2012 and included no less than 34 implementing measures, to achieve an intermediate and overall indicative energy savings target of 2% and 9% in 2012 and 2018 respectively.

The Law on Spatial Planning and Construction of 2008 introduced provisions in two areas: energy efficiency requirements to be fulfilled during the development of spatial/urban plans and as a precondition for the building permit. They impose an obligation to include energy efficiency criteria when preparing the specific technical documentation ("elaborate") for new buildings, and to submit a certificate on the energy performance of the building.

The Public Procurement Law was amended in 2011 to introduce energy efficiency criteria, further elaborated by Procurement Guidelines.

The Energy Efficiency Law assigns responsibility for implementation to the Ministry of Economy and its Directorat for Energy Efficiency. Directive 2010/31/EU is being implemented in cooperation between the Ministry of Economy and the Ministry of Sustainable Development and Tourism which is responsible for buildings. No specialized Agency for Energy Efficiency exists in Montenegro. However, the Energy Efficiency Law introduced an inspectorate for energy efficiency that controls the work of energy auditors providing energy performance certification.

A 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.

b. Progress made in 2012/2013

Montenegro made significant progress in the reporting period. Following the adoption of the Law on Energy Efficiency, the adoption of relevant by-laws continued in 2013 with a set of rulebooks related to the building sector. They include the Rulebook on Energy Performance Requirements (including

a Methodology for Calculation of Energy Performance), the Rulebook on Energy Certification of Buildings, the Rulebook on Performing of Energy Audits, the Rulebook on Registration of Experts for Performing of Energy Audits, and the Rulebook on Performance of Regular Energy Audits for Heating and Air-conditioning Systems. Moreover, the project "Implementation of the recommendations of the Study on Energy Efficiency in Buildings in Montenegro" will provide assistance to the Ministry to develop a building stock inventory and define reference buildings, develop software tools for energy auditing and certification of buildings, and deliver further education and capacity building in this area.

Other ongoing activities include the preparation of new Law on Efficient Use of Energy (for further incorporation of the requirements of the recast Directives incorporated in the Energy Community in 2011), as well as the finalisation of the Rulebook on Labelling of Energy-Related Products.

In May 2013, the Government adopted the Energy Efficiency Operational Plan of Public Administration Institutions for 2013, which promotes the exemplary role of the public sector and further elaborates NEEAP measures in the public sector.

In terms of awareness-raising, two info-centers and six info-offices on local level are providing direct information and advice to citizens, which, according to public opinion polls, are very successful.

c. State of compliance

1. The Law on Energy Efficiency and the Procurement Law transposed fully the requirements of Directive 2006/32/EC. The exemplary role of the public sector is well promoted by the Law and the NEEAP.

The implementation of the 1st NEEAP was fairly successful. Preliminary reporting shows that the 2012 target was achieved and 15 out of 34 measures have been implemented as planned, while 11 measures have been partially implemented. The 2nd NEEAP is under development, and its submission to the Secretariat is still pending.

2. With regard to labelling, the Law on Energy Efficiency of 2010 transposes the general requirements of the old Directive 92/75/EEC. Following the adoption of the recast Directive 2010/30/EU (with broader scope of "energy related products" and stricter requirements for public sector), amendments to the Law on Energy Efficiency and the draft Rulebook on Labelling of Energy-Related Products were prepared, but still not adopted. Montenegro thus fails to fully comply with Directive 2010/30/EU and the delegated acts.

3. The requirements of Directive 2010/31/EU have been transposed through the Law on Energy Efficiency (see details above), and further implemented through the set of rulebooks adopted in May 2013, in compliance with Directive. However, the implementation of those rulebooks was postponed to January 2014.

d. Conclusions and Priorities

Despite significant progress made in the reporting period, the finalization of certain legislation and putting more efforts in implementation remain priorities for next period.

The priority for Montenegro in 2013 should be the immediate adoption of the missing secondary legislation accompanying the Energy Efficiency Law. In the framework of the Implementation Partnership signed with the Secretariat in June 2012, technical assistance is possible in this area.

Finally, the institutional setup should be further developed, either by strengthening the capacities within the Ministry of Economy and local authorities, or by establishing a specialised energy efficiency institution.

3.7.9 SERBIA

Energy Efficiency

National Energy Efficiency Action Plan (NEEAP)*				
Period covered by NEEAP			2010 – 2018	
Overall energy savings target - Directive 2006/32/EC (ktoe / % / year)			752 / 9 / 2018	
Key institution(s) in charge			Ministry of Energy, Development and Environmental Protection	
Main data and energy efficiency indicators**			2009	2010	2011
Total primary energy supply (TPES)		ktoe	15,177	15,536	16,185
Energy Intensity (TPES/GDP)		toe / 1,000 USD	0.55	0.56	0.57
TPES/Population		toe/capita	2.07	2.13	2.23
Total final energy consumption (TFEC)		ktoe	8,786	9,479	9,778
Share of TFEC by sector	Residential	%	35%	33%	32%
	Services		8%	7%	8%
	Industry		23%	25%	28%
	Transport		25%	23%	20%
	Others		3%	4%	4%
	Non-energy use		7%	8%	8%

* Source: 1st NEEAP of Serbia, available under: http://www.energy-community.org/portal/page/portal/ENC_HOME/AREAS_OF_WORK/ENERGY_EFFICIENCY/NEEAPs
** Source: International Energy Agency

a. Energy efficiency in Serbia

In March 2013, the Law on Efficient Use of Energy was adopted. It includes provisions on energy management systems, labelling of energy-related products, energy performance in buildings, energy efficiency requirements in energy production, transmission and distribution, financial mechanisms for energy efficiency (including the establishment of an Energy Efficiency Fund) and the promotion of an energy services market. Disregarding the recommendations made by the Secretariat, an Energy Efficiency Agency was not set up by the Law. In the Secretariat's view, this is to be considered a missed chance to further strengthen the institutional capacity for the promotion of energy efficiency in Serbia.

The Ministry of Energy, Development and Environmental Protection is responsible for further implementation of the Law and the preparation of secondary legislation, which is currently being developed. Besides, the Ministry of Construction and Urbanism is another important implementing body for the issues covered by Directive 2010/31/EU.

The Law on Construction and Planning of 2009 (as amended in 2013), follows the structure and 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 the Conditions, Content and Manner of Issuance of Certificates of Energy Performance of Buildings (2012) are already adopted. The Institute for Standardization adopted a set of CEN standards dealing with energy performance of buildings.

In July 2010, the 1st National Energy Efficiency Action Plan (NEEAP) was adopted by the Government. The NEEAP sets an indicative energy savings target of 1.5% until 2012 and 9% (752 ktoe) until 2018, compared to the final domestic energy consumption in 2008. Several energy efficiency projects have been successfully implemented, including energy efficiency improvements in public buildings, the Municipal Finance Program in Serbia, and training in energy audits and development of energy management in industry even before the reporting period. However, the implementation of other sets of measures envisaged by the NEEAP was less successful than planned, mainly due to the lack of a supportive legal and financial framework in the previous period.

b. Progress made in 2012/2013

Serbia made significant progress in the reporting period. The Law on Efficient Use of Energy was adopted in March 2013. However, the decision to abolish the Energy Efficiency Agency raises concerns regarding the implementation capacity of the unit in charge in the Ministry of Energy, Development and Environmental Protection.

After the initial set of primary and secondary legislation dealing with energy efficiency in buildings, already adopted in earlier reporting periods, the Rulebook on the Conditions, Content and Manner of Issuance of Certificates of Energy Performance of Buildings was applied as from 30 September 2012.

The Ministry of Energy, Development and Environmental Protection also drafted a Decree on the Labelling of Energy-

Related Products, which is expected to transpose the Directive 2010/30/EU and the delegated regulations. The adoption of this Decree is expected in November 2013.

The 1st NEEAP was implemented only partially. One of the reasons was the delay in the implementation of the adequate legal framework. To strengthen the NEEAP implementation, a Decree on a Program for Financing of Energy Efficiency Projects was already adopted in 2012. However, a source of funding, the Fund for Environmental Protection, was terminated in September 2012, which slowed down the NEEAP's implementation in building sector. In April 2013, Serbia started the preparation of the 2nd NEEAP, and submitted the first draft for comments to the Secretariat in June 2013.

c. State of compliance

1. The Law on Efficient Use of Energy transposes the main provisions of Directive 2006/32/EC (definitions, NEEAP requirements, energy audits, minimum energy efficiency requirements in generation, transmission and distribution, new financing mechanisms and obligations of the public sector). The Ministry of Energy, Development and Environmental Protection is currently drafting a comprehensive package of secondary legislation, to support fully the implementation of Directive 2006/32/EC.

The target in the 1st NEEAP was determined not in compliance with Article 4 of the Directive (i.e. on the basis of average annual amount of consumption for the most recent five-year period), but on the basis of data on the final inland energy consumption in 2008, due to statistical data constraints. The 2nd NEEAP must correct this shortcoming, improve the monitoring and verification of the savings achieved, and describe energy efficiency improvement measures. Thus full transposition and compliance with Directive 2006/32/EC is still not achieved.

2. Until the adoption of the Decree on Labelling of Energy-Related Products, Serbia does not comply with Directive 2010/30/EU and the Delegated Regulations.

3. The Law on Construction and Planning, the Law on Efficient Use of Energy, the Rulebook on Energy Efficiency of Buildings and the Rulebook on the Conditions, Content and Manner of Issuance of Certificates of Energy Performance of Buildings partly transpose Directive 2010/31/EU. The Institute for Standardization adopted a set of relevant standards. Implementation is ongoing but certain provisions will be implemented with adoption of by-laws on the basis of the Law on Efficient Use of Energy, such as inspection of heating and air-conditioning systems, training and accreditation of experts, and energy audits.

d. Conclusions and Priorities

With the adoption of the Law on Efficient Use of Energy, Serbia made a significant step towards the transposition of energy efficiency *acquis*. However, more needs to be done in the near future for full implementation.

The first priority for Serbia should be the adoption of the comprehensive set of secondary legislation based on the Law on Efficient Use on Energy, including also the Decree on Energy Labelling.

The second priority should be the timely finalization and adoption of the 2nd NEEAP (Serbia submitted a first draft in June 2013) correcting some of the shortcomings of the 1st NEEAP.

3.7.10 UKRAINE

Energy Efficiency

National Energy Efficiency Action Plan (NEEAP)*				
Period covered by NEEAP			2012 – 2020	
Overall energy savings target - Directive 2006/32/EC (ktoe / % / year)			6,233 / 9 / 2020	
Key institution(s) in charge			State Agency on Energy Efficiency and Energy Saving of Ukraine	
Main data and energy efficiency indicators**			2009	2010	2011
Total primary energy supply (TPES)		ktoe	114,420	132,308	126,438
Energy Intensity (TPES/GDP)		toe / 1,000 USD	1.32	1.46	1.33
TPES/Population		toe/capita	2.48	2.88	2.77
Total final energy consumption (TFEC)		ktoe	67,555	74,004	75,852
Share of TFEC by sector	Residential	%	33%	32%	31%
	Services		6%	6%	6%
	Industry		33%	34%	35%
	Transport		18%	17%	17%
	Others		3%	3%	3%
	Non-energy use		6%	7%	8%

* Source: draft 1st NEEAP of Ukraine
** Source: International Energy Agency

a. Energy efficiency in Ukraine

The Programme of Economic Reforms for 2010-2014 includes the promotion of energy efficiency as a key objective. The Energy Strategy, updated in 2012, puts strong emphasis on efficiency measures to tap into the large and unused energy efficiency potential in Ukraine.

An (outdated) Law on Energy Conservation of 1994 still applies in Ukraine. It stipulates only very general principles on energy efficiency. A new Law on Efficient Use of Energy Resources was drafted to transpose the energy efficiency *acquis*. Nevertheless, currently the Law was approved by the Council of Ministers, sent to the Parliament and discussed in the Parliament Commission for EU Integration on 18 September 2013. The Parliament approval is expected before the end of 2013.

In the absence of the new law, the most relevant document is the State Target Economic Programme on Energy Efficiency for the period 2010 - 2015, and the action plan for its implementation. They were approved by the Government in 2010 and are updated every year and adjusted to the available budget. These define actions for bringing the national legislation on energy efficiency and renewable energy in line with the *acquis*, of which the preparation of the Energy Efficiency Law is the key milestone. A very ambitious target for energy efficiency envisages reduction of energy intensity by 20% until 2015, as compared to 2008, which is very difficult to achieve in the absence of the appropriate legal and financial framework.

The State Agency for Energy Efficiency and Energy Saving (SAEE) is the main institution responsible for the promotion of energy efficiency and renewable energy in Ukraine. SAEE is coordinated by the Ministry of Economic Development and Trade of Ukraine, and is responsible for end-use efficiency, while the Ministry of Energy and Coal Industry is responsible for energy efficiency policies on the supply side. The Ministry of Regional Development, Construction, Housing and Communal Services is tasked with the implementation of Directive 2010/31/EU. This complex institutional set-up requires efficient coordination, which is currently not taking place in a satisfactory manner.

An Action Plan on Legal Support of the Energy Efficient Policy in Heat Consumption and Modernization of the Heat Supply was approved in July 2012. It envisages the update of standards for heating installations, the development of "model" technical solutions and the adoption of financial support instruments.

The financial support from the public budget to promote energy efficiency is provided within the framework of the State target economic program of energy efficiency. Besides that, international donors are very active in Ukraine and provide extensive technical and financial assistance.

b. Progress made in 2012/2013

Ukraine's progress in the reporting period was limited mainly to drafting primary and secondary legislation, and the 1st National Energy Efficiency Action Plan (NEEAP). None of these were adopted by the date of this report.

The draft NEEAP 2012-2020 was submitted to the Secretariat in February 2013. Subsequently, and taking into account the Secretariat's comments, the first version was significantly improved. The updated draft provides a comprehensive analysis of the current situation, defines a national indicative energy savings target of 9%, and proposes a set of energy efficiency improvement measures in energy end-use sectors, as required by Directive 2006/32/EC.

A roadmap for the transposition of the energy efficiency *acquis*, required under the Task Force's Work Programme for 2012, was prepared by SAEE and approved by the Governmental Decree on the Approval of the Action Plan on Implementation of certain EU Directives in the area of Energy Efficiency in May 2013.

The draft Law on Efficient Use of Energy Resources is being discussed in the Ukraine Parliament. It should, among other things, strengthen the role of the Agency in the monitoring of energy efficiency programmes and measures, extend State funding to SMEs and ESCOs, and introduce other innovative financing mechanisms as well as penalties for non-compliance. A draft Law on Energy Efficiency in Public and Residential Buildings was prepared by the Ministry of Regional Development, Construction, Housing and Communal Services and submitted to Parliament in December 2012, where the second reading is expected in 2013. In parallel, Ukraine is in the process of implementing relevant standards in this area, as well as a Handbook on Energy Certification of Buildings.

On 7 August 2013, the Government of Ukraine adopted the Decree of the Cabinet of Ministers on the Technical Regulation on Energy Labelling. This was developed by SAEE, and among others, it empowers the Ministry of Economic Development and Trade, as well as the Ministry of Justice to review the issues concerning product market surveillance.

The Technical Regulation on Energy Labelling, also adopted by the above mentioned Decree transposes the recast EU Labelling Directive and some Delegated Regulations, as follows:

- Directive 2010/30/EU of 19 May 2010 on the indication by labelling and standard product information of the consumption of energy and other resources by energy-related products;

- Delegate Regulation of EU of 28 September 2010, Nr.1060/2010, on energy labelling of household refrigerating appliances;

- Delegated Regulation of EU of 28 September 2010, Nr.1061/2010 on energy labelling of household washing machines.

SAEE also started developing Technical Regulation on Energy Labelling of televisions, household air-conditioners and household lamps on the basis of EU legislation.

SAEE also developed a communication strategy aimed at increasing the public awareness in energy efficiency issues. Its implementation began in 2012. A separate information campaign for the agricultural sector also started in 2012.

c. State of compliance

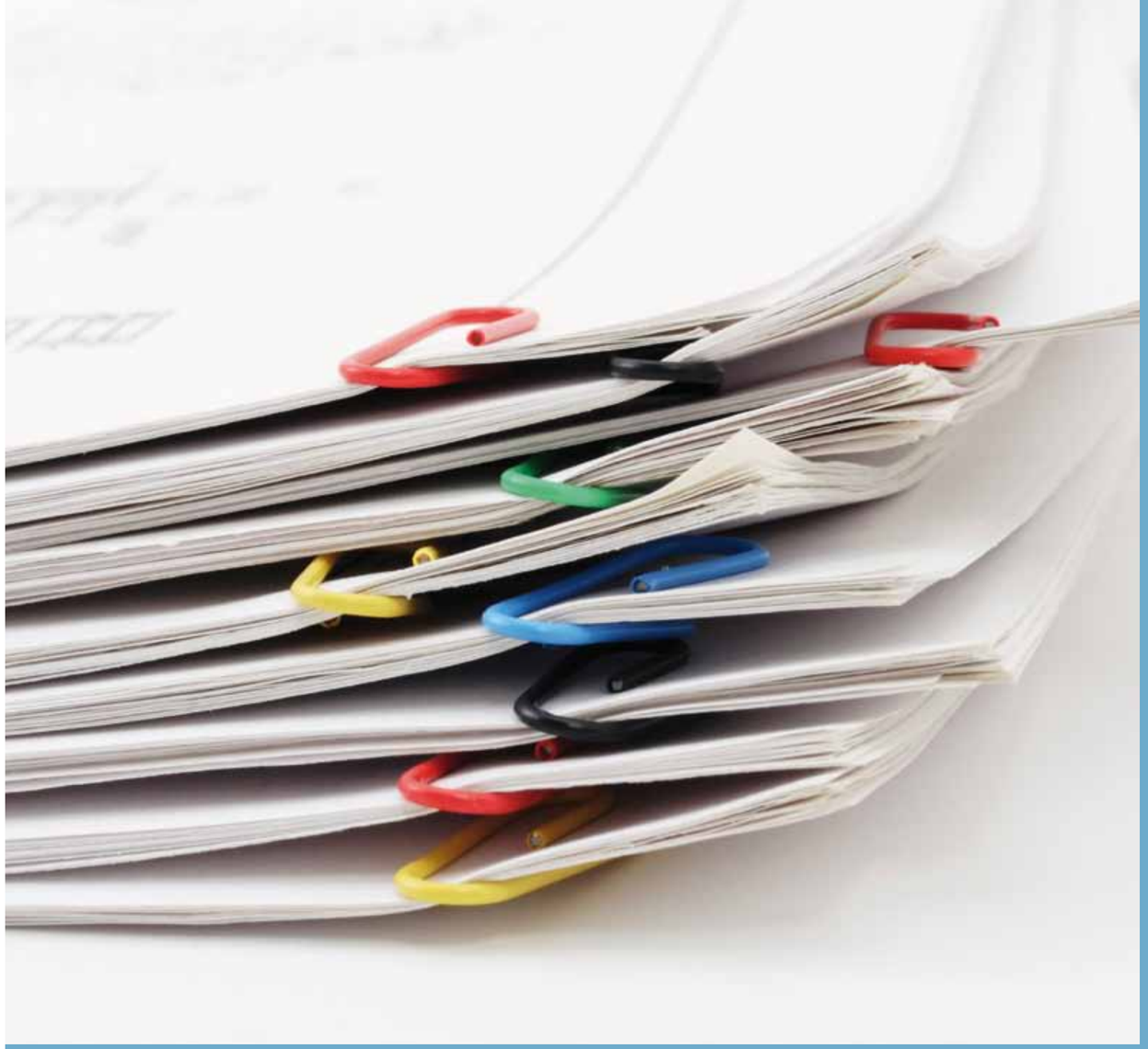
1. The Law on the Efficient Use of Energy Resources is intended to transpose Directive 2006/32/EC. The Law adoption is pending. The 1st draft NEEAP 2012-2020 was improved to ensure compliance with the *acquis*, especially with Directive 2006/32/EC. However, its adoption is still pending. Under these circumstances, Ukraine currently does not comply with Directive 2006/32/EC.

2. The draft Law on Energy Efficiency in Public and Residential Buildings is meant to transpose Directive 2010/31/EU. The draft was sent to Parliament in December 2012, but its adoption is still pending. As the Energy Community deadline for the implementation of the Directive expired in September 2012, Ukraine fails to comply with this Directive at the date of this report.

d. Conclusions and Priorities

At the date of this report, Ukraine has not yet complied with its obligations under the energy efficiency *acquis*. A significant number of acts of primary and secondary legislation remain to be adopted. The main priority for Ukraine should be the rapid adoption of the Law on Efficient Use of Energy Resources, the Law on Energy Efficiency in Public and Residential Buildings.

The second priority should be the development of the Regulation on Energy Efficiency in Buildings. Furthermore, the improvement of internal coordination between the authorities, as well as with the donors in Ukraine, is essential for further progress in 2013 and beyond.



3.8 Statistics

A Regional Overview

3.8 STATISTICS – A Regional Overview

Integration of energy markets within the Energy Community and with the EU market requires accurate information on market competition, concentration and monopolies, price structure and price levels, applicable fees and charges, subsidies and other elements relevant for a level playing field for participants in these markets. The status and changes of supply and demand, fuel mix and emissions, stocks levels, import dependency, consumption patterns in different industrial, transport and commercial activities and residential sector, short term information and long term trends and projection are of particular interest in this context. At the same time, the commitments of the Energy Community in the areas of energy efficiency, renewable energy sources and oil stocks require monitoring the effectiveness of energy policies, measures and reporting need to be based on sound and reliable data.

a. The *acquis* on statistics

In October 2012 the Ministerial Council adopted the Decision to implement the Rules of Energy Statistics in the Energy Community with a view to ensure the collection, compilation and dissemination of consistent, accurate and coherent energy related data. With this Decision, Regulation (EC) No 1099/2008 of 22 October 2008 on energy statistics, and Directive 2008/92 of 22 October 2008 concerning a Community Procedure to Improve the Transparency of Gas and Electricity Prices Charged to Industrial End-users (recast), became a part of the *acquis communautaire* applicable in the Energy Community. Energy statistics, as defined in the Regulation and Annexes to it, refers to statistical data concerning energy products and their aggregates, definitions, data sources, time reference and frequency of reporting, transmission and dissemination, quality assessment and quality reporting. The energy products and energy aggregates covered include solid fuels and manufactured gasses, natural gas, heat and electricity, oil and petroleum products, renewable energy and energy from waste. Data collections are reported annually, monthly and short monthly. In terms of methodology, the *IEA* publication "Energy Statistics Manual", developed in cooperation of *IEA*, *EUROSTAT* and *UNECE*, is a key textbook for energy statisticians and energy planners.

The deadline for implementation of the *acquis* on statistics is the end of 2013. The Ministerial Council Decision tasked the Secretariat to monitor implementation of the *acquis* in accordance with its mandate and to submit an annual progress report, the first of which is due in 2013.

b. Statistics in the Energy Community

From 1 January 2014 all Contracting Parties should establish a reporting system capable of producing the required data on fuels and energy and on electricity and gas prices, maintaining the format, frequency and timeliness defined in the *acquis*.

By now, all Contracting Parties nominated national coordinators for the harmonisation of energy statistics and prepared revised action plans for energy statistics with the view to a common approach to technical assistance. Based on these plans, the Secretariat in cooperation with *EUROSTAT* and the national coordinators defined service specifications for a technical assistance project. The project is in progress and will focus the quality of overall annual collections, renewable energy data and establishing a system for monthly statistics and price statistics.

Bearing in mind that *EUROSTAT* and *IEA* use the same methodology and same questionnaires for annual collections, and that official communication of data was not established between all Contracting Parties and *EUROSTAT*, the fact that all Contracting Parties submitted annual energy data for 2011 to *IEA* in time shows their commitment. In that sense, the implementation of Annex A of Regulation (EC) 1099/2008 (Annual Energy Statistics) is on solid ground. The main issue of concern is quality and completeness of data collections, particularly in terms of consumption structure and data based on consumption surveys.

Monthly statistics systems, defined in Annex C and D of the Regulation are not developed or fully established in most Contracting Parties. Currently, only the former Yugoslav Republic of Macedonia, Montenegro and Ukraine have established reporting systems for monthly data collections, although not all datasets are completed. Monthly data on supplied electricity is also available in most Contracting Parties, as well as on supplied gas and heat.

With the view to the objective needs of the implementation process and institutional framework of the Energy Community, measures to adapt the Regulation in the area of monthly statistics, envisaged in Article 2 of the Ministerial Council Decision, should be proposed urgently to facilitate implementation by all involved parties.

Implementation of Directive 2008/92/EC has begun in Bosnia and Herzegovina, the former Yugoslav Republic of Macedonia and Montenegro by reporting to *EUROSTAT* their half yearly electricity prices charged to industrial end users and to households. A reporting system for electricity and gas prices charged to households and the submission of data to *EUROSTAT* for the purpose of surveying power purchasing parities, although not required in the Directive, have been established and data is communicated by Albania, Bosnia and Herzegovina, the former Yugoslav Republic of Macedonia and Montenegro. Gas prices charged to industrial users are reported only by Bosnia and Herzegovina and the former Yugoslav Republic of Macedonia, including prices charged to households in case of Bosnia and Herzegovina. The requirement of disaggregated price reporting once per year and price system reporting every second year has yet to be adequately transposed and implemented.

In **Albania** the Law on Statistics of 2004 defines the responsibilities of different stakeholders and a methodological concept of collection, compilation and dissemination of official statistics. The Institute for Statistics (INSTAT) is established as a national body for official statistics. However, the collection and compilation of energy statistics is assigned to the National Agency for Natural Resources (AKBN). AKBN is authorised to collect information about the use of natural resources, including energy supply and consumption. AKBN is also responsible for the collection and compilation of annual and monthly data on energy products.

INSTAT is responsible for the publication of statistical data and for price collections. The official statistical program for a five year period, defining the list of surveys to be conducted and responsible institutions has been adopted by the Parliament. The current program does not oblige INSTAT to conduct any surveys under the *acquis* on statistics.

The regulatory authority is responsible for the monitoring of energy markets and prices in the regulated electricity and gas activities, the generation of energy from renewable sources and cogeneration.

The Ministry responsible for the energy sector is authorised by several sector laws to monitor security of supply, including collection of short-term data on production, import, export, consumption and stock changes, emissions of pollutants, energy efficiency and other indicators and provide inputs for projections and modeling of energy supply and demand.

The Law on Statistics of **Bosnia and Herzegovina** defines a legal set up for statistics, including energy statistics. The Law defines the Agency for Statistic of Bosnia and Herzegovina (BHAS) as the competent authority. Other sources of official statistics are statistical agencies in the entities and the Central Bank of Bosnia and Herzegovina.

The statistical program for the period 2009 - 2012 envisages the development of a methodology and surveys for annual data collections on supply and consumption of energy in accordance with international standards, with a focus on electricity, gas, coal and oil. Electricity and gas prices are not explicitly mentioned in this program. However, BHAS concluded a Memorandum of Understanding with the national regulatory authority SERC. This obliged the Commission to communicate information on electricity prices to BHAS.

The entities established their respective legal frameworks to collect and compile relevant data for planning energy balances and designing energy policies and measures within their competence.

Statistics in the Federation of Bosnia and Herzegovina are governed by the Law on Statistics from 2003. The Law defines the vertical and horizontal lines of communication with the Institute for Statistics in charge of producing official statistics. Part of the framework is a program of statistical surveys for a four year period and annual plans. The most recent program covers the period 2009 - 2012, targeting the development of surveys to produce annual balances for electricity, heat, coal, gas and oil in accordance with international (*IEA* and *EUROSTAT*) standards.

In the Republika Srpska, the Law on Statistics from 2003 defines the organisation of statistical activities. The Institute for Statistics is responsible for its implementation. The production of statistics is determined by the program of statistical surveys, the most recent for the period 2013 - 2017, and an annual Work Plan.

The Law on the state-level and corresponding entities' Laws are currently being reconsidered.

The Law on Official Statistics of **Kosovo*** from 2011 establishes a legal framework for the organisation, production and publication of official statistics. The Law defines the role of producers of official statistics, namely the Kosovo Agency for Statistics (KAS), the Central Bank and the Ministry of Finance.

The Energy Law defines the obligation of the Ministry of Energy and Mining to adopt and publish forecasts of long-term and annual energy balances. In addition, the regulator is obliged to approve the methodology for the forecast and data collection process to prepare an energy balance. The Program of Official Statistics defines the framework for the production of official statistics for a period of at least five years. Currently the Program is adopted for the period 2012 - 2017.

A memorandum of cooperation between KAS, the Ministry of economic development (MED) and the regulatory authority is envisaged in order to streamline reporting requirements of Regulation (EC) 1099/2008 and Directive 2008/92/EC.

Currently, energy data is collected, compiled and published by the MED, within its Department for Energy and Mining. Reporting requirements for energy data from Regulation (EC) 1099/2008 are defined in the Rules on Energy Balances introduced by an administrative order of MED. The Administrative Order defines the reporting requirements, units, format and communication lines and responsible institutions.

A legislative framework for the collection of energy prices has not yet been established. It has been agreed that KAS shall take responsibility to implement Directive 2008/92/EC in respect of electricity prices, starting from 2014 and the public supplier of electricity to report all data on electricity prices.

In the former Yugoslav Republic of **Macedonia** the Law on State Statistics from 1997, amended in 2007 and 2011, defines the organisation of statistical work in the country. Activities on the collection, compilation and dissemination of official statistics, including energy statistics, are vested in the State Statistical Office (SSO).

The Law is supported by the program of statistical surveys covering a four year period and annual work plans. In accordance with the Law, the Government adopted the Program for Statistical Surveys 2013 - 2017. Priorities are to intensify the work on quality reports and metadata, to improve the quality of monthly data and activities aiming to improve the data on energy consumption in households. SSO has already compiled the first short-term monthly datasets and started submitting them to *EUROSTAT*.

The Program also defines reporting requirements and obligations relating to price monitoring, entrusting the SSO to collect, compile and disseminate half-yearly price data, in accordance with Directive 2008/92/EC and the definitions and methodology set by *EUROSTAT* for both electricity and gas prices charged to industrial and residential customers and price structure. Based on the Program, SSO is preparing a Strategic Plan, the most recent for the period 2013 - 2015.

The sector laws, particularly the Energy Law, allows the Ministry in charge of energy and the national regulatory authority to collect certain energy data, particularly as regards data for the planning of energy balances and its realisation. The Minister in charge of energy introduced the Rulebook for energy balances and energy statistics in October 2011.

The Law on Official Statistics of **Moldova** of 2004 governs the collection, processing and dissemination of official statistical information.

The National Bureau of Statistics (NBS) is the central authority that leads and coordinates all statistical activities in the country. It elaborates and approves methodologies for the statistical surveys and compilation of statistical data, monitoring indicators in accordance with international standards.

There is no special regulation on energy statistics. In 2013 the Ministry of Economy has developed a draft Government Decision regarding the creation of energy statistics system at the country level. It is planned for adoption by the end of 2013.

Support for energy statistics is stipulated in the Law on Energy of 2004 that defines general rules on statistical reports and transparency. The Law imposed obligations on the Ministry in charge of energy and the national regulatory authority to collect and disseminate certain information related to energy supply and consumption or information from gas and electricity markets. At the moment, the energy sector laws are being revised.

All statistical activities are described in the Statistical Program of Activities, which is approved by the Government annually. The Program for Statistics Development for the period 2012 – 2014 points out the need to build the capacity of NBS in order to implement additional statistical surveys and more advanced statistical analysis, such as energy indicators. The Program does not specify any activity related to the improvement of energy statistics.

NBS compiles monthly statistics on electricity and heat production, based on data gathered within the framework of surveys on industrial statistics. Statistics on gas and electricity prices charged to households and industrial end users are not available.

The Law on Official Statistics and statistical system of **Montenegro** of 2012 defines the organisation of activities relating to official statistics, including collection, compilation, record keeping and dissemination of statistical data and principles of official statistics.

The Statistical Office of Montenegro (MONSTAT) is the competent body for the preparation of official statistics, including all data relevant for the *acquis* on statistics.

Official statistic activities are based on the program of statistical surveys, prepared in compliance with the Development Strategy and covering a five-year period. Currently the Program of Statistical Surveys for the period 2009 – 2013 has been implemented. The Program requires the preparation of annual energy balances for electricity and coal, as well as the development of annual balances for oil, gas and energy from renewable sources with the aim to prepare a comprehensive energy balance, and indicators on gas and electricity prices for customer categories based on consumption bands.

For the purpose of implementing the Program, an annual plan is adopted for every calendar year. In reference to energy statistics, the Annual Plan for 2013 specifies conducting surveys to collect annual data for electricity, coal, oil and oil derivatives, biofuels and the compilation of a comprehensive annual energy balance. The Plan does not indicate any work on monthly data. However, MONSTAT has started to collect and compile monthly collections for electricity and coal, in cooperation with the Ministry in charge of energy.

The Energy Law and the Law on Energy Efficiency as sector specific laws define reporting obligations and competencies for implementation.

Pursuant to the Energy Law, the Ministry in charge of energy is responsible for preparing a long-term and annual energy balance in accordance with the long-term energy strategy and action plan for its implementation. The Ministry is responsible for adopting a rule defining the content, scope, reporting units and their obligations, procedure and methodology for the preparation of an energy balance. The draft rule has been prepared, but not yet adopted.

In accordance with the Law on Energy Efficiency, the Ministry adopted a set of secondary statistical legislation. The Rulebook on information system on energy consumption and reporting on annual consumption, adopted in 2012, defines obligations of different reporting units to submit information on their energy consumption to the Ministry.

MONSTAT is responsible for price collections, including electricity and gas prices. In addition, the national regulatory authority is authorised by the Energy Law to monitor the operation of energy undertakings (electricity, gas, heat and coal) and to request from licensed undertakings the submission of information necessary to perform its tasks.

The Official Statistics Law of **Serbia** provides the legal framework for the production and dissemination of official statistics and for the organization of the system of official statistics in Serbia. According to the Law the Statistical Office of the Republic of Serbia (SORS) acts as the authorised professional agent, main producer and disseminator of official statistics and organiser and coordinator of the official statistics system. It performs its tasks in accordance with the five-year statistical programs approved by Parliament and annual implementation plans approved by Government.

The Program of Official Statistics for the period 2011 - 2015 aims to achieve complete harmonisation of statistical surveys and indicators with international standards, primarily with EU standards, until the end of the reference period. Energy statistics is among the priorities in this Program. Other key topics are the development of quality assurance and sampling methodology. The Program indicated that SORS and the Ministry in charge of energy are responsible for compiling annual energy balances; to provide structural data referring to production of electricity and heat, technical characteristics of facilities and capacities for gas storage; provide data on consumption of energy commodities by sectors and groups of users.

The Annual Plan of Official statistics for 2013 puts great emphasis on energy statistics, specifying the type of data, methods and sources for collection and periodicity. According to this plan, the methodological and administrative setup to collect information for comprehensive annual energy balances compliant with the *IEA / EUROSTAT* methodology should be completed in 2013.

SORS reported its plan to gradually introduce monthly reporting, starting with simple questionnaires, in the following order of reporting: electricity, coal, natural gas, oil and petroleum products, to provide data on production, imports and exports, and then gradually increase the amount of data required by questionnaires until fully implementing Annex C and Annex D (monthly energy statistics) of Regulation (EC) 1099/2008.

In addition, the Energy Law obliges the Government and the Ministry in charge of energy to prepare an energy strategy and a program for its implementation and to submit an annual implementation report to Parliament. The Law also obliges energy undertakings, the regulatory authority and local administration unit to submit necessary information to the Ministry.

The main document regulating statistical activities in **Ukraine** is the Law on State Statistics from 1990, revised in 2000 and amended several times afterwards (2002, 2005, 2009, 2010, 2011). The Law defines the organisation of activities on collection, compilation and dissemination of official statistical information with respect to fundamental principles of statistics.

The central coordinating institution is the State Statistical Service of Ukraine (SSSU). It performs its tasks in accordance with the annual plan of state statistical observations approved by the Cabinet of Ministers. Other institutions involved in the production of energy statistics in Ukraine are Ministries in charge of energy, environment and natural resources, the energy regulator, the agency responsible for energy efficiency and others.

The Strategy for the State Statistics Development for the period until 2017 was adopted in March 2013. SSSU has developed a Quality Manual and Quality Management System.

The work plan for the period 2011 - 2012 specified a list of tasks in the area of energy statistics to be completed, including information on technical and economic parameters of the power stations, energy consumption and energy capacity serving the manufacturing process in industry, gasification data, heat supply, energy materials and refined products, residues and use of energy materials and products of petroleum, operation of fuel, heat and electricity companies and costs of fuel and energy production unit, production and use of heat and combustible waste energy, establishment of the database export and import of oil, gas, electricity, and other data to compile an energy balance of Ukraine.

SSSU collects information on capacities annually and information on production and consumption mainly on monthly basis.

The obligation of SSSU to compile an annual energy balance is based on the Resolution of the Cabinet of Ministers from 2007, amended in 2008. This Resolution established procedures, a methodological concept and reporting obligations in this respect, including data from administrative sources.

Pursuant to the Resolution 926-p from 1999, SSSU has been collecting monthly data on supply and consumption of coal, oil and oil products, and natural gas. From 2011 the data collection and compilation were adjusted to meet the requirements of *IEA* questionnaires for monthly reporting.

Half yearly gas and electricity prices are not part of the official statistics established by the Law on State Statistics. In this respect cooperation with the regulatory authority, as an institution responsible for monitoring gas and electricity markets and the conduct of licensed undertakings, should be introduced. However, the Energy Law from 2011 does not require reports on energy prices from the regulatory authority.

c. Regional Activities

Action Plans to harmonise energy statistics with international practices were developed in the Energy Community in 2010 for the period 2010 - 2012. The objective was to harmonise annual data collections with the *EUROSTAT* / *IEA* / *UNECE* methodology.

After adopting the rules of energy statistics in the Energy Community, the scope of technical assistance to be provided to Contracting Parties was agreed to focus on improving the quality of annual data collections, particularly regarding consumption data and data on energy from renewable sources, monthly data collections and price data collections.

At present the key challenges to implementing the *acquis* are the lack of financial, technical and human resources, particularly regarding monthly collection. Quality assurance in all collections will also need attention. Implementation of Directive 2008/92/EC is of utmost importance as it is a key tool for monitoring the evolving energy markets. The explicit assignment of tasks relating to price reporting schemes in accordance with the Directive has to be tackled urgently. In their action plans, Contracting Parties envisage the coordination with other official sources, notably regulatory authorities. These cooperation arrangements have to be formalised to ensure adequate and timely implementation.

Common activities, managed by the Secretariat, will focus on capacity building to improve working procedures, to develop methodologies and questionnaires and to establish quality assurance procedures.

d. Conclusion and Priorities

The assessment of the legislative and administrative framework showed that in most Contracting Parties adaptations of primary legislation will not be needed and that the relevant institutions are equipped with the necessary powers and competences.

The responsibility for security of supply, energy strategies and planning, as well as for monitoring of the implementation of energy policies are usually vested in the executive authority, often involving collecting and compiling necessary information. Price setting and market monitoring, including the capacity to impose reporting obligations on licensed undertakings is vested in the regulatory authority. Authority to produce official statistics in energy rests with the designated statistics authority.

The existing legislative and institutional framework, limited sources in institutions responsible for energy statistics and complex multifold reporting and monitoring structure indicate that improving coordination and cooperation between different institutions would significantly contribute to the implementation of the *acquis* in an efficient and cost effective manner, improving the quality of data and reducing the burden on reporting units.

Implementation of the *acquis* on energy statistics imposes an obligation to permanently improve the system of energy statistics in each Contracting Party and to adjust the reporting schemes in the Energy Community to the methodologies employed by *EUROSTAT*.

Price statistics compliant with Directive 2008/92/EC and *EUROSTAT* methodology on price and market monitoring are of utmost importance as key references to assess market integration and market opening. The establishment of the necessary framework is expected by 31 December 2013.

Data quality and quality assurance will be tackled in the technical assistance project managed by the Secretariat from August 2013 to April 2014.

With respect to the completion of annual datasets and their timely preparation, significant progress has been achieved.

Monthly statistics proved to be most challenging. The implementation of the *acquis* in this respect will require additional staff, technical equipment and substantial resources. The Contracting Parties should prioritise their activities according to available resources and gradually establish a monthly reporting scheme to reflect their needs for short term data.

Memoranda of understanding or other working formats for cooperation should also be established with all providers of administrative data defined in the legislation.

In **Albania** additional legal arrangements and regulations may be needed, not only to establish and strengthen the authority and legitimacy of the institution responsible for energy statistics, but also to assign authority for monthly collection. In parallel with the strengthening of its position, the responsible institution has to establish reporting requirements, methodology and a quality assurance system.

In **Bosnia and Herzegovina**, tasks related to monthly reporting still need to be explicitly assigned. The Law on Census of Population, Households and Dwellings in Bosnia and Herzegovina in 2013, planned for October 2013, remains of crucial importance for all statistics. This will provide the first official count of population, households and dwellings after 22 years and a basic input for all statistical calculations.

In **Kosovo*** priority should be given to complete institutional building. The legislative framework needs an upgrade, in parallel with administrative and institutional strengthening to establish an independent position of institutions responsible for energy statistics. The role of the statistical agency should be clarified as the coordinator of the NSS, by concluding memoranda of understanding with all other producers of official statistics. For the implementation of the *acquis* adopted, it is important for the responsible legislative authorities to have a multi-annual statistical program adopted where these tasks will be adequately included, as well as to develop and implement a quality policy and a dissemination policy.

In the former Yugoslav Republic of **Macedonia**, conducting surveys based on sampling, particularly for households, and consequent modeling and projections might be affected by outdated information on population. Otherwise, there is no legislative barrier to implement the *acquis* on statistics.

Moldova should follow a defined national action plan and strengthen the capacity in staff numbers and training. The relevant legislation should be modified in due time and approved until the end of 2013. For annual statistics, core tasks are related to quality assurance and further harmonisation with the *EUROSTAT* methodology. Considering necessary resources, Moldova should evaluate and prioritise the need for specific monthly collections. As regards electricity and gas prices, establishing a compliant reporting system is a top priority, recognised as such in the revised action plan, including coordination of activities and reporting schemes between relevant institutions.

Montenegro has defined its legal framework with an institutional setup in place. It has to introduce the rule on an energy balance, envisaged in the Energy Law, to enable efficient data collection and the coordinated approach of institutions and stakeholders. Staff numbers are still a limiting factor thus making human resources a key challenge to fully implementing the *acquis* on statistics.

Serbia has to finalise the current activities on data collections required for annual energy balances, as well as for monthly collections, to be compliant with the *EUROSTAT* methodologies in 2014. As a next step a comprehensive consumption survey will be needed. Although statistics on electricity and gas prices was not the top priority in 2013, coordination and cooperation between institutions should be encouraged or imposed for the sake of cost efficient implementation of the *acquis*.

Ukraine has already made plans and earmarked resources to have annual and monthly data collections in the required format and quality. In addition to implementation of this plan, a reporting system on electricity and gas prices in accordance with Directive 2008/92/EC should be defined in order to have reported half yearly prices for the first semester of 2014.

In addition to problems and obstacles regarding specific data collections needed to implement the *acquis* on energy statistics, most Contracting Parties are faced with a persistent lack of staff, very often combined with insufficient funding for key activities and in some cases lacking technical resources. Therefore, the first and foremost general precondition for a sound and reliable system of energy statistics is providing sufficient resources for the system to function.

3.9 Dispute Settlement Report

3.9 Dispute settlement report 2012/2013

a. Background

Title VII of the Treaty establishing the Energy Community envisages a dispute settlement mechanism to enforce the obligations assumed by the Parties by signing the Treaty. Articles 90 to 93 have been fully applicable since the entry into force of the Treaty, but dispute settlement only started in practical terms after the adoption of the Rules of Procedure for Dispute Settlement under the Energy Community Treaty in June 2008 by the Ministerial Council (Procedural Act No 2008/01/MC-EnC of 27 June 2008 on the Rules of Procedure for Dispute Settlement under the Treaty). The main features under these Rules are a two-step preliminary procedure to be carried out by the Secretariat on its own initiative or upon complaint by a private body, and the creation of an Advisory Committee to support the Ministerial Council in making a Decision under Article 91 of the Treaty.

The present dispute settlement report reflects the situation on 1 September 2013 and summarizes the open cases. Cases closed or not yet opened by this date are not reflected in this report. The present report is also without prejudice to bilateral discussions and negotiations currently taking place between the Secretariat and individual Contracting Parties (still) outside the scope of a dispute settlement procedure.

b. Open dispute settlement cases upon complaints

1. Case ECS-3/08 was initiated with an Opening Letter sent by the Secretariat to the Republic of Serbia on 17 September 2010. Following Serbia's reply, 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 received by KOSTT for costs incurred as a result of electricity transit on the network it operated 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. This issue is also subject to bilateral negotiations held in Brussels between the two Governments.

2. On 26 February 2013, the Secretariat sent an Opening Letter in Cases ECS-6/13 to Ukraine. The Secretariat, takes 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 appliance in practice by the system operator, fails to respect relevant Energy Community rules, namely Regulation (EC) 1228/2003 and the so-called Congestion Management Guidelines. The view that the Secretariat takes in the Opening Letter is that different treatment of electricity imports and exports by distinguishing between different directions of electricity flow and maintaining different procedures for the allocation of capacity in both directions is incompliant with the Energy Community law. In addition, the Secretariat found that the access to interconnectors for electricity exports is limited by maintaining requirements for participation in the auctions that are falling short of respecting the *acquis*. The Secretariat also took the preliminary view that the procedure for capacity allocation in cases of non-congested interconnectors as well as the prohibition of secondary trading encroach upon several provisions and principles of the Energy Community Law.

c. Open dispute settlement cases on Secretariat's own motion

1. On 21 September 2010, the Secretariat sent an Opening Letter to Bosnia and Herzegovina in Case ECS-1/10. The Secretariat takes the preliminary view that Bosnia and Herzegovina failed to fulfill 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, its effective implementation in practice is still pending. The State Aid Council has been established and following clarifications that will be provided by the competent authorities upon the Council becoming fully operational, the case will be closed.

2. On 20 January 2011, the Secretariat sent Opening Letters to Albania, Bosnia and Herzegovina, Croatia, former Yugoslav Republic of Macedonia, Montenegro and Serbia in accordance (Article 12 of the Rules of Procedure for Dispute Settlement) with Cases ECS-1–6/11. The Secretariat challenges that these six Contracting Parties have not yet adopted a common coordinated congestion management method and procedure for the allocation of capacity to the market, in accordance with their obligation from a decision by the Ministerial Council of 2008. The transmission system operators of Albania, Bosnia and Herzegovina, Croatia, former Yugoslav Republic of Macedonia, Greece, Montenegro, Romania, Slovenia, Kosovo* and Turkey on 13 June 2012 signed an agreement for establishing a company tasked with preparing the establishment of a Coordinated Auction Office in South East Europe within 12 months. Until this Office is operational, the cases remain open.

3. 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 Treaty by not adopting legislation prohibiting State aid and enforcing that prohibition, as required by Articles 6 and 18 of the Treaty. Following the Opening Letter, Kosovo* adopted a State Aid Law in July 2011 that entered into force on 1 January 2012. The newly adopted State Aid Law transposes Article 18(c) of the Treaty to a large extent. However, the closure of this case depends on the establishment of a functioning enforcement authority.

4. 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) 1775/2005 by an Opening Letter in Case ECS-8/11. Having taken into account the reply of the Government to the Opening Letter the Secretariat sent a Reasoned Opinion on 24 January 2013, and submitted the case to the Ministerial Council for decision by way of a Reasoned Request on 21 May 2013.

5. On 11 February 2013, the Secretariat sent Opening Letters to Albania, Bosnia and Herzegovina, the former Yugoslav Republic of Macedonia, Serbia and Ukraine in accordance with Article 12 of the Rules of Procedure for Dispute Settlement. The Secretariat comes to the preliminary conclusion that these five Contracting Parties have 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 SO_2 resulting from the combustion of heavy fuel oils and gas oils.

* This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and ICJ Advisory opinion on the Kosovo declaration of independence.

3.10 Investment Report

3.10 INVESTMENT REPORT: Projects of Energy Community interest

a. The investment outlook

"The Energy Community is about investments, economic development, security of energy supply and social stability", reads the European Commission's Report to the European Parliament and the Council in 2011. Improving the balance between energy supply and demand is critical for supporting economic development. Primary sources of energy are limited in the Contracting Parties, and the energy sector is facing the major challenges of reducing its carbon and energy intensity as well as rehabilitating and replacing the ageing power generation capacities. This necessitates the attraction of substantial new investments. According to the Contracting Parties' own projections, total electricity production including net imports is forecasted to grow to 136.5 TWh by 2020 and to 170.72 TWh by 2030, aggregated at the level of Western Balkans and Moldova; the aggregated electricity generation including Ukraine is estimated at 443.5 TWh in 2020 and 590.1 TWh in 2030. In terms of new domestic generation capacity, the Contracting Parties have indicated plans to produce an additional 20 GW between 2012 and 2020, of which 8.1 GW is to be generated in Ukraine. The new plants are expected to be based on hydro energy (42%) and coal/lignite (32%), nuclear (10%), gas (6%), other renewable energy sources (10%).

As part of the work on the Energy Community's first Energy Strategy, a scenario analysis was performed with technical assistance sponsored by *USAID*. This included a 'Current Trends' scenario, evaluating the implications of continuing the current investment practices in the energy sector; a 'Minimal Investment Costs' scenario examining the costs of meeting energy demand regardless of the environmental impact; and a 'Low Emissions Development/Sustainability' scenario looking at the costs and implications of a more aggressive promotion of energy efficiency and renewable energy, as well as the full implementation of the Large Combustion Plants Directive.

Under the 'Current Trends' scenario, the unmet electricity demand is estimated at 70 TW by 2020. The scenarios further indicate the potentially large investment needs required for the region to meet supply adequacy. Between 2012 and 2020, an estimated EUR 39.1 billion is needed under the 'Minimal Investment Costs' scenario. Under the 'Current Trends' scenario, considering the Contracting Parties' own investment plans, the investments were estimated at EUR 44.6 billion. Under the 'Low Emissions Development/Sustainability' scenario, the expected investment costs are over EUR 73 billion.

b. Investment challenges

As they recover from the economic and financial crisis, the Contracting Parties will face an increasing demand in energy, and increasing pressure to cover the gap between supply and demand. This will require large scale investments in both power generation and transmission as well as in gas and oil supply. The lack of infrastructure is one of the most significant constraints to growth through its impact on the business environment. Investing in infrastructure is therefore a key component of any new growth agenda. In order to successfully attract private investments, several constraints need to be overcome.

1. Growth projection constraints

The *World Bank* in its *Southeast Europe Regular Economic Report* of December 2012 stated that: *"After two years of fragile recovery from the global recession, as a group the six South East European countries (SEE6)—Albania, Bosnia and Herzegovina (BIH), Kosovo, FYR Macedonia, Montenegro, and Serbia—are experiencing a double-dip recession in 2012. Deteriorating external conditions, the impact of the severe winter on economic activity, and a continuing rise in unemployment early in the year took a toll on consumption, investments, and exports"*.

In 2012, the weighted average of GDP of the Western Balkans fell by 0.8%. The growth for 2013 is currently projected at 1.4% in the IFI Coordination Office of DG Enlargement report, based on *International Monetary Fund (IMF)* revised 2013 projections. Moldova's GDP decreased with 0.8% in 2012 and its increase of 4% is forecasted for 2013. Ukraine's GDP grew by only 0.2% in 2012 and is expected to grow by 1% in 2013 according to the *World Bank* and *EBRD*.

2. Public budget constrains

The IFI Coordination Office, in June 2013, described the (near term) investment perspectives in the Western Balkans as follows: *"The countries are experiencing serious difficulties in financing infrastructure development due to sluggish growth of incomes, taxes and remittances. The global economic and financial crisis and particularly the problems in the euro zone have significantly reduced the fiscal space of governments in the region, public debt has attained critical levels for some countries, and access to bank lending and capital markets has become more difficult"*.

Furthermore, Contracting Parties – with the exception of Ukraine – constitute small markets with relatively small investment projects, which make them less attractive to investors. Following the logic of economies of scale, it will definitely be more expensive for each Contracting Party to pursue full energy independence and to strive to achieve security of supply alone rather than cooperating in the planning and realization of infrastructure developments with its neighbours and increasing regional energy trade.

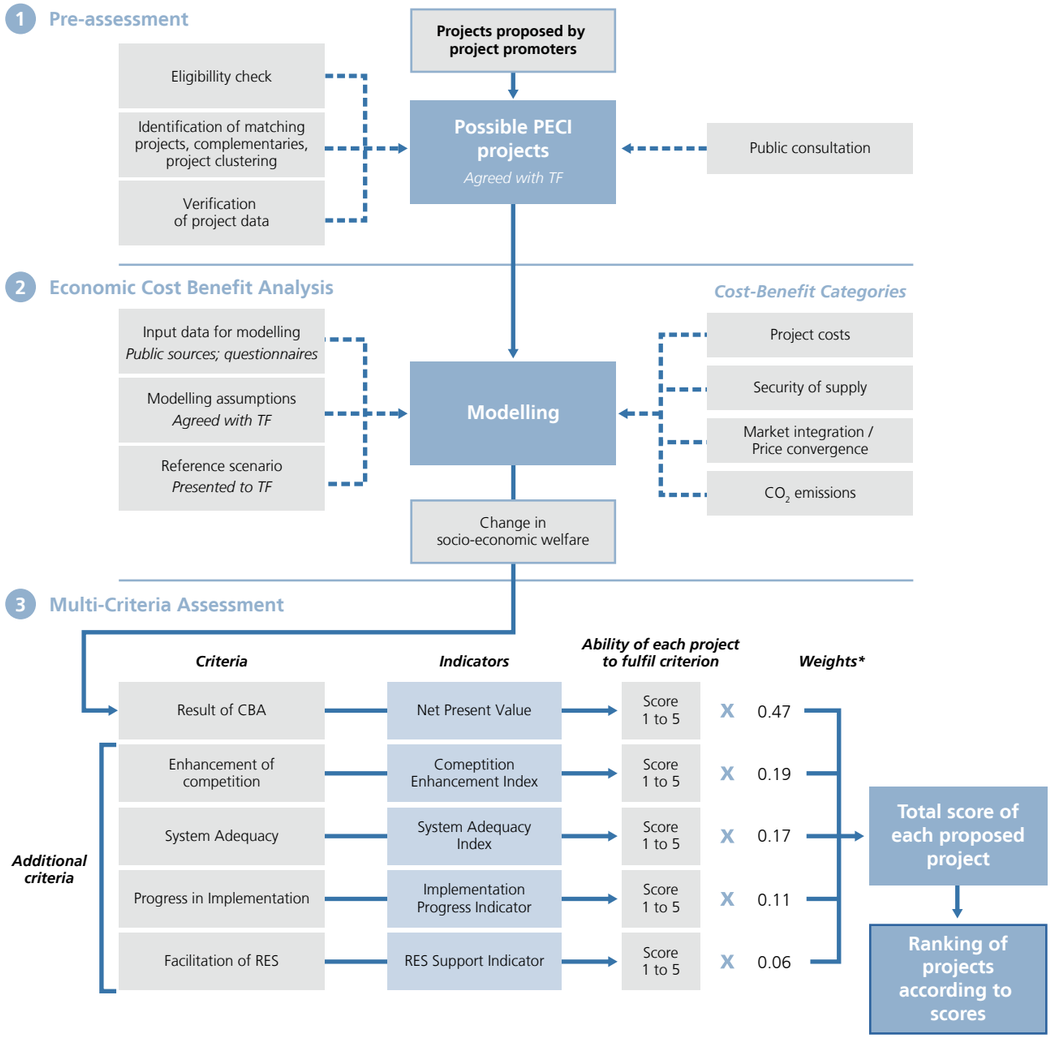
This fact as well as the present financing constraints for infrastructure investment requires even more activity than before, namely the identification of priorities for the future development of the electricity, gas and oil infrastructure at Energy Community level.

c. Projects of Energy Community Interest

For the reasons mentioned above, the Contracting Parties have agreed to cooperate in the process of identifying those projects which have the highest positive impact in the largest possible number of Contracting Parties, so-called Projects of Energy Community Interest (PECIs). The selection of these projects was accomplished by the same Task Force that contributed to the preparation of the Energy Strategy.

The methodology used to assess PECIs included as criteria: a cost-benefits analysis, enhancement of competition, system adequacy, progress in implementation, and the facilitation of renewable energy. The methodology applied to electricity generation projects is displayed in the diagram below. The same methodology with other weights (result of the "Cost Benefit Analysis (CBA)" 48%, enhancement of competition 20%, system adequacy 18%, and progress in realization 14%) was used for electricity and gas infrastructure projects.

Proposed Project Assessment Methodology to be continued for each investment project



* Weights and criteria differ slightly for the different groups (electricity infrastructure, electricity generation and gas infrastructure). In this graph criteria and weights for electricity generation are presented.

In order to facilitate the development and implementation of PECIs, the Energy Community plans to strongly encourage regulatory measures in order to remove the barriers to cross border investment. Such measures may include enhanced dialogue and cooperation between national regulatory authorities particularly in the case of cross-border projects, permitting procedures, information for decision makers, cost-benefit analysis, incentives for projects with a cross border impact, and others. To complement these, more innovative financial instruments should be used, and special funding mechanisms for PECIs will have to be designed, using the pre-accession funds or other similar instruments. The *Western Balkans Investment Framework* focusing on supporting strategic projects in the Energy Community is a potential channel to secure financing for priority investments and to finance sector studies that can contribute to the implementation of PECIs.

Based on this approach, the projects that will be proposed as PECIs to the Ministerial Council on 24 October 2013 are the following:

Electricity Generation	
Contracting Party	**Project**
AL	Hydro Power Plant Skavica
AL	Wind Park Dajc-Velipoje
BiH	Combined Heat and Power Plant KTG Zenica
BiH	Hydro Power Plant Dabar
BiH + HR	Hydro Power Plant Dubrovnik (Phase II)
BiH + RS	Hydro Power Plants Upper (HPP Buk Bijela, HPP Foča, HPP Paunci, HPP Sutjeska) and Middle Drina (HPP Tegare, HPP Rogacica, HPP Dubravica)
Kosovo*	Kosova e Re Power Plant (KRPP)
ME	Hydro Power Plants Lim River
RS	Combined Heat and Power Combined Cycle Gas Turbine Plant in Pancevo, Serbia
RS	Thermal Power Plant Kolubara B
RS	Thermal Power Plant Nikola Tesla B3
RS	Combined Heat and Power Plant Novi Sad
RS	Hydro Power Plants Ibarske (10 HPPs)
RS	Hydro Power Plants Velika Morava (HPP Ljubicevo, HPP Trnovce, HPP Svilajnac, HPP Mijatovac, HPP Varvarin)

Electricity Infrastructure	
Contracting Party	**Project**
AL - FYR of MK	400 kV OHL SS Bitola (FYR of MK) – SS Elbasan (AL)
HR - BIH and HR internal line reinforcement	400 kV OHL Banja Luka (BiH) – Lika (HR) 400 kV OHL Brinje – Lika – Velebit – Konjsko including 400 kv substation Brinje
IT - AL	400 kV HVDC SS Vlora - Bari West
Kosovo* - AL	400 kV OHL Tirana (AL) - Pristina (Kosovo*)
MD - RO	OHL Balti (MD) and Suceava (RO)
ME - RS - BiH and ME internal line reinforcement	400 kV OHL SS Bajina Basta (RS) - SS Pljevlja (ME) - SS Visegrad (BiH) 400 kV OHL Pljevlja - Lastva
RS	400 kV OHL SS Kragujevac - SS Kraljevo
RS	400 kV OHL SS Bajina Basta - SS Kraljevo 400 kV OHL SS Obrenovac - SS Bajina Basta
RS - RO	400 kV OHL SS Resita (RO) - SS Pancevo (RS)

Gas Infrastructure	
Contracting Party	**Project**
AL-ME-HR-BiH	Ionian Adriatic Pipeline (IAP)
GR-AL-IT	Trans Adriatic Pipeline (TAP)
AL	EAGLE LNG Terminal
BiH - HR	Interconnection Pipeline BiH - HR (Slobodnica-Bosanski Brod-Zenica)
BiH - HR	Interconnection Pipeline BiH - HR (Ploce - Mostar - Sarajevo/Zagvozd - Posušje/Travnik)
BiH - HR	Interconnection Pipeline BiH - HR (Li ka Jesenica-Tržac-Bosanska Krupa)
HR	LNG Terminal in Croatia + Pipeline Zlobin-Bosiljevo-Sisak-Kozarac-Slobodnica
HR - RS	Interconnection Pipeline HR - RS (Slobodnica-Sotin-Ba ko Novo Selo)
SR	Interconnection Pipeline RS (Nis) - BG (Dimitrovgrad)
UA	Modernization of Urengoy-Pomary-Uzhgorod Pipeline

Oil Infrastructure	
Contracting Party	**Project**
HR	Project of Inspection, Evaluation, Rehabilitation, Upgrading and Reconstruction of the existing JANAF Oil Pipeline
UA	Construction of the Brody – Adamowo oil pipeline

3.11 Social Issues

A Regional Overview

3.11 SOCIAL ISSUES – A Regional Overview

a. The social *acquis*

Article 2 of the Treaty mentions social stability together with economic development as one of the primary interests of the Parties for which the access to stable and continuous energy supply is essential. Chapter IV of the Treaty (Articles 31–33) envisages further promotion of the social aspects of the energy *acquis* related to the provision of energy to citizens and affordability.

The Memorandum of Understanding on Social Issues in the context of the Energy Community was signed in October 2007. Moldova and Ukraine signed it in October 2011. The Memorandum indicates the political intent of the Contracting Parties to take due account of the social consequences of implementing the Treaty, and the ensuing energy sector reforms. However, the Treaty does not provide a specifically defined set of social *acquis*.

The Memorandum of Understanding addresses in more detail the social protection of consumers; the safeguarding of limits to the impact of social and economic change, particularly for the most vulnerable consumers; the improvement of energy sector workers' living and working conditions; and the anticipation of and solution to negative impacts as a result of sector restructuring. It also addresses the protection of workers' rights, the improvement of safety at work, equal opportunities for men and women, dealing with redundant workers, investment in life-long learning, energy efficiency at work and similar activities.

The Ministerial Council also established an annual Social Forum in December 2007, as a platform for discussing the progress of the Memorandum's implementation.

Following the Memorandum and guided by the Secretariat, the Contracting Parties (apart from Moldova and Ukraine) prepared Social Action Plans. The Social Action Plans are intended to serve as a roadmap to develop and implement measures necessary to deal with the social consequences of energy sector reform.

As regards such measures, the main focus is on the protection of vulnerable consumers, the information and consultation of social partners in the energy sector, the development of specific employment, training and support services for managing the restructuring process and workers' fundamental rights as well as their working conditions and equal opportunities.

b. The state of play

The 5th Social Forum held in September 2012 called for addressing the social dimension of the Energy Strategy of the Energy Community as adopted by the Ministerial Council in 2012. The Ministerial Council Meeting held in October 2012 invited the Secretariat, in cooperation with the social partners, to prepare an outline of a *Social Strategy*. Subsequently, the Secretariat started a public consultation with stakeholders during January and February 2013. The 6th Social Forum held in April 2013 discussed the Secretariat's draft outline of the Social Strategy. It was agreed that the outline could propose a regional definition of vulnerable customers. Based on this invitation, the Secretariat proposed that:

1. in electricity, a vulnerable customer is (1) using energy for supplying her/his permanent housing; (2) not exceeding a maximum energy consumption per person. When defining the electricity consumption level per person, Contracting Parties shall consider total consumption of up to 200 kWh/month for a family with up to 4 members and reflect seasonality; (3) belonging to a category of citizens with the lowest income. For the definition of low income, as well as income all available assets shall be taken into account; (4) having her/his electricity consumption supplied through a single-phase meter with a connection not exceeding the maximum power. When defining power of a mono-phase meter Contracting Parties shall consider power of up to 16 Ampere. The definition shall not include more than a minority of the population.

2. for gas consumption, a vulnerable customer is (1) using gas for supplying her/his permanent housing; (2) not exceeding a maximum gas consumption per person. When defining the gas consumption level per person, Contracting Parties shall consider total consumption of up to 70 cm/month for a family with up to 4 members and reflect seasonality; (3) belonging to a category of citizens with the lowest income. For the definition of low income, as well as income all available assets shall be taken into account. The definition shall not include more than a minority of all consumers.

Reflecting the possibility to switch from gas to electricity supply, support schemes granted to vulnerable gas customers shall not apply in case the same customer benefits from the support mechanism for socially vulnerable electricity customers.

The outline is expected to be approved by the Ministerial Council in October 2013. However, as the Permanent High Level Group noted in June 2013, taking into account the very different historical backgrounds, legal frameworks and approaches to social issues of each Contracting Party, it is currently not feasible to prepare a regional Social Strategy.

d. Conclusions and Priorities

The Governments of Albania, Kosovo*, Moldova and Ukraine have still not approved the Social Action Plans. This should be rectified with priority.

A continual update of the Social Action Plans by all Contracting Parties with concrete actions in the energy sector and strengthening provisions on following-up and monitoring should be another priority.

As a legal obligation following from the Third Package, Contracting Parties must define vulnerable customers in terms appropriate to national circumstances. Properly defining vulnerable customers is a first important step for breaking the vicious circle of across-the-board price regulation and its negative impact on investments, security of supply and energy efficiency. In this sense, the needs of vulnerable customers should ideally be dealt with in the context of social policy rather than energy policy issues. Social allowances provided by central or local governments should directly or indirectly go to the beneficiaries rather than leaking to other groups. Furthermore, more focus should be put on non-economic support such as protection from disconnection at critical times, e.g. severe winters.

Moreover, bipartite and tripartite social dialogue needs to be further improved by the inclusion of the social partners in the energy policy process. Currently, collective agreements are poorly enforced and the autonomous bipartite and in particular the sectoral social dialogue is still weak. National tripartite bodies seem to be more mature but their impact on policy making still appears to be limited.

GLOSSARY

The report makes a reference to the following institutions, treaties, support programmes, energy policy related concepts and measurement units.

1. ABBREVATIONS

ATC	available transmission capacity
ACER	Agency for the Cooperation of Energy Regulators
CEE-CAO	Central European Electricity Co-ordinated Auction Office
CEN	European Committee for Standardization
CHP	Combined Heat and Power
CNG	compressed natural gas (trucks)
DSO	Distribution System Operator
ECRB	Energy Community Regulatory Board
EBRD	European Bank for Reconstruction and Development
EEA	Agreement on the European Economic Area
EIA	Environmental Impact Assessment
EnC	Energy Community
ENTSOE	European Network of Transmission System Operators for Electricity
ENTSOG	European Network of Transmission System Operators for Gas
ESCO	energy service companies
ESIA	Environmental and Social Impact Assessment
EU	European Union
EUROSTAT	the statistical office of the European Union
FS	Feasibility study
GIZ	Deutsche Gesellschaft fur Internationale Zusammenarbeit
HPP	Hydro power plant
HVDC	high-voltage, direct current
IAP	Ionian Adriatic Pipeline
IFC	International Finance Corporation, member of World Bank group
IFI	International Financial Institution
IFI CO	IFI Coordination Office, EU + IFIs, EU funded project
INOGATE	an international energy co-operation programme between the European Union, the littoral states of the Black and Caspian seas and their neighbouring countries
IPA	programmes EU's Instrument for Pre-Accession Assistance for countries engaged in the accession process
ITO	Independent Transmission Operator
KfW	Kreditanstalt fur Wiederaufbau
LNG	Liquefied Natural Gas
MoU	Memorandum of Understanding
NALAS	Network of Associations of Local Authorities of South East Europe
NEEAPs	National Energy Efficiency Action Plans
NREAPs	National Renewable Energy Action Plans
NTC	Net Transfer Capacity (auctions)
OTC	Over the Counter
OHL	an overhead electric line
PECIs	Projects of Energy Community Interest
PHLG	Energy Community Permanent High Level Group
PPP	Public Private Partnership
REEP	Regional Energy Efficiency Programme (managed by EBRD)
RES	Renewable Energy Sources
SCADA	Supervisory Control and Data Acquisition
SEE CAO	SEE Coordinated Auction Office
SEE-RAP	Regional Action Plan for Wholesale Market Opening in South East Europe
SEEPEX	power market exchange in Serbia (planned for 2014)
SME	small and medium-sized enterprises
SPA	Special Protection Area
USAID	United States Agency for International Development
UNECE	United Nations Economic Commission for Europe
UNDP	United Nations Development Programme
TAP	Trans Adriatic Pipeline
TFEU	Treaty on the Functioning of the European Union
TPP	Thermal Power Plant
TSO	Transmission System Operator
VAT	value added tax
WB	World Bank
WBIF	Western Balkans Investment Framework

2. DEFINITIONS ON THE ELECTRICITY AND GAS FACT AND FIGURE TABLES

Electricity	**Definition**
Electricity Production	Annual domestic electricity production of all generation 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 main generator transformers of the power plants
Net Imports	Amount of electricity supplied from abroad to cover the needs of domestic consumption including energy used to cover network losses (transmission and distribution), whether customs clearance has taken place or not (If not available, report the amount of electricity that have crossed the national borders)
Net Exports	Amount of electricity produced in the country supplied to customers across the national boundaries, whether customs clearance has taken place or not (If not available, report the amount of electricity that have crossed the national borders)
Total energy supplied	Total amount of electricity supplied by all power plants to the network, reduced for net export and increased for net imports from abroad
Gross Electricity Consumption	Total amounts of electricity consumed by all customers connected to transmission or distribution network, including network losses and electricity consumed by power plants (including for pumping), if supplied from the network
Losses in Transmission	The difference between the amount of electricity injected into the transmission network and the aggregated amount of electricity taken from the transmission network registered at all customers' metering points
Losses in Transmission	Percentage of total losses in the transmission system (relative to the total electricity injected into the transmission network)
Losses in Distribution	The difference between the amount of electricity injected into the distribution system and the aggregated consumption registered at customers' metering points
Losses in Distribution	Percentage of total losses in the distribution system (relative to the total electricity injected into the distribution network)

Consumption of energy sector	Amount of electricity taken from the power network and consumed by the energy industry to support the power plant operation	
Final consumption of electricity	Total consumption of end-users in industry, transport, commercial and public services, agriculture and residential sector	
Consumption of 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	
Consumption of Households	Electricity consumed by the residential customers (households)	
Net maximum electrical capacity of power plants	Sum of net maximum capacities of all power plants taken individually throughout a period of operation of 15 hours of continuous running, at the power plant outlet to the network, assuming the power to be solely active power	
Coal-fired plant	Sum of net maximum capacities of all plants using solid fossil fuels (coal, lignite, coke, patent)	
Coal multi–fired plant	Sum of net maximum capacities of multi-fired plants 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 plant	Sum of net maximum capacities of all plants using natural gas as a fuel	
Gas multi-fired plant	Sum of net maximum capacities of all multi-fired plants using natural gas and solids or liquids	
Oil-fired plant	Sum of net maximum capacities of all plants using oil or oil product as a fuel, excluding combined oil and gas	
Nuclear plant	Sum of net maximum capacities of all plants using nuclear energy	
Hydro power plant	Sum of net maximum capacities of all plants using hydro power sources including storage, pumped storage and run-of-river plants of all types and sizes	
Small hydro power plant	Sum of maximum capacities of all small hydro power plants (10 MW or less, connected to a distribution network)	
Other Renewables	All existing RES generation capacity excluding hydro (wind, PV, solar, geothermal, biomass-fired, biogas-fired, other)	
Horizontal Transmission Network	380 kV or more	Total length of existing OHL on 380 kV or more
	220 kV	Total length of existing OHL on 220 kV or more – but less than 380 kV (in the transmission or distribution network)
	110 kV	Total length of existing OHL on 110 kV or more – but less than 220 kV (in the transmission or distribution network)
Substation Capacity	Sum of the nominal capacities of all substations in the transmission network	
Eligible customers under national legislation	Number of customers eligible to choose 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 supplied under market conditions	
Electricity supplied to active eligible customers	Quantity of electricity supplied to active eligible customers	
Share of total consumption	Electricity supplied to active eligible customers as a part of total consumption	

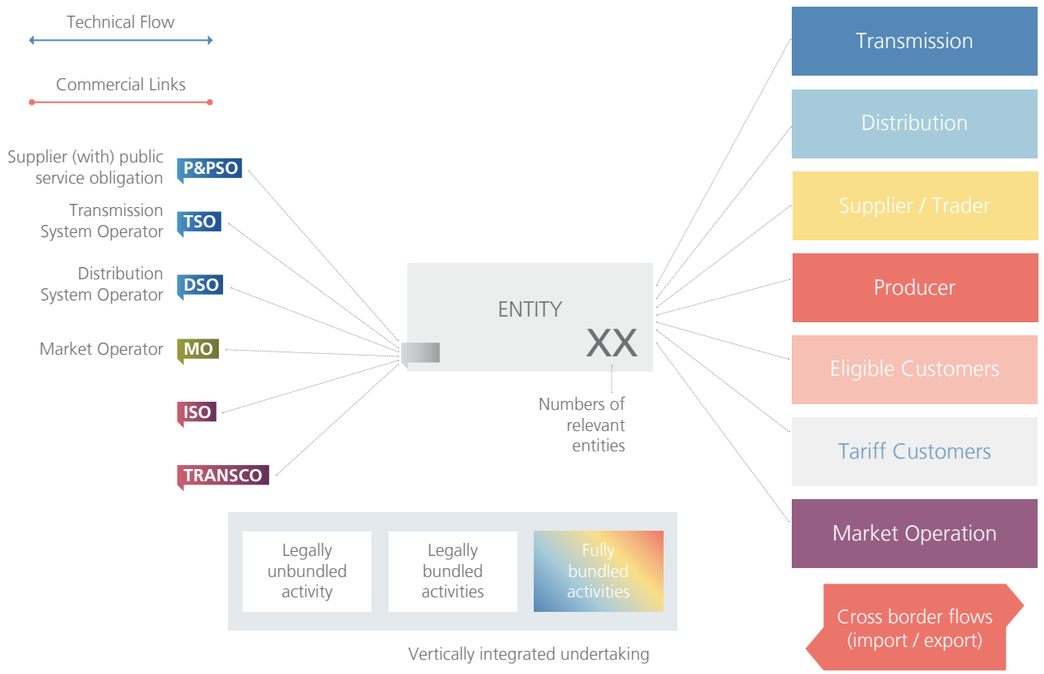
Gas	**Definition**
Natural Gas Production	Amount of indigenous annual production of natural gas (all dry marketable production within national boundaries, including offshore production, measured after purification and extraction of NGLs and sulphur, excluding extraction losses and quantities reinjected, vented or flared.)
Imports Flows	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	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	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	Amount of natural gas available for consumption calculated as: Indigenous production + Imports – Exports + Stock changes
Gross consumption of natural gas	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	Amounts of NG 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	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	Total annual capacity of all interconnectors
Storage working capacity	Total working capacity of underground storages (without cushion gas)
Length of Transmission Network	Total length of transport network(s)
Length of Distribution Network	Total length of distribution networks
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
Gas supplied to active eligible customers	Quantity of natural gas supplied to eligible customers from competitive market under market conditions
Share of total consumption	Natural gas supplied from to eligible customers as a part of total consumption
Final Consumption of Natural Gas per Sector	Total annual consumption of all final customers of Natural Gas
Consumpion for Energy transformation	Amount of natural gas used for production of electricity or heat
Consumption of Industry and Commercial 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
Consumption of Households	Natural gas consumed by the residential customers (households)

3. MEASUREMENT UNITS

kW	kilowatt
MW	megawatt
GW	gigawatt
TW	terawatt
kWh	kilowatt hour
MWh	megawatt hour
GWh	gigawatt hour
TWh	terawatt hour
J	joul
TJ	terajoul
kgoe	kilogram of oil equivalent
toe	ton of oil equivalent
t	ton
m	meter
cm	cubic meter
mcm	million cubic meters
bcm	billion cubic meters

ENERGY MARKET SCHEME LEGENDS

The report displays special markets schemes to demonstrate the degree of market opening in each Contracting Party. The legends for the different market elements are the following:



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