

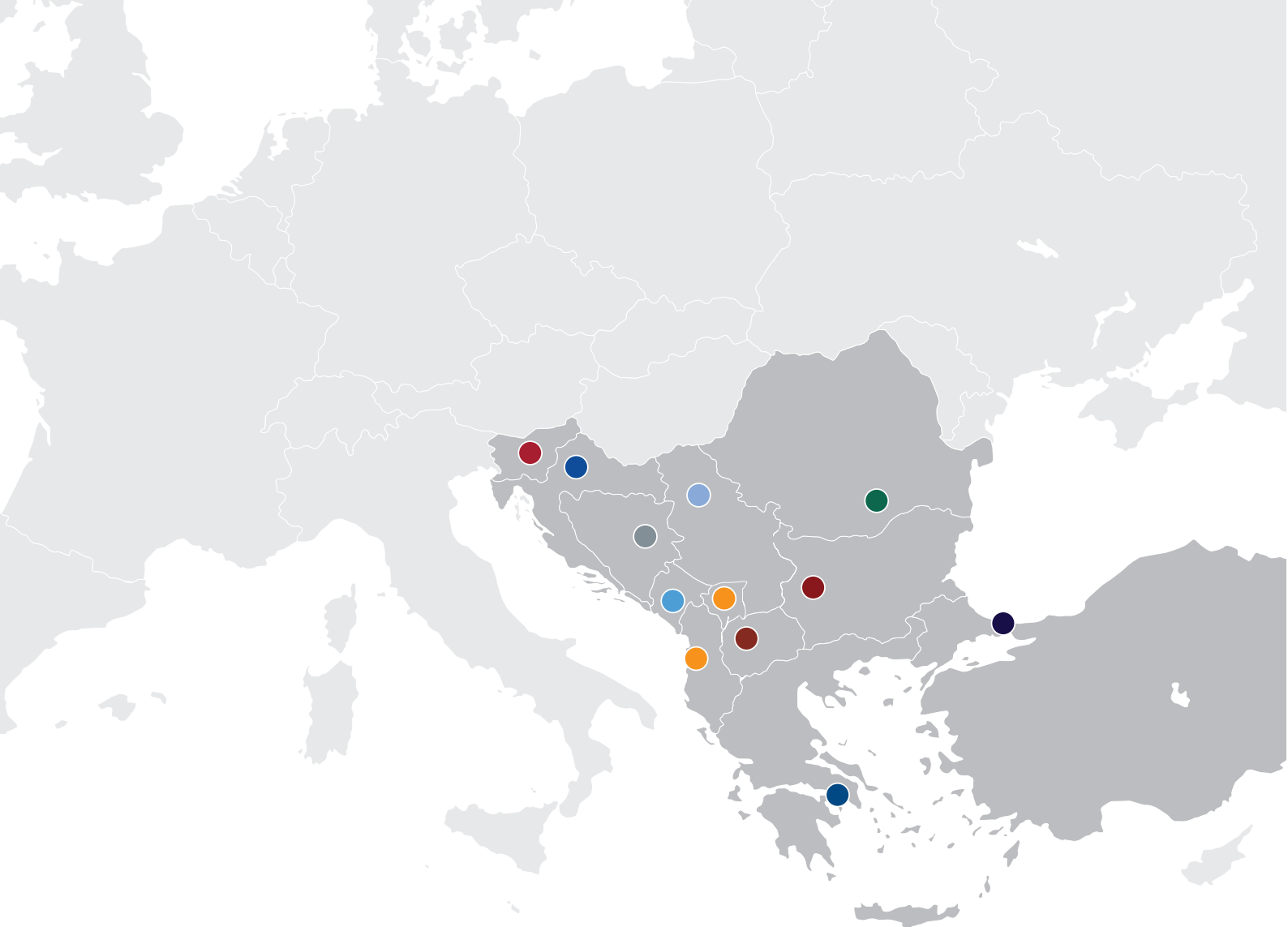


The Southeast Europe Energy Handbook 2014



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SE EUROPE ENERGY HANDBOOK 2014 5



PREFACE

Dear Partners and Friends of SEE Legal,

Established in 2003, South East Europe Legal Group ("SEE Legal") remains the only regional organization of 10 leading independent national law firms covering the twelve jurisdictions of South East Europe.

Last year, SEE Legal celebrated its 10th year anniversary and remains the largest regional legal force of more than 450 lawyers with an impressive client base of multinational corporations, financial institutions and governmental bodies. Our duty of care to our clients remains at the highest level and we are proud that our achievements in client service continue to distinguish SEE Legal as the top tier network of law firms in the region. Our member firms are instructed to work on major energy – infrastructure related investment transactions and continue to have successfully closed most of the important and high profile energy deals in the region. All member firms enjoy the highest recognition from their peers and are constantly ranked every year as market leaders in our respective jurisdictions by reputable legal directories such as, Legal 500, Chambers & Partners, IFLR 1000, etc.

SEE Legal is delighted to be publishing this second edition of the South East Europe Energy Handbook 2014 which is the outcome of the cooperation of our Energy-Infrastructure Practice Group functioning within SEE Legal. We are confident that this practical energy handbook will prove to be a helpful desk-book resource for in-house counsels, industry professionals and law firm practitioners in dealing with complex and highly regulated energy sector relations in the twelve jurisdictions of South East Europe. We have aimed to highlight all the important aspects from our experience in the energy sector, such as market structures, licensing, price regulations, access to the grid, etc. The South East Europe Energy Handbook is not meant to be a treatise on any particular country's energy legislation and is not exhaustive to the point of eliminating the need of professional advice, but it certainly serves its main purpose - to raise readers' attention as to the complexity of energy legislation, the evolution in the energy sector and assist you in identifying the issues that might influence investment and business development decisions.

The Energy Infrastructure Practice Group of SEE Legal decided to contribute this Energy Handbook as a part of various initiatives to promote our capacity and profile in the region and to develop further our relations with you.

Sincerely

Gus J. Papamichalopoulos

Head of Energy Infrastructure Practice Group of SEE Legal



Emir Bahtijarević

Co-Chair of SEE Legal



Disclaimer

This publication is intended to provide a general guide to the law and regulation in the individual jurisdictions described and to be used for reference purposes only. The information contained herein is based on the respective legislation as of March 2014 (unless otherwise indicated) and is not intended to be a comprehensive study nor to provide legal advice. Specific legal advice should always be sought before taking any action based on the information provided herein.

ALBANIA

1. INTRODUCTION TO THE ENERGY MARKET

Albania has been a potential candidate for accession to the European Union since January 2003. It formally applied for EU membership on 28th April, 2009 and is in the process of harmonising its legal framework with that of the EU. The institutional and regulatory framework for energy and in general the energy market in Albania reflects the policy progress achieved over the last decade. In the context of the energy market, Albania is party to, inter alia, the Athens Memorandum, Kyoto Protocol, and the European Community Treaty and strives to comply with the targets set therein to create a unified and sophisticated market foreign investors can rely upon. In terms of energy sources Albania has both thermal and hydro power to generate electricity, with the latter being more significant and having a greater potential for development.

These Market Rules promote an effective generation and supply of electricity and also the competition in sale and purchase of electricity. Until 2008, all energy operations (from production to supply) were in the hands of a single state-owned enterprise, the National Power Corporation ("KESH"). Following the unbundling of the TSO (which is still state-owned), the distribution arm was unbundled from KESH and subsequently a majority stake therein was sold through privatisation to the Czech Company ("CEZ") in 2009.

The market has since undergone liberalisation and indeed the restructuring of the state-owned electricity enterprise had at first enhanced its technical, economic and corporate performance. However, in early 2013, the Energy Regulation Entity ("ERE") withdrew the licence of the CEZ that owned the electric power distribution in Albania and put the company under public administration. CEZ subsequently initiated international arbitration procedures, however now the new government, constituted in September 2013, it is reported that both parties are negotiating to reach an out-of court settlement agreement, to resolve the matter amicably.

2. ELECTRICITY

2.1 Market overview

In 2008 the Government of Albania ("GoA") approved the Albanian Market Model ("AMM") partially developed in accordance with the EU Directives on Electricity and also adopting the requirements of the Energy Community Treaty. The AMM outlines the main responsibilities and relationships among the market participants and Energy Regulatory Entity ("ERE"). In simple terms, the AMM is characterised by bilateral contracts for electricity between and among market participants. Ancillary services for Transmission System are purchased by the Transmission System Operator ("TSO"). Also in 2008 the ERE approved the Albanian Energy Market Rules ("Market Rules") which define:

- a set of rules that establish the procedures for market operations and management;
- a coherent framework under which participants in the electricity market can interact with each other;
- sale and purchase of electricity at freely negotiated prices;
- conditions for participating as part of the Balancing Electricity Market

In order to address importing capacity and to integrate Albania into the European energy network, the GoA has undertaken several projects and has licensed private companies to build interconnection lines. One is the inter-connection line between Albania and Montenegro 400 kV voltage, 50 Hz with a transmission capacity of 100MW. In December 2013, the respective Albanian and Kosovo Ministers responsible for energy signed the agreement on the construction of a 400 kV interconnection line between Kosovo and Albania. The project of the high voltage 400 kV line between Kosovo and Albania is divided in two lots. LOT 1 includes the development of the interconnection line connecting substation SS Kosovo B (Kosovo) and SS Tirana 2 (Albania), at total length of 241.5km. LOT 2 includes the construction and installation of high voltage equipment in these substations, as well as the necessary infrastructure for the provision of secondary regulation (frequency - power), between the Kosovo Electricity Transmission, System and Market Operator (KOSTT) and Albanian Transmission System Operator (OST). The project is expected to be concluded within 24 months. The government has also granted an authorisation for the construction of two merchant lines, 400 kV voltages undersea

interconnection cable lines voltage, connecting Albania and Italy. In 2014 an agreement for the construction of a high voltage transmission interconnection line is also expected to be signed between Albania and Macedonia .

2.2 Regulatory overview

Law No. 9072, dated 22 May 2003 On the Power Sector, as amended ("Power Sector Law") constitutes the cornerstone of the Albanian power sector and has been regularly amended to reflect the developments in the market. The key objectives of this Power Sector Law include (a) the restructuring, commercialisation and ultimate privatisation of the KESH; (b) the development of a competitive energy market; the encouragement of regional electricity trade; and (c) the improvement of investment conditions in the electricity sector.

The Power Sector Law and its subsidiary legislation regulates activities in the electrical power sector defining the rights and obligations of all parties involved in this sector as well as the procedures for selecting and developing a market model and the rules for an electricity market. An important element is that it provides for the oversight of the independent electrical energy regulator ("ERE") - a legal public entity that receives funding from annual regulatory fees that it sets itself. The ERE is, inter alia, responsible for:

- a) setting the rules and requirements for the granting, modifying and revoking of licences to companies for the generation, transmission, distribution, supply, export and import of power;
- b) setting, regulating and reviewing tariffs (which are to be set on a cost recovery basis) and the terms and conditions of service of electrical energy proposed by a licensee, or review them according to the circumstances;
- c) resolving disputes between licensees and consumers, and between or among licensees; and
- d) monitoring and controlling the operation of services by licensees, with powers of inspection, access, seizure of documentation or relevant information.

The Ministry of Energy and Industry ("MEI") is the other important public stakeholder in this sector, particularly with regard to policy-making. The MEI supervises the operation of the energy sector and has specialised internal Directorates dealing with electricity and hydrocarbons. MEI plays a crucial role in drafting the development policies of the energy sector. MEI also represents the state as the named owner of the remaining state energy companies and shall

continue to be responsible for the effective management of these companies until their eventual privatisation.

2.3 Regulated and unregulated electricity market activities

The Power Sector Law and the AMM define the participants in the energy market which include several operators and the ERE. All contracts and tariffs between the various market participants are regulated at their inception in the energy market. The regulated market is organised and regulated through the following contracts between:

- a) KESH Gen and Wholesale Public Supplier ("WPS") (primarily for transparency of sale prices charged);
- b) WPS and Retail Public Supplier ("RPS");
- c) Transmission System Operator ("TSO") and other market participants for transmission-related services, including ancillary services;
- d) Distribution System Operator ("DSO") and other market participants for distribution-related services;
- e) Small Power Producers ("SPPs") and the WPS;
- f) RPS and its tariff customers;
- g) KESH Gen and Traders, including import contracts for the exchanges of power, which are subject to ERE scrutiny or procurement rules;
- h) OST and KESH Gen, SPPs, Independent Power Producers ("IPPs") and Traders for the transmission losses and Ancillary Services.

The ERE retains the right to adopt standard agreements or procurement rules that are obligatory to be executed by Eligible Suppliers ("ESs"), IPPs, SPPs and other market participants when carrying out a bilateral contract with the WPS.

Pursuant to the provisions of the AMM, some contracts between market participants are not regulated; thus they are freely negotiable between the parties and these include:

- (a) contracts between ESs and Eligible Customers ("EC");
- (b) contracts between SPPs, IPPs, ECs and Traders;
- (c) contracts between KESH Gen (i.e. the generating arm of the WPS and ESs or Traders, to the extent permitted under the present or other restrictions on WPS sales; and
- (d) contracts between DSO and Traders, ESs, SPPs and IPPs for the necessary energy required to cover losses in the distribution system.

See figure 1 below for the electricity market structure in Albania.

MARKET STRUCTURE ENERGY SUPPLY AGREEMENTS

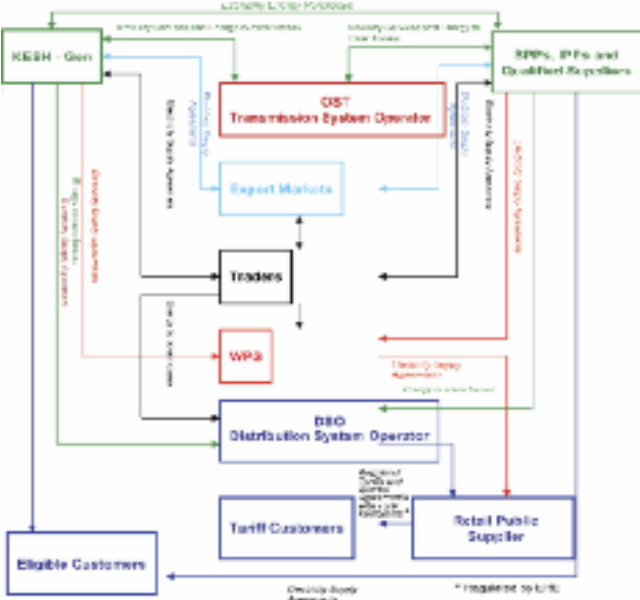


Figure 1: Electricity Market Structure in Albania (Source: ERE)

2.4 Trading and supply of electricity

The AMM is a vertically integrated market model characterised by bilateral contracts for electricity between and among market participants. The AMM has directed that Wholesale and Retail Supply be public activities. Thus after the unbundling of KESH, three different entities now fulfil the activity of the wholesale production, supply and retail supply of electricity. KESH Gen retains the licence for the generation of electricity and is entitled to sell electricity produced to the WPS at prices approved by the ERE. Sales are subject to and regulated through annual contracts (or based on different durations) as approved by the ERE. In all cases, the ERE is entitled to monitor the process of the exchange and sale of electricity, in order to ensure compliance with the rules and procedures of sale and exchange of electricity, as approved by the ERE.

The WPS, being a separate entity in possession of a licence for the wholesale supply of electricity is entitled to purchase from KESH Gen all the electricity produced by KESH Gen from its hydro power plant and other generation plants, as well as from IPPs, SPPs, ESs and Traders to fulfil its obligations to the Retail Public Supplier ("RPS"), i.e. to service all the Tariff Customers.

The AMM also comprises: the RPS - an entity licensed for the retail supply to tariff customers at regulated prices determined by the ERE; IPPs - entities producing electricity and are not connected with the grid; Grid System Operators which maintain, operate and upgrade the grid in high, medium and low voltage levels and SPPs

which are entities licensed to produce electricity by hydro, wind or other sources which qualify for feed-in tariff if their installed capacity fulfils the legal requirements (for hydro sources - up to 15MW); and lastly, Traders and Tariff Costumers conclude the list of participants of the AMM. All contracts and tariffs between the various market participants are regulated upon inception in the energy market. Pursuant to the provisions of the AMM some contracts amongst market participants are not regulated and so are freely negotiable.

Under the AMM, Traders are licensed entities which buy and sell electricity with the exception of sales to the RPS and end-user customers. Traders should be established as legal entities and the scope of their activity should be the wholesale buying and selling of electricity. Traders can buy electricity from KESH Gen (i.e. surpluses), IPPs and SPPs to then sell on to QSs, WPS, or a DSO (covering the distribution losses). When IPPs or SPPs sell directly to the WPS or other ESs, they require only a production licence and not a trading licence.

IPPs, SPPs and ESs may also be Traders, engaged in wholesale transactions, on the condition they obtain the necessary trading licence. The ERE shall ensure that the licences and licensing procedures for ESs and Traders are transparent and non-discriminatory and do not create an undue burden on the entry of Traders into the Albanian market, subject to any reciprocity agreement.

2.5 Transmission and grid access

Transmission is regulated by the Transmission System Code - a document describing the relations between TSO and users and establishes procedures for the operation and development of the Transmission System according to the development of the Albanian and Regional Electricity Market.

The Transmission System Code contains specific provisions which:

- a) facilitate economic, efficient and coordinated development, operation and maintenance of the Transmission System according to the Albanian and Regional Electricity Market;
- b) help the TSO comply with its obligations regarding electricity transmission with neighbouring countries;
- c) eliminate discrimination in the preparation and application process of the Transmission System maintenance program.

As an indivisible part of the Transmission System Code, the Connection Code specifies the conditions, criteria and deadlines that users need to fulfil for connection to the Transmission System or modification of their existing connections. Any user which needs to use the Transmission System may file an application (in the

format prepared by the TSO) to the TSO for connection. The TSO Connection Agreement should specify the general conditions of connection and all specific technical and financial conditions for connection. Currently, there is no approved standard form of a TSO Connection Agreement.

2.6 Distribution and grid access

The Distribution Code regulates the use of the distribution network and promotes and imposes the minimum technical rules and requirements for the electricity market in the aims of providing the reliable, stable and economic operation of the electricity distribution network, mandatory for the DSO, Retail Public Supplier and users connected to the distribution network.

The Distribution Code is applicable to all existing or prospective independent electricity generators directly connected to the distribution system, including co-generators, auto-producers and generators using renewable sources of energy. These requirements are prescribed in the DSO Connection Agreement template which is approved through the ERE decision No. 22, dated 24 February 2012. Beside the DSO Connection Agreement template, the same ERE decision approved the regulation for new connections and the official application form for new connections.). The regulation aims to standardize the relations between the DSO and Distribution System users that wish to make a new connection or modify their existing connections in the distribution system, and establishes the procedures, terms and fees for this service by the DSO.

Any Distribution System user requiring a new connection or modification of existing connections and/or using the Distribution System must follow the procedures set out in the Distribution Code and aforementioned ERE Decision No. 22. The Distribution System users requiring connection to the Distribution Network or modification of the existing connection need to fulfil the minimum technical criteria of planning and operation in order to maintain a stable and safe operation of the Distribution System.

3. RENEWABLE ENERGY

3.1 Market overview

The Power Sector Law does provide some basic regulation and a basis for renewable energy sources and to some extent sets out the obligation to use renewable energy sources. It obliges every subject licensed for power generation with an installed capacity of more than 50MW to produce at least 3% of power through renewable sources. With the assistance of international advisors,

including IFC, the GoA finalized the Law on Renewable Energy Sources which provides for the much-needed detailed regulation and rules and clarifies the support schemes available to encourage production of such energy. The main priorities of the Albanian energy policy are energy efficiency and the promotion of renewable energy sources. Both these objectives are on track to be harmonised with European Community Directive 2001/77 as well as with the Energy Community Treaty principles concerning energy efficiency and renewable energy sources. Promotion of renewable energy is well-defined in the Albanian government energy policy.

At present renewable energy makes up around 40% of Albania's energy supply. This is largely due to the fact that virtually all electricity production is generated from hydropower. Many concessions and licences have been granted over the years to private companies for the construction and operation of small hydro-power plants in particular, although only a small percentage have been constructed to date (many still requiring financing).

Other renewable sources are being explored, several licences have been issued for the construction and operation of wind farms (estimated total installed capacity of 1,000MW). Given the beneficial conditions of the Mediterranean climate, solar power and photovoltaic energy generation are viable options, in addition to biomass, for which some licences having been granted to date.

3.2 Support schemes

The Power Sector Law and the wider legal framework provide for certain types of support mechanisms that are granted to investors exploiting renewable energy sources. These are summarised below:

- (a) Custom Duties Exemptions: a specific law has been approved to promote the construction of installations using renewable energy sources and which grants exemptions from custom duties for the import of machinery and other equipment to be used in the construction of installations using renewable sources;
- (b) Feed-in Tariffs: this is the most successful form of support scheme and although in the renewable energy law feed-in tariffs are to be applied to many renewable energy sources, currently the option is only available for new and existing small hydro power plants ("SHPP") (i.e. with installed capacity up to 15MW). The feed-in tariff is set by the ERE annually and any SHPP producer can upon request benefit from a 15-year power purchase contract with the WPS using the feed-in tariff for the entire term;
- (c) Guarantee of Origin Certificates ("GOC"): GOC's are

official certificates issued as evidence that the power generated is from renewable sources. This certificate is issued after the qualification of the plant as being a generator from renewable sources and must be acquired prior to receiving a Green Certificate. The certificate shall include the amount of power generated by renewable sources, the name of the power plant and its capacity. GOCs can be transferred together with the power in accordance with rules and procedures defined by ERE;

- (d) Green Certificate ("GC"): GC's are official certificates proving that the power was generated through renewable sources or by a combined generating mode which can be transferred (i.e. traded), separately from the power it certifies. The GC certifies the owner and also the place of generation, date of generation and the generating plant. GCs can be transferred in accordance with the rules and procedures defined by ERE.

To date there is only one international agreement for the sale and purchase of GCs and GOCs: the Agreement between the Italian Ministry of Productive Activities, the Italian Ministry of Environment and Protection of Territory and the Albanian Ministry of Economy, Trade and Energy. With this agreement, Albanian and Italian power generators are able to sell their respective GCs and sell power with GOC to buyers from the other country.

3.3 Introduction of Law on Renewable Energy Sources

In 2013 the Albanian Parliament enacted the law No. 138/2013, dated 2 May 2013 "On Renewable Energy Sources", as amended ("RES Law"). This new law was intended to boost the production of electricity from renewable sources. KALO & ASSOCIATES have played a key role in the drafting group of this law. The law has fully transposed the 2009/28/EC Directive "On promotion of use of energy from renewable sources. It also contains a comprehensive set of definitions several of them drafted pursuant to the 2003/54/EC Directive and other relevant secondary legislation of the EU. Key provisions of this law include:

- (a) A proposal for the adoption of a National Renewable Energy Action Plan, and adoption of the national targets for the use of the renewable energy sources;
- (b) The introduction of Support Schemes by the Council of Ministers for reaching the targets indicated in the Renewable Action Plan – though the law does provide for certain types of support scheme such as feed-in tariffs, tax exemptions and renewable energy obligatory support schemes;
- (c) Requires the responsible Government entities and bodies to

provide any information and training to enhance the awareness of renewable energy sources technology.

- (d) Establishes rules for connection and access to the grid for renewable energy sources plants.
- (e) A basis for Priority Grid Access rules - which could be considered as one of the most important provisions of the law. The law divides the Renewable Energy producers into two different categories (i) "Producers with Priority", meaning Producers that produce energy from renewable sources with an installed capacity of up to 15 MW, who benefit from the feed-in tariffs support scheme by signing a Power Purchase Agreement with the WPS; and (ii) "Producers without Priority", meaning producers who do not benefit from the Feed-in Tariffs support scheme.
- (f) Transmission and distribution of electricity produced by Priority Producers from renewable energy sources is guaranteed. The TSO shall give priority to the plant that produces energy from renewable sources for as long as it is permitted by the national energy security system and based on transparency and non-discrimination;
- (g) Methodology for Feed-in Tariffs – to be proposed by ERE for all types of renewable energy sources by determining the installation size of the plants and characteristics to qualify for the specific feed-in tariff;
- (h) Guarantees of Origin – the law now provides for the minimum requirements for acquiring the guarantees of origin, its elements, the manner in which it can be traded, etc.;
- (i) Provisions about solar collectors and energy in transport – the law also provides for certain support schemes drafted for the promotion of solar-energy installations. It provides that all solar systems producing hot water, either produced locally or imported, which are installed to meet the objectives under the RES Law, or supported by any type of public incentive scheme, must meet the technical minimum requirements to be approved by the Council of Ministers.

3.4 Energy Efficiency

Energy efficiency in Albania is regulated through the law No. 9379, dated 28 April 2005 "On Energy Efficiency". The law aimed to establish the legal framework required for the elaboration and enforcement of a national policy for the efficient use of energy and reducing energy losses in the entire energy cycle. The policies objectives for the efficient use of energy consist mainly in increasing the energy supply security by means of reducing the consumption of energy sources and environmental pollution. There had been

efforts to produce a draft new Law on Energy Efficiency which has yet to be published or adopted.

Some of the key provisions of the law include:

- (a) Any legal or natural entity that manufactures or imports house ware electrical appliances shall not sell them, unless the standards are met and proper labelling has been applied.
- (b) The data on the labels shall be in the Albanian language and shall include data on the specific energy consumption of the appliance, its energy efficiency in relation to the lowest and highest rates of energy for the given type of electrical appliance, as well as on potential negative impact that its operation may have on the environment and the people's health.
- (c) Responsibilities of the energy auditors and of the entities that shall be audited.
- (d) Procedures and criteria for licensing the energy auditors.
- (e) Establishment and financing of the Energy Efficiency Fund.

The GoA issued the decision No. 619, dated 7 September 2011 "On approval of the national action plan for energy efficiency 2011-2018. The Action Plan is based on the Directives 2006/32/EC "On efficient use of energy for end users and energy services", Directive 2002/91/EC "Performance of energy in buildings" (amended by 2010/31/EP), Directive 92/75/EC (amended by Directive 2010/30/EP). The Energy Efficiency Action Plan provides for the necessary measures to be taken for improving the energy efficiency in the economy sectors, in order to achieve the energy efficiency for the short-term period up to 2012, for medium-term period up to 2012 and for long-term period up to 2018 through the implementation of energy efficiency policies.

4. NATURAL GAS

4.1 Market overview

The development of the natural gas sector in Albania is one of the priorities set out in the National Strategy of Energy. Albania has a very low level of gas consumption, particularly with over 90% of its energy being produced from hydro-power.

However, it is in a prime location to serve as a transit country and is not yet connected to the international gas networks though this shall change in the future. In 2013, the developers of a major Azerbaijani natural gas field in the Caspian Sea picked the Trans-Adriatic Pipeline (TAP) project over the Nabucco West project to transport Caspian natural gas to Europe. The pipeline will transport natural gas from the Second Shah Deniz field in the

Caspian Sea. With construction set to begin in 2015 and be completed by 2019, the 870km long pipeline will run from the Turkish border through Greece and Albania, and then cross the Adriatic sea to Italy.

The Albanian parliament has already ratified the intergovernmental agreement signed with Italy and Greece on the construction and operation of the Trans Adriatic Pipeline. Such agreement confirmed the three host countries' support for TAP and their cooperation for the project's timely implementation. The ratification of the Intergovernmental Agreement follows the finalization of the Host Governmental Agreement initiated in Albania on 18th January 2013. The Host Governmental Agreement sets out the parameters of engagement between TAP and the Albanian government, such as permitting process, implementation of technical and safety standards or land easement procedure. The TAP has major implications for European energy requirements and it shall largely affect Albania as well, especially with promotion of the economic development, job creation and foreign direct investments in Albania as well as the complete restructuring of the gas sector in Albania with it to benefit from direct gas supply.

4.2 Regulatory overview

In line with the objectives of the National Strategy of Energy, the Albanian Parliament approved Law No. 9946, dated 30 June 2008, On Natural Gas Sector, as amended ("Gas Law"). The Gas Law defines two main roles:

- (a) The Ministry responsible for the energy sector, i.e. MEI is the supreme institution responsible for: (i) developing policies and plans for sustainable development; (ii) approving new Natural Gas Infrastructure; (iii) preventing and managing crisis situations; (iv) approving technical and safety rules;
- (b) The ERE is responsible for regulations of natural gas activities (except for natural gas exploration and production, which is regulated under Law No. 7746, dated 28 July 1993 On hydrocarbons (exploration and production), as amended, ("Hydrocarbon Law").

With the enactment of the Gas Law, the ERE has expanded its scope of regulation to cover gas and has begun the preparation of the regulatory framework for the Natural Gas Sector. To date it has amended its Rules of Practice and Procedures and with the assistance of international advisors and donors it has completed the Licensing Procedures for the Natural Gas Sector and is working towards completing the set of rules and regulations to ensure proper functioning of the sector.

4.3 Regulated natural gas market activities

As noted above the natural gas market is largely regulated and supervised by the ERE. Under the Gas Law the following activities require a licence: (a) transmission; (b) distribution; (c) supply (retail sale); (d) trading (wholesale); (e) operation of natural gas storage facilities; (f) operation of LNG facilities. Each activity requires its own separate licence and the licensing procedures are regulated by the ERE Decision No. 9, dated 11 February 2011 on Natural Gas Sector Rules and Procedures on Licensing, Modification, Partial/ Full Transfer, Revocation and Renewal of Licences which is comprehensive. In accordance with the abovementioned ERE decision, the duration of the validity of a licence for the transmission, distribution, storage and LNG issued by the ERE shall be for a term of 30 years with the right to apply for renewal. The duration of validity of a licence for the supply and trading shall be for a term of 5 years with the right to apply for renewal.

An application for a licence for any of the activities in the natural gas sector must be filed by companies which have a legal presence in Albania (by their duly authorised representative) through the completion of the relevant application forms provided and published by ERE. Together with the application form a set of legal, financial and technical documents must be submitted to the ERE (ensuring the criteria determined by the ERE for each type of activity is met). In the cases when a licensee does not comply with the provisions of the Gas Law, the ERE is entitled to take the necessary administrative measures ranging from the imposition of a fine to the revocation of the licence.

4.4 Exploration and production

The exploration and production of natural gas are separately regulated under the Hydrocarbon Law (see below under section 5).

4.5 Transmission and access to the system

As provided for under the Gas Law, the criteria for ensuring that users receive equal treatment and freedom of access to the gas transmission/ distribution network are defined by the ERE. The activity of natural gas transmission and distribution is of public interest and is performed respectively by the TSO and DSO.

These operators own, operate, construct and maintain the transmission/ distribution systems. They act with transparency and objectivity avoiding discrimination between the system users. The system operators must enter into grid connection and grid access agreements with third persons seeking access.

The grid access can only be refused if such access is technically or economically impossible or unreasonable. Upon a request from

interested parties and in cases when a TSO/ DSO refuses third party access to the grid, the ERE can intervene and review such decisions and, in the event of an unjustified refusal, will order granting of access. The TSO/ DSO publishes the terms and conditions approved by the ERE for the granting of access to the transmission/ distribution system to the third parties. There is, however, currently no DSO or TSO in the gas sector nor any Codes published in this respect. In order to operate a distribution network, a distribution licence issued by the ERE is required in accordance with the Gas Law. This licence is issued on a case-by-case basis and shall contain such terms and conditions as are deemed necessary, convenient or prudent by the ERE. For a distribution licence application an environmental permit, construction site and construction permit are required.

A DSO should provide the efficient and stable distribution of natural gas in accordance with the licence terms. The DSO must connect local customers upon request, in a non-discriminatory manner, to its grid, provided that the operator has sufficient capacity and that the work necessary to make the connection is technically and economically feasible according to the criteria issued by the ERE. The ERE is entitled to order the DSO to provide capacity to new customers in cases where the operator has rejected access in violation of the rules issued on this matter. However, it cannot order the operator to expand its system if this is economically unreasonable. Additionally, the DSO and TSO will prepare long-term investment plans for the development and expansion of the distribution and transmission network for natural gas and such plans will be approved by the ERE based on cost recovery analysis.

4.6 Trading and supply

As provided for by the Gas Law, the ERE is authorised to regulate the procedures and principles for tariff-setting. Accordingly, the regulated activities for which the ERE is empowered to determine the tariffs are: entry into the transmission/distribution network, connection with the distribution/transmission network, entry into the deposit areas and LNG installations, auxiliary services, balancing and supply of the tariff consumers. Other activities such as the wholesale trade of natural gas between suppliers and retail trade between suppliers and eligible customers are non-regulated activities and the prices are adjusted on the basis of market demand. The ERE tariff methodology shall include prices, terms and tariff conditions, which are transparent, non-discriminatory to all users by taking into account the need for integrity of the gas system and reflecting the costs incurred to include an adequate return on investment ratio.

5. UPSTREAM OIL MARKET

5.1 Market overview

All natural resources in Albania (inland and offshore) are owned by the state which has the right to explore, develop, extract, exploit and utilise natural resources. Pursuant to the law No. 7746, dated 28 July 1993 "On Hydrocarbons" (exploration and production), as amended (the "Hydrocarbons Law"), the state acting through MEI is entitled to grant a Petroleum Agreement to a person (one type of which is a Production Sharing Agreement ("PSA")) the right to explore, develop and exploit hydrocarbons in a defined area as agreed in the PSA.

The governmental objective is to negotiate the terms of the PSA with the oil industry in a fair and balanced manner, by taking into consideration the typical risks associated with exploration and the state's legal entitlement to revenue as the owner of the natural resources. The Natural Agency for Natural Resources ("AKBN") was created back in 2006 to deal, inter alia, with hydrocarbon activities on behalf of the Albanian state. The AKBN is a specialised institution dealing with the negotiations of the PSA, the monitoring of petroleum activities and policy-making. Albania is home to the largest onshore oil field in Europe (i.e. Patos Marinza with 7.5 billion barrels original oil in place). A number of foreign investors have already entered this market, most notably Bankers Petroleum which operates and has a 100% interest in the development of the Patos Marinaz oil field. Another potential oil and gas field in Albania is the Molisht-Shpirag hydrocarbon area, where Royall Dutch Shell and Petromanas Albania are at present carrying out hydrocarbon exploration operations. The Molisht-Shpirag consists of the 2-3 Research Blocks, and it is reported that the first exploration stage has been completed. Following the drilling of Shpirag-2 well, a test was conducted in late 2013, which discovered the presence of a considerable quantity of oil and gas in this area.

5.2 Regulatory overview

Petroleum operations are regulated under the Hydrocarbons Law which together with the Decree No. 782, dated 22 February 1994 "On the Fiscal System in the Petroleum Sector", as amended, forms the legal framework for the exploration, development and exploitation of petroleum in Albania. Any person wishing to carry out petroleum operations must firstly obtain either a Prospecting Permit or enter into a PSA with terms and conditions which will be negotiated with the AKBN. In the latter case there is no separate licence per se; all matters are regulated and encompassed in the PSA. On 1st January 2014, entered into force three laws related to activities in the field of hydrocarbons:

- (a) Law no. 180/2013, dated 28.12.2013, "On Amendments and Additions to the Law no. 61/2012, "On Excise Taxes in the Republic of Albania" as amended.
- (b) Law no. 182/2013, dated 28.12.2013, "On some amendments and changes to Law no. 7928, dated 27.04.1995 "On value added tax "as amended.
- (c) Law no. 183/2013, dated 28.12.2013, "On an amendment to Law no.7811, dated 12.04.1994" On the approval of changes to the decree no. 782, dated 22.02.1994, "On the fiscal system of the hydrocarbon sector (exploration-production)"".

These new amendments brought some changes in the hydrocarbon fiscal system (VAT, Excise Duties) which has an impact on the activity of companies that perform exploration and production operations in the field of hydrocarbon in Albania.

5.3 Regulated oil market activities

With the exception of activities conducted pursuant to a Prospecting Permit, no person can engage in petroleum operations without being authorised by METE in accordance with the agreed terms and conditions stipulated in a Petroleum Agreement/ PSA. A Prospecting Permit authorises the holder to carry out the following activities:

- (a) To perform prospecting activities in the areas covered by the permit by means of aerial, geophysical, geochemical, paleontological, geological, topographical and seismic surveys and to study their interpretation; and
- (b) To file an application for a PSA, if petroleum is discovered.

The law states that the permit shall be valid for a two-year term, shall be not exclusive, shall not authorise the drilling of exploration wells and shall not grant to the permit holder any priority right (over any other party/ person) to enter into a Petroleum Agreement/ PSA with METE, except when expressly stated so in the Prospecting Permit. The PSA is a contract entered into between the AKBN acting on behalf of the MEI and the Contractor allowing for the exclusive rights for the Contractor to undertake explorations within the contract area for a period of 5 years (subject to extension as noted below) and exclusive rights to exploit for a period of no more than 25 years.

The PSA provides for the recovery of Contract Costs from petroleum produced in the defined area or from a proportional part thereof. It also provides for the division between the State and the Contractor of the balance of petroleum remaining after the recovery of Contract Costs, in accordance with a scale or formula specified in the PSA. Other typical provisions in a PSA relate to:

- (a) Contractor property rights and right to construct and operate required infrastructure subject to third party rights and access under the law;
- (b) Contractor right to trade and export petroleum exploited under the terms of the PSA;
- (c) Fiscal regime applicable to operations (and exemptions applicable under the law);
- (d) Obligation to perform a minimum work program backed by a performance guarantee;
- (e) Obligation to present an annual work program and budget;
- (f) Preference given to local employment and supplies during petroleum operations, where these are competitive in terms of quality, availability and cost;
- (g) Change of law indemnities measures;
- (h) Obligation of the Contractor to carry out the Petroleum operations in a safe and proper manner in accordance with the generally accepted international petroleum industry practice and by causing minimal damage as is reasonably practicable to the general environment including, inter alia, the surface air, seas, lakes, rivers, marine life, animal life, plant life, crops, other natural resources and property, and shall forthwith repair any damage caused to the extent reparable, and shall pay reasonable compensation for all damage which is beyond repair.

Under the PSA the Contractor is authorised to conduct petroleum operations during an Initial Exploration period which can be extended twice. It is preferred that the Exploration Period includes a drilling commitment by the Contractor. The duration of the exploration period is up to 5 years and can be extended only up to 7 years according to the Hydrocarbon Law. The phases of the Exploration Period are subject to negotiation. In the event that the Contractor declares a commercial discovery during the exploration period, it has the right then to proceed and extend for a development/ production period of twenty-five years, which can also be extended. During the exploration period, the Contractor is subject to minimum work programs and expenditure obligations.

Exploration expenditures and capital expenditures are recoverable only in the case of a commercial discovery but not before the start-up of production. Operating expenditures are recoverable during the year in which they are incurred. Reasonable and necessary administrative expenditures of the Contractor are also recoverable. The Contractor is subject to tax on profit at a rate of 50% of the realised profit and the royalty at typically 10% of sales revenues.

6. FORTHCOMING DEVELOPMENTS IN THE ALBANIAN ENERGY SECTOR

The desired full and complete liberalisation of the energy sector is not quite accomplished yet and there are still fundamental reforms required and legal framework to be reinforced. The first step was made back in 2003 with the adoption of the Power Sector Law which sets as a priority the development of a competitive energy market; the encouragement of a regional electricity trade and the improvement of investment conditions in the electricity sector.

The government is still finalising a new power sector law which will further unbundle the activities of the market participants in the electricity sector to an extent consistent with the applicable EU directives. The draft law provides certain obligations relating to the transmission system operator which, in the mid-term, will have to comply as fully as practicable with the separation of accounting, management and assets, as well as the provisions of the applicable EU directives concerning transmission system operators under joint ownership. The Distribution System Operator and the Retail Public Supplier also must fully comply with the division into two separate legal entities and all other separation and independence requirements, as well as all applicable EU directives concerning the separation of the distribution system operator from the retail supplier. The draft law shall establish the necessary legal framework for the power sector which shall be organised and fully implement the European Union energy related Directives and Third Package of European Union Directives.

As part of the package of legislation in the energy sector, a new draft law on Energy Efficiency is expected to be introduced which shall fully transpose the Directive 2012/32/EC. The Gas Sector Law shall also be amended by fully bringing it in line with the Third Package of European Union Directives on the energy sector.

In respect of the oil & gas sector, regulatory and policy developments are also underway as part of the overall state energy strategy. A new regulation on the activity of exploration and production of hydrocarbons in Albania is soon expected to be approved by the GoA. This regulation shall establish the main procedures, terms and conditions for licensing entities in the field of exploration and production of hydrocarbons in Albania and is also expected to adjust the competences and responsibilities of state authorities and entities involved in the hydrocarbons sector in Albania.

1. INTRODUCTION TO THE ENERGY MARKET

The central location of Bosnia and Herzegovina in the Balkans makes it the intersection of all major infrastructure related projects. In spite of its relatively complex legal and political system, Bosnia and Herzegovina represents an increasingly interesting market for foreign investors. The strong hydro and wind power potential of Bosnia and Herzegovina gives it a natural predisposition in the development of renewable energy, making it one of the few non-EU countries that has already met EU targets in the amount of electricity produced from renewable energy sources. The latest political changes in Bosnia and Herzegovina have been followed by announcements of new legislation, aimed at simplifying and re-organising the complex legal and administrative framework related to the development of energy facilities.

Being a Contracting Party to the Treaty establishing the Energy Community, Bosnia and Herzegovina is obliged to transpose the so-called EU Third Energy Package into the domestic legislation and to ensure practical implementation of its requirements. Full transposition of the relevant EU legislation in electricity and natural gas sectors has to be done by the end of 2014, while its implementation through various reforms in regulatory, administrative and corporate fields – by the end of 2015. Additionally, Bosnia and Herzegovina is also bound by certain EU requirements regulating renewable energy sector, oil and petroleum products, environmental protection, energy efficiency and energy statistics.

Transposition and implementation of the EU law shall inter alia result in full opening of electricity and natural gas markets from 1 January 2015, as well as in unbundling of vertically integrated energy undertakings, practically ensured supplier switching, liberalised trading schemes in energy products and financial derivatives, and market-based energy pricing. Together with an expected diversification of the use of primary energy sources, awaited legal and regulatory reforms will enhance the development of competitive and liquid energy markets.

2. ELECTRICITY

2.1 Market overview

The electricity sector in Bosnia and Herzegovina is characterised by its fragmentation. The legal, administrative and regulatory frameworks for electricity generation, distribution and supply are divided between the Entities of the Federation of Bosnia and Herzegovina and Republika Srpska, and the Brčko District. Despite legal concept of a single electricity market in Bosnia and Herzegovina, the three jurisdictions operate in parallel under separate sets of legislative framework.

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 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). The enterprise Komunalno Brčko 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 the State-level and is separated in two companies. The independent system operator Nezavisni Operator Sistema BiH (NOS BiH) is a non-profit enterprise established 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 the State Energy Regulatory Commission (DERK). NOS BiH is owned by the two Entities in the same ratio as the transmission company.

The shares of the transmission company Elektroprenos-Elektrprijenos BiH (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 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 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 monopolised 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 Komunalno Brčko) 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 DERC, 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 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 aluminium 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. In 2012, the final consumption of electricity in Bosnia and Herzegovina reached up to 11,047 GWh. Local electricity production amounted for 12,935 GWh, the absolute majority of which was generated by hydropower plants (including small hydropower plants and pump-storage power plant) and coal fired thermal power plants. Bosnia and Herzegovina also imported 4,215 Gwh and exported 4,525 GWh of electricity.

2.2 Regulatory overview

Jurisdictional and regulatory competences in the electricity sector of Bosnia and Herzegovina, following its constitutional setup, are divided between the State level, the Entities and the Brčko District. Consequently, there are four regulatory frameworks which in parallel do regulate respective electricity activities in the country with a rather limited scale of their inter-harmonisation.

At the State level, the Law on Transmission of Electric Power, Regulator and System Operator of Bosnia and Herzegovina, as adopted in 2002 and further amended, regulates activities of the transmission system operation and transmission of electricity, cross-border trade in electricity, and designation, functioning and decision-making powers of DERK. This law defines the electricity market of Bosnia and Herzegovina as “a single economic space”.

Also the Law Establishing the Company for the Transmission of Electric Power in Bosnia and Herzegovina, as adopted in 2004 and further amended, and the Law Establishing an Independent System Operator for the Transmission System of Bosnia and Herzegovina, as adopted in 2004, respectively regulate corporate setup and competences of Transco and NOS BiH.

Based on these laws, the operation of the electricity transmission system in Bosnia and Herzegovina is structured as a very specifically adapted model of an independent system operator. However, separation of functions between Transco and NOS BiH, including those related to the transmission of electricity, is not fully clear and creates dead-lock situations in decision-making which vital for effective and reliable functioning of the network.

Therefore, unbundling of the transmission system operator is one of the key targets, both with legal and political reference, for further regulatory reforms.

In the Federation of Bosnia and Herzegovina, the electricity sector is regulated by the Law on Electric Power, a new wording of which was adopted in August 2013. In Republika Srpska, the regulatory framework for electricity is established by the Law on Energy, as adopted in 2009, and the Law on Electricity, as adopted in 2008 and further amended. As for the Brčko District, its Law on Electricity adopted in 2004 and further amended regulates electricity activities within the territory of the District.

Considering regulatory fields vested for an exclusive competence of the State level, the Entities and the Brčko District keep their jurisdictional powers in all remaining fields of the electricity sector, namely – generation, distribution, supply of and internal trade in electricity. Divided jurisdictional and regulatory competences also mean that separate authorities are designated for regulation, monitoring and supervision of regulated electricity activities. As it was already mentioned, DERK is designated as an independent State-level regulatory authority in charge for the regulation of activities falling within the jurisdictional scope of the State.

DERK is also designated as a regulatory authority of the Brčko District. In the Entities, the Regulatory Commission for Energy in the Federation of Bosnia and Herzegovina (FERK) and the Regulatory Commission for Energy of Republika Srpska (RERS) are designated for the regulation of respective electricity activities. It has to be noted that the EU law expressly requires the countries to designate a single regulatory authority at the national level. Currently, DERK represent Bosnia and Herzegovina in international cooperation of regulatory authorities, however, its limited powers outside the regulatory scope of the State make it impossible to act as a single – or senior – regulatory authority for electricity in Bosnia and Herzegovina.

Restructuring of regulatory competences by granting DERK respective monitoring and enforcement powers in all fields of electricity is one of the issues to be targeted within the scope of future legal and regulatory reforms. At the very beginning of 2014 the EU Instrument for Pre-Accession Assistance (IPA) project “Development of the EU acquis-compliant electricity legislative framework in Bosnia and Herzegovina” has been concluded by submitting legal drafts for primary and secondary legislation transposing the EU Third Energy Package in all four jurisdictions of

Bosnia and Herzegovina. Draft legislation proposed by the projects aims at full compliance of the legal framework with the EU law and maximum harmonisation of regulatory practices between different jurisdictions. Outcomes of the project shall be further on taken by competent authorities through the legislative procedures in order to meet the country’s commitments under the Treaty establishing the Energy Community.

2.3 Regulated electricity activities

The following electricity activities are regulated in Bosnia and Herzegovina and are subject to licenses issued by competent regulatory authorities:

1. The State level:

- Transmission of electricity – a license is issued to the company responsible for the transmission of electricity within the entire territory of the country (currently – Transco);
- Operation of the transmission system – a license is issued to the transmission system operator in charge for the operation of the transmission network within the entire territory of the country (currently – NOS BiH); and
- Cross-border trade in electricity – a license is issued for all electricity undertakings willing to perform an international trade in electricity (import/export of electricity).

2. The Entities and the Brčko District:

- Generation of electricity – a license is issued to all undertakings operating electricity generation facilities and willing to perform the commercial production of electricity;
- Distribution of electricity – a license is issued to electricity undertakings operating the distribution grid and providing electricity delivery services for final customers (currently EP BiH, EP HZHB, EP RS and Komunalno Brčko);
- Supply of electricity – a license is issued to all undertakings willing to sell electricity to final customers (does not include physical delivery); and
- Trade in electricity – a license is issued for all electricity undertakings willing to trade in electricity on the internal market (does not include cross-border trade and supply).

It has to be noted, that licences issued for the supply of or trade in electricity in any of the Entities or the Brčko District shall be acknowledged and fully valid within the entire territory of Bosnia and Herzegovina. Other activities – generation, transmission and distribution – are limited to the specific territory and/or energy facilities.

2.4 Material provisions of the electricity market law and licensing regulations

Only companies established, and registered, in accordance with the laws of Bosnia and Herzegovina, and provided that they have been licensed to perform the activities determined by these laws, may perform one or more electricity market activities.

Electricity licences, as listed hereinabove, are regulated under the licensing rules adopted by competent regulatory authorities and applicable in their respective jurisdictions. The licensing rules prescribe the procedures for decision-making on licence application, the contents of licence applications, criteria for licence issuance, the conditions for licensing, contents of licences, the requests for modification, amendment, transmission and revocation of licences, registry of licences and conditions of monitoring.

The State level

The Regulation on Licences adopted by DERK defines procedure and criteria for licence issuing by the DERK, including the procedure for filing the application, review of the application and its issuing, as well as deadlines for decision making on the application, and criteria required for the approval or rejection of the application, for obtaining the licence and the content and requirements of the licence.

The Regulation on Licences further defines the manner of modification, suspension, and revocation of the licence, as well as procedures for sale, granting, lease or transfer of the licence. Together with the application, the documents defined in Article 18 and 19 point c) of the Regulation on Licences must be submitted.

The general criteria for licensing are stipulated by Article 21 of the Regulation on Licences. In addition, the Applicant must fulfil specific criteria related to the licences for international trade prescribed by Article 22 point c). The specific criteria for the licence for international trade are as follows:

- The Applicant has had no history of criminal or civil adjudications for fraud, financial impropriety or serious licence violations at electricity markets inside and outside of Bosnia and Herzegovina;
- The Applicant has a proven ability to provide appropriate financial and performance guarantees for his/her business activity;

- The Applicant has given a statement that he/she will comply with the market rules;
- The Applicant has registered capital to the amount of at least BAM 1 million, equivalent to EUR 511,291.88;
- The Applicant has provided evidence that he/she will obtain the appropriate trading licence from the FERK or the RERS prior to the commencement of the activity of the international trade in accordance with the DERK licence.

DERK issues licences for a defined time period. A licensee who intends to extend the licensed activity must file an application at least 180 days before expiration of the licence. DERK may re-open and modify a licence either upon a request by the licensee or, as a result of clear and unpredictable changes in circumstances and the licensee has been provided with reasonable notice and the possibility of a hearing. DERK may suspend the licence for a definite or an indefinite period, or revoke the licence permanently in the cases stipulated in Article 30 of the Regulation on Licences.

If the licensee wishes to sell, grant, transfer, lease or in another manner perform the transfer of his/her licence, the activities which are subject to the licence or assets from the licence, he/she must obtain permission from DERK for such an act. The new licensee must obtain permission for transfer of the licence issued by DERK before he/she starts performing the activity.

The Federation of Bosnia and Herzegovina

(a) Generation license

Together with the application for a licence for generation or distribution, the documents defined in Article 19 of the Licensing Rule adopted by FERK must also be submitted.

A production licence may be issued to an Applicant if the Applicant demonstrates the following:

- It has fulfilled all technical, operational, safety, and other conditions in accordance with applicable regulations and standards;
- It has fulfilled all established criteria for the protection of the environment and will ensure continuous control over the impact on the environment;
- It has provided high-quality power generation, from the point of view of safety, reliability, energy efficiency, and auxiliary services, and high-quality electricity for customers, in accordance with applicable regulations and standards;

- It has sufficient employees with expert qualifications for the performance of the activities;
- It or its management have not been found culpable of economic crime or convicted under criminal laws for fraud or financial impropriety, and have not been found liable for any significant licence violations or environmental infractions in the Applicant's electricity activities;
- It has provided the appropriate financial guarantees of performance to assure that the licensee will fulfil all licence conditions;
- It has demonstrated that it will comply with all market rules prescribed for the electricity market;
- It has demonstrated the capacity to provide accounting reports to the FERK in the format and detail required by FERK or other authorities;
- It has demonstrated the financial and technical capacity to dispose of all generation-related waste and to decommission and/or remove all generation facilities in compliance with technical and environmental requirements.

(b) Distribution licence

A power distribution licence may be issued to an Applicant if the Applicant proves the following:

- It has fulfilled all the technical, operational, safety, and other conditions in the operation of its distribution plants, devices and equipment;
- It has metering devices on electricity delivery points;
- It has fulfilled all established criteria for the protection of the environment and will ensure continuous control over impact on people and environmental protection;
- It has provided quality services regarding safety, reliability, energy efficiency, and quality electricity for customers, in accordance with the applicable regulations and standards;
- It has sufficient employees with expert qualifications for performance of the activities;
- It has established an efficient system of meter readings for the purpose of electricity billing;
- It or its management have not been found culpable of economic crime or convicted under criminal laws for fraud, financial impropriety, significant licence violations, or environmental infractions in the Applicant's field of activities;
- It has provided the appropriate financial guarantees of performance to assure that the licensee will fulfil all licence conditions;

- It has demonstrated that it will comply with all the prescribed market rules specified for the electric power market;
- It has demonstrated the capacity to provide accounting reports to FERK in the format and detail required by FERK or other authorities;
- It has proved the financial and technical capacity to decommission and/or remove all distribution facilities in compliance with technical and environmental requirements after the expiration of licence validity, and in the cases specified in the licence.

(c) Supply licence

There are two types of power supply licences:

1. "Tier 1 Supply Licence" is required for a distributor which supplies the electricity for non-eligible (tariff) customers and who has a separate trade activity;
 2. "Tier 2 Supply Licence" is required for any legal person engaged in supply other than the distributor required to obtain a Tier 1 Supply Licence. A Tier 2 Supply Licence may also be granted to a distributor who holds a Tier 1 Supply Licence at the sole discretion of FERK but with sufficient licence conditions to ensure that the interests of non-eligible (tariff) customers are fully protected.
- It has fulfilled all the technical, operational, safety, and other conditions in the operation of its supply facilities and equipment;
 - It has fulfilled all the established criteria for the protection of the environment and will ensure continuous control over any impact on the environment;
 - It has provided high-quality service relating to safety, reliability, energy efficiency, and high-quality electricity to customers in accordance with the applicable regulations and standards;
 - It has sufficient employees with expert qualifications for the performance of activities;
 - It or its management have not been found culpable of economic crime or convicted under criminal laws for fraud, financial impropriety, significant licence violations, or environmental infractions in the Applicant's field of activity;
 - It has provided the appropriate financial guarantees of performance to assure that the licensee will fulfil all the licence conditions;
 - It has demonstrated that it will comply with the regulated electric power market rules;

- It has demonstrated the capacity to provide accounting reports to FERK in the format and detail required by FERK or other authorities;
- It has established an efficient system for reading, accounting, billing, and collection of supplied electricity;
- It has established an efficient system for providing information concerning electricity supply to non-eligible customers, including plans for the improvement thereof;
- It has provided evidence that it will be able to contract adequate supplies of electricity to supply its customers.

The Tier 2 Supply Licence may be issued to an Applicant who demonstrates the following:

- The Applicant fulfils all the technical, operational, safety and other conditions in its operation;
- The Applicant provides high-quality services related to safety, reliability, energy efficiency and quality electricity for customers, in accordance with applicable regulations and standards;
- The Applicant has sufficient employees with expert qualifications for the performance of activities;
- The Applicant or its management have not been found culpable of economic crime or convicted under criminal laws for fraud, financial impropriety, significant licence violations, or environmental infractions from the Applicant's field of activity;
- The Applicant has provided appropriate financial guarantees of performance to assure that the licensee will fulfil all licence conditions;
- The Applicant has demonstrated that it complies with regulated electric power market rules;
- The Applicant has demonstrated the capacity to provide accounting reports to FERK in the format and detail required by FERK or other authority;
- The Applicant has provided evidence that it will be able to contract adequate supplies of electricity to services its customers.

FERK issues all licences for a limited time period. The licensee is obliged to file an application for licence renewal no later than 180 days before the expiry of the current licence validity. Procedures for the modification or amendment of a licence can be initiated upon the request of the licensee or on FERK's own initiative. FERK may revoke the licence in the cases stipulated in Article 43 of the Licensing Rule.

If the licensee requests the transfer of the licence to another entity, it must obtain prior approval of FERK. The new licensee must obtain an operational licence or approval for transfer from FERK prior to commencing activities. If there are concerns regarding the guarantee of the security of supply, such as financial insolvency, FERK at its own initiative may start a licence transfer procedure, in order to ensure that the licence is transferred to a third party which will provide regular security of supply to the customers.

Republika Srpska

Together with the application for a specific licence, the documents defined in Article 23 - 27 of the Rulebook on Issuance of Licences adopted by RERS must be submitted. The general criteria for licensing are set out in Article 28 of the Rulebook on Issuance Licence. In addition, the Applicant must fulfil additional criteria for the specific licence.

The licence for production of electricity is issued to the Applicant which in addition to the criteria defined in Article 28, can prove that:

- It meets the conditions for the safe operation of the plant and facilities with regard to the health and life of people and functioning of equipment and installations;
- It possesses water-management acts;
- It possesses the environmental and other acts defined by the law on protection of the environment;
- It possesses the prescribed rules on the maintenance and exploitation (operation) of the electric power structures and facilities (if there is no certificate on introduced system of the quality control and system of control of the environment protection following ISO standards);
- It has fulfilled the conditions for connection of the generation facility to the electric power network;
- It achieves energy efficiency in using primary sources, namely that it undertakes measures for improvement of efficiency;
- It possesses the approval for using new generation facility.

The licence for distribution of electricity is issued to the Applicant which in addition to the criteria defined in Article 28 can prove that:

- It fulfils the requirements for the safe operation of the distribution infrastructure and facilities for the health of people and the functioning of the equipment and installations;
- It possesses an environmental licence and other acts defined by the law on the protection of the environment;
- It possesses the prescribed rules on the maintenance and

exploitation (operation) of the electric power structures and facilities (if there is no certificate for an approved quality control system and environment protection control system, fulfilling ISO standards);

- It fulfils the standards related to the quality of the electricity supply;
- It achieves energy efficiency while transferring electricity through the distribution system and that it undertakes measures for improvement of efficiency;
- It has established an efficient system of meter reading for measuring and recording the amount of electricity consumed.

The licence for the supply of tariff customers with electricity is issued to the Applicant which in addition to the criteria defined in Article 28, can prove the following:

- That it has established an efficient system of informing customers, including plans for its improvement;
- That it has established an efficient system of calculation, delivery of bills and payment for the electricity delivered.

Any licensee who intends to continue to perform the activity defined in its licence shall, submit an application for the extension of a new licence no later than 3 months before the expiry of the licence. The amendment of the licence is made at the proposal of RERS or the licensee. During the licence validity period, the licence may be transferred to a third party if the licensee sells his business or if he asks to transfer his licence or controlled (managerial) interest to that party.

The licensee must obtain consent from the new licensee regarding the acceptance of the licence requirements for which the transfer has been requested, before obtaining the approval from RERS for the licence transfer. The new licensee should possess the licence for performing activities in the energy sector in order to obtain RERS approval for transfer of the licence.

Licence transfer to a third party is preceded by a procedure for the transfer of the right for the use of the assets required for the realisation of the activity of the respective licence to that party.

RERS initiates the procedure of compulsory transfer of the licence to a third party in cases of financial incapacity or bankruptcy of the licensee or non-fulfilment of conditions related to the obligation to offer a public service to the consumers regulated with the issued licence. RERS may cancel a licence if the licensee during

a procedure for the issuance, extension, amendment or transfer of the licence, gives incorrect information based on which RERS made its final decision.

2.5 Trading and supply of electricity

Under the existing legal framework of Bosnia and Herzegovina, the following tariffs are subject to regulation performed by competent regulatory authorities:

- Electricity sales tariff – set by regulatory authorities for four public utility electricity companies (EP BiH, EP HZHB, EP RS and Komunalno Brčko);
- Electricity transmission tariff – regulated by DERK;
- Transmission system operation tariff – a joint contribution for the operation of NOS BiH;
- Auxiliary services tariff – determined and regulated by DERK.

The balancing and settlement of electricity demand and supply in the electricity market and the power grid is regulated by the State-level Law on Transmission of Electric Power, Regulator and System Operator. The distribution of respective competences is explained in section 2.2 hereinabove.

3. RENEWABLE ENERGY

3.1 Market overview

In those matters expressly conferred to the Entities for regulation, the entities adopted their own legislation. Even though the entities' legislation is to a certain extent harmonised, some legal issues may be resolved differently. In the Federation of Bosnia and Herzegovina, cantons may also adopt their own legislation in legal matters that are of local relevance.

There are visible shifts in the development of energy strategies in Bosnia and Herzegovina, at the State- and Entity-levels. The energy development strategy in Republika Srpska is defined as follows: long-term aims of development of certain energy activities, priorities of development, determination of energy needs of Republika Srpska, sources and method of providing necessary quantities of energy, including long-term planning of the energy sources structures, a share of renewable sources, required levels of energy efficiency and energy savings, necessary investments in energy, measures for encouragement and method of providing means for investment in renewable energy sources and cogeneration, measures and mechanisms for increase of energy

efficiency, improvement of protection of environment and prevention of climate changes, encouragement of competition and gradual liberalisation of the power market, mechanisms for providing protection of end users, mechanisms and measures for protection of vulnerable customers under the circumstances of liberalised market and other elements which are important for achievement of the aims of the energy policy.

The objective of the Renewable Energy Law of the Federation of Bosnia and Herzegovina is to encourage greater production and consumption of electricity from renewable energy sources in the internal electricity market and the development of a regulatory and technical infrastructure for renewable energy.

With Bosnia and Herzegovina's great natural and energy potential, it is apparent that first and foremost energy production from renewable resources will become a practice in this country. With the prospect of joining the EU, the production of energy from renewable resources will become an obligation which Bosnia and Herzegovina, as a potential member, will have to take seriously.

Thus, manufacturers will be obliged to apply those standards and procedures which comply with environmental conservation.

3.2 Support schemes

(a) Groups of plants and the use of renewable energy and cogeneration ("REC"): depending on the installed capacity REC plants are divided into:

- Micro-systems: up to and including 150 kW;
- Mini plants: from 150 kW up to and including 1MW;
- Small-scale plants: from 1MW up to and including 10MW;
- Large plants: more than 10MW.

Depending on the type of renewable source used for electricity production, the aforementioned plants are divided into the following groups:

- Group 1 - Micro plants connected to the distribution grid;
- Group 2 - Mini plants connected to the distribution grid;
- Group 3 - Small plants connected to the distribution grid or transmission grid;
- Group 4 - Large plants connected to the transmission grid;
- Group 5 - REC plants which are not connected to the transmission or distribution grid, or which operate in isolated regime;
- Group 6 - Cogeneration plants which are not connected to the transmission or distribution grid, or which operate in isolated regime;

- Group 7 - Cogeneration plants with installed power up to and including 1MW connected to the distribution grid;
- Group 8 - Cogeneration plants with installed power capacity of over 1MW connected to the transmission or distribution grid.

Within each group above, several plants are defined including their tariff price.

(b) Fees, payment and encouragement of electricity production from REC: in order to establish the institutional structures needed for the operational production of electricity from REC, a REC Operator must be established. The production of electricity from REC by eligible producers which have entered into a compulsory purchase agreement is encouraged by the application of the following measures:

- Priority of delivery or acceptance of electricity produced from REC to the grid;
- Obligation of purchase of electricity produced from REC;
- Guaranteed prices.

(c) Connection to the Transmission System: a qualified producer which has entered into a compulsory purchase agreement has the advantage that it is able to dispatch electricity within the reported daily work schedule (timetable) of the network operator to which the plant is connected. The network operator must take the electricity from the qualified producers if it does not endanger the operation of the power systems.

(d) Priority in Energy Sales: a qualified producer is entitled to enter into a contract for the obligatory purchase of electricity from REC with the REC Operator at a guaranteed price determined in accordance with the Renewable Energy Law of the Federation of Bosnia and Herzegovina. The contract, inter alia, defines the duration, the amount of electricity subject to the purchase and is concluded for a period of 12 years. A payment fee for the encouragement of REC is paid by all customers of electricity in the Federation of Bosnia and Herzegovina as a supplement to the price of electricity.

(e) Building of plants: for the construction of REC energy the approval of the competent Ministry is needed. This approval is issued after the registration in the register of RES projects - projects under construction. Mandatory criteria for the issuance of the energy approval include:

- Registration of the applicant in the territory of the Federation of Bosnia and Herzegovina in accordance with applicable regulations;

- Compliance of the Project with the strategic plan and program of development;
- Professional competence, technical infrastructure and financial capability;
- The application and installation of new technology and new (unused) equipment.

(f) RES Certificate: Certificate of guarantee of origin of electricity produced from REC ("Certificate") is issued by the REC Operator on the basis of data obtained from producers of REC electricity and network operators. The Certificate is issued at the request of an eligible producer which has been granted such status by a decision issued by FERK in accordance with the Law on Electricity.

The Law on Energy of Republika Srpska defines two types of certificates which the generator of electricity receives upon installation. Pursuant to Article 29 of the Law on Energy of Republika Srpska, the generator of electricity may, upon its own request, receive a certificate of origin for electricity generated in generation installations which have a valid certificate (declaration) on the condition that it can prove that during the period for which the certificate is granted, it has been operating in such a way that it meets the terms and conditions prescribed for generation of electricity from renewable sources.

The certificate (declaration) for generation installations may be granted to a generator of electricity if such generation installations generate electricity from renewable energy sources in an economically appropriate way, protecting the environment or in efficient cogeneration.

The certificates are defined as follows:

1. Certificate of electricity origin – a document which enables the generator of electricity to prove that the electricity generated in its installation was generated from renewable energy sources or in co-generation with a high level of efficiency, duly containing the amount of electricity, energy source which was used for its generation, place and date of generation as well as other data which contribute to the accuracy and reliability of the document;
2. Certificate (declaration) of generation installation - a document which is issued to generator of electricity for a single generation installation certifying that such an installation fulfils the prescribed terms and conditions for the concurrent generation of electricity and heat with a high level

of efficiency, or for the generation of electricity using waste or renewable energy sources in an economically appropriate way, harmonised with the regulations related to the protection of the environment.

4. NATURAL GAS

4.1 Market overview

The natural gas market in Bosnia and Herzegovina is still at the early stage of development. Due to the absence of domestic sources and dominance in external supplies, lack of network capacities and high concentration on the market, the role of natural gas in the economy of Bosnia and Herzegovina is very limited and constitutes to a small part of gross energy consumption in the country.

First of all, Bosnia and Herzegovina does not have its own sources of natural gas and, subsequently, supplies are exclusively based on import from the only available external source – Russia. Natural gas are transported to Bosnia and Herzegovina through Ukraine, Hungary and Serbia, and delivered to the national transmission system at a single cross-border connection point in Sepak.

Secondly, the major part of the country remains non-gasified. Currently the transmission pipeline from the entry point at the border with Serbia connects Zvornik, Kladanj, Sarajevo and Zenica. In 2013 the gas system has been expanded by launching a new transmission pipeline from Zenica to Travnik and a new distribution pipeline from Sepak to Bijeljina. However, technical capacities of the network are not yet sufficient to ensure effective access to the system and to meet the natural gas demand of potential customers. Furthermore, a single cross-border point does not allow for any possibility for diversified supplies of natural gas to the country.

And thirdly, the natural gas market in Bosnia and Herzegovina is largely dominated by incumbent State-owned energy undertakings, which are fully bundled in terms of their infrastructure and commercial activities, thus restricting the market from any competition and entrance of new players. The market is not opened yet, meaning that in practice customers are not able to switch their gas supplier and the prices mainly remain regulated.

In 2012 the natural gas consumption in Bosnia and Herzegovina reached up to 0.26 bcm, however, it is forecasted that the factual

demand will increase significantly and may reach up to 0.9 bcm in 2020 and may grow up to 1.6 bcm in 2030. In order to fulfil such a demand, significant increase of network capacities will be inevitable, both by expanding internal system and increasing cross-border capacities, noting that current entry point at Sepak with a total capacity of 0.75 bcm will not be sufficient to serve the system in a secure and reliable manner.

Considering the above, both Entities of Bosnia and Herzegovina are showing a strong interest in regional gasification projects. Construction of two branch pipelines from the projected South Stream pipeline (from Serbia), interconnecting Slobodnica in Croatia and Zenica in Bosnia and Herzegovina, as well as participation in the Ionian Adriatic Pipeline (IAP) project connecting Croatia and Albania is on the agenda. Implementation of these projects, together with an intense gasification of the country, would allow Bosnia and Herzegovina to benefit from diversified supplies of natural gas in the region, including usage of potential LNG and storage capacities in neighbouring systems.

4.2. Regulatory overview

The natural gas sector in Bosnia and Herzegovina is separately regulated by legal acts adopted in both Entities – the Federation of Bosnia and Herzegovina and Republika Srpska. Due to the failure in reaching common political consensus, there is no State-level regulation of natural gas activities, thus leaving a significant legal gap, including absence of the State-level regulatory authority.

In the Federation of Bosnia and Herzegovina, activities in the natural gas sector are regulated by the Governmental Decree on Organisation and Regulation of the Gas Sector, as adopted in 2007, and other secondary legislation acts. The draft Law on Natural Gas of the Federation of Bosnia and Herzegovina was approved by the Government on 15 May 2013 and has been forwarded to the Parliament, however, its adoption in May 2014 was still pending.

In Republika Srpska, the Law on Pipeline Transport of Gaseous and Liquid Carbohydrates and Distribution of Gaseous Carbohydrates was adopted in 2012 and significant amendments to the Law on Natural Gas were passed in January 2013. Implementing regulations of the laws are being adopted by the Government, the Ministry of Industry, Energy and Mining, and by the designated Entity's regulatory authority – RERS.

Energy policy and its objectives in the natural gas sector are being formed and implemented by Governments and competent Ministries of the Entities without any clearly established form of mutual cooperation thereto.

As it was already mentioned, there are no legal instruments regulating natural gas activities at the State-level, not to mention common strategy for gasification projects. Failure to establish a single regulatory authority at the State-level, despite competences assigned to the State under the Constitution of Bosnia and Herzegovina and mandatory requirements of the EU law, results that all natural gas activities are regulated at the level of Entities. In Republika Srpska, respective regulatory competences are clearly assigned to RERS; however, in the Federation of Bosnia and Herzegovina, an independent regulatory authority for energy – FERK – is not yet vested with powers in the natural gas sector and respective functions are performed by the Federal Ministry of Energy, Mining and Industry.

Activities in the natural gas sector, i.e. operation of natural gas systems, transmission, distribution, storage and supply of and trade in natural gas, are subject to licenses issued by the competent authority. Licenses in Republika Srpska are issued by RERS, whereas in the Federation of Bosnia and Herzegovina, considering absence of a designated regulatory authority, by the Federal Ministry.

Licenses for operation of natural gas transmission and distribution systems, as well as for transmission and distribution of natural gas do authorise the performance of respective activities in a defined territory considering the Entity borders. Currently two companies – Gas Promet a.d. and Sarajevo-gas a.d. – are licensed for operation of the transmission system and transmission of natural gas in Republika Srpska and one – BH Gas d.o.o. – in the Federation of Bosnia and Herzegovina. All three companies are also licensed for the distribution activities.

Licenses for supply of and trade in natural gas do allow for respective activities within the entire territory of Bosnia and Herzegovina, irrespective of the issuing authority. Currently, there are five companies licensed for such activities, however, BH Gas d.o.o. remains a dominant supplier and covers over 90% of the market. Absence of any competition and liquidity in the market, as well as failure to establish legal framework for effective opening of the market and implementation of the customers' rights results

in a status quo situation that in practice customers are not capable to switch their supplier and have to purchase natural gas from market incumbents at regulated prices.

It may be concluded that the existing legal framework in both Entities establishes general principles for developments of the natural gas infrastructure and performance of natural gas activities. However, there is a noticeable lack of legal certainty in many aspects of the organisation and regulation of the natural gas sector, especially in the Federation of Bosnia and Herzegovina, not to mention the absence of any harmonisation of regulatory practices between the Entities.

Competent institutions of the Energy Community have several times noted the failure of Bosnia and Herzegovina to transpose and implement requirements of the EU law mandatory to all Contracting Parties of the Energy Community, including unbundling of vertically integrated undertakings, designation of an independent regulatory authority, setting and publishing transmission and distribution tariffs, granting eligibility to non-household customers, etc.

Enforcement actions undertaken by the Energy Community Secretariat caused some movement in both Entities towards development of the legal framework in 2013; however, not much of a practical result has been reached in amending indicated non-compliances. Furthermore, the EU Third Energy Package has to be transposed to the domestic legislation of Bosnia and Herzegovina by the end of 2014, what requires for significant legal and regulatory reforms. So far, no steps were undertaken to comply with these EU pre-accession commitments in the field of natural gas.

5. UPSTREAM OIL MARKET

Market overview

During the 1970s several studies have been performed on the territory of Bosnia and Herzegovina, in search of potential oil reserves. Unfortunately, however, these studies have found only symbolic amounts of hydrocarbon deposits which have no exploitation value. Accordingly, the oil market in Bosnia and Herzegovina has remained relatively undeveloped and almost all oil derivatives are imported. The only domestic oil production facility is the oil refinery in Modriča. However, this refinery

produces sub-standard fuel and its participation in the oil market is practically insignificant.

The research and exploitation of hydrocarbons is regulated by the entity-level laws on mining, and, treating hydrocarbons as mineral deposits.



BULGARIA

1. INTRODUCTION TO THE ENERGY MARKET

The Bulgarian energy sector has undergone serious transformation in the last decade and continues to attract foreign investments in Bulgaria even in times of economic slowdown. Bulgaria is one of the few countries in the region with nuclear power facilities and due to its geo-economic location it is a focal point for a number of strategic energy infrastructure projects.

The sector is mostly privatised and the market is (at least in legal terms) fully liberalised. The Bulgarian state still holds substantial energy assets by way of a holding company named "Bulgarian Energy Holding". The Bulgarian Energy Holding controls some large electricity generation capacities, the electricity transmission system, the natural gas transmission and supply and most of the lignite coal production.

Similarly to many of the countries in the region the Bulgarian energy sector faces a lot of challenges, which will be also a source of major business opportunities in the future:

- (a) High energy intensity of the economy (still the highest in the European Union);
- (b) High dependency on imports of fuels (Bulgaria covers more than 70% of its gross energy demand by imports);
- (c) Competing goals of ensuring security of energy supply and of meeting environmental requirements (serious investments required for reduction of greenhouse gas emissions in power plants using local lignite coal);
- (d) Delayed practical implementation of the market liberalisation,
- (e) Controversial and politically influenced regulatory framework, etc.

In June 2011 the Bulgarian Parliament adopted the Energy Strategy of the country until 2020, which acknowledges the challenges and sets out five priorities for the sector aiming to ensure energy needs and protect consumer interests: guaranteeing the security of supplies; boosting energy from renewable sources; improvement of energy efficiency; development of a competitive energy market.

2. ELECTRICITY

2.1 Market overview

Bulgaria is a major player and a leading exporter of electricity in South East Europe, covering at times around 80% of the electricity shortages in the neighbouring countries. For instance, according to official data for electricity exported for the year 2012, Bulgaria was the twenty fifth largest player worldwide and the tenth largest player on the European electricity market with a net export of ca. 9,532 GWh for year 2013. There was a slight downturn in export in 2013 but the data for the first months of 2014 are promising with over 1,100 GWh of export for January 2014.

After the liberalisation of the market and the implementation of Directive 2003/54/EC of the European Parliament and of the Council of 26th June, 2003, concerning common rules for the internal market in electricity, the only asset (and activity) which has remained 100% owned by the State is the national transmission grid and the national supplies of electricity at the regulated market. Currently, the national transmission network is owned by the Electricity System Operator ("ESO") after a long process of unbundling of transmission assets from the assets of the National Electricity Company EAD ("NEC") which now remains responsible for national supplies in the regulated market and owns a number of generation capacities. Both companies are owned by the Bulgarian Energy Holding EAD which is also the owner of some project pipeline, mining and heat production companies and the nuclear power station Kozloduy. ESO deals with the operational regime planning and control of the electrical power system in Bulgaria, the synchronisation of the Bulgarian electrical power system operation with the electrical power systems of the European countries member of the Union for the Coordination of Transmission of Electricity ("UCTE") and coordination of joint operation with other electrical power systems.

The distribution and end-supply networks were privatised and are beyond the control of the State, albeit under a licence regime only. The production of electricity is currently performed by both the State and privately owned companies. The indicative goals for the

energy mix up to 2020 correspond with the EU goals for broadening the share of renewable energy and reduction of CO₂ emissions. A new set of amendments to the Energy Act in 2012 were introduced in the aims of the further liberalization of the energy market.

These implement in detail Directive 2009/72/EC of the European Parliament and of the Council of 13 July, 2009 and the Third Energy Liberalization Package directives in general in the following manner:

- division of transmission from production and sale of electricity and introduction of guarantees for independence of the grid operators;
- guarantees for the development of the grid;
- introduction of new powers to the State Energy and Waters Regulatory Commission;
- clear definition of consumer rights;
- Exclusion of the users of high and middle voltage electricity from the regulated market and the introduction of the last instance suppliers;

Regulatory overview

The regulation of the electricity sector has several layers.

The first layer is the core energy regulatory framework covering, among other things, the regulation of electricity generation activities, encouragement of production of electricity from renewable sources, relations between the investor and the distribution/ transmission companies, etc. These issues are regulated mainly by the Energy Act of 2003 (State Gazette No. 107 of 9 December 2003, as amended from time to time). Special rules applicable to renewable energy projects are set out under the Energy from Renewable Sources Act of 2011 ("Renewables Act") (State Gazette No. 35 of 3 May 2011), the Energy Efficiency Act of 2008 (State Gazette No. 98 of 14 November 2008, as amended and supplemented from time to time). There are also a number of secondary level regulations issued by the Council of Ministers or competent Ministers (such as the Minister of Economy and Energy) regulating various aspects such as price regulation, security and safety requirements for electricity equipment, connection to the grid, etc. The State Energy and Water Regulatory Commission (the "Commission") also issues secondary level regulations such as Rules on trading electricity, Rules for access to electricity networks, etc. The second layer is the general regulatory framework governing the construction processes including the construction of electricity generation facilities. These processes are regulated mainly by the

Territory Development Act of 2001 (State Gazette No. 1 of 2 January 2001, as amended from time to time), the Protection of the Agricultural Lands Act of 1996 (State Gazette No. 35 of 24 April 1996, as amended from time to time), the Protection of the Environment Act of 2002 (State Gazette No. 91 of 25 September 2002, as amended from time to time), as well as by a number of secondary pieces of legislation.

The government bodies and institutions which are granted powers to monitor and regulate the Electricity sector include:

- The Parliament – according to the Energy Act the Parliament of Bulgaria approves the Energy Strategy of Bulgaria which determines the main goals, strategies, milestones, means and stages for development of the energy sector;
- The Council of Ministers of Bulgaria – the Council drafts and implements the Energy Strategy approved by the Parliament;
- The Minister of Economy and Energy (the "Minister") amongst others (i) approves short -, medium and long-term prognostic energy balances of Bulgaria in accordance with the Energy Strategy; (ii) proposes for approval by the Council of Ministers a list of the strategic enterprises in the energy sector; (iii) approves the obligatory criteria for the reliability of the electricity supply and gas supply; (iv) approves programmes and strategies for restructuring in the energy sector; (v) determines the annual overall quota for obligatory purchase of electricity from producers which use local primary electricity sources; (vi) grants permissions for exploration and research of energy resources and organises the activities related to granting of concessions for extraction of energy resources; (vii) issues ordinances for the purpose of implementation of the laws approved by the Parliament, etc.;
- The State Energy and Waters Regulatory Commission – this is the main regulatory body for the energy sector as well as the water and sewage sector and is an independent specialised state authority which regulates the activities related to the production, transmission and distribution of electricity, transmission and distribution of natural gas, trade with electricity and natural gas, production and transmission of heating power; the powers of the Commission, amongst others, include: (i) issuing, amendments and cancellation of licences when such are required under the Energy Act; (ii) approval of general terms and conditions; (iii) control over observation of the applicable legislation in the sector; (iv) regulation of the prices, when so provided by the law, determination of preferential prices for purchase of

electricity from renewables included; (v) approval of rules for trade with electricity and natural gas as well as of the technical requirements for the networks; (vi) approval of rules for supply with electricity and natural gas; (vii) approval of rules for determining the prices of balancing electricity; (viii) approval of the rules for access to the electricity and gas networks; (ix) issuance of certificates for origin of electricity generated by combined production of electricity and heating power; (x) granting of consents for corporate restructuring of companies which are holders of licence/s; (xi) granting of permissions for disposal with assets of companies which are holders of licence/s, etc.; With the implementation of the Third Energy Liberalization Package directives the Commission was in addition empowered to, inter alia: (i) control the observation of the requirements for independence of the transmission networks and license the transmission network operator; (ii) approve the 10-year plans for development of the distribution and transmission grids and monitor their implementation; (iii) monitor the application of the law in terms of quality of the services provided, the protection of the consumers and the internal and international competition, etc.

- The Agency for Sustainable Energy Development – this is a state authority responsible for the implementation of the State policy on encouragement of the production and consumption of electricity and heating power produced from renewables, the production and consumption of gas from renewables as well as the production and consumption of biofuels; the powers of this Agency include coordination, monitoring and control over matters related to the usage of renewables in the Energy sector as well as issuance of certificates of origin for electricity produced from renewables;
- Electricity System Operator EAD – this is a company which is indirectly 100% owned by the State. Although the company is a commercial entity as per the meaning of the Commerce Act of Bulgaria, the Energy Act and the applicable ordinances empower ESO with certain regulatory functions in the Energy sector, which include: (i) operational regime planning and control of the electrical power system of Bulgaria; (ii) synchronisation of the Bulgarian electrical power system operation in parallel with the electrical power systems of the European countries member of the UCTE and coordination of the joint operation with other electrical power systems; (iii) operation, overhaul and maintenance of the transmission network; (iv) organisation of the balancing energy market;

- National Electricity Company EAD - this is a company which is indirectly 100% owned by the State. Currently the NEC has certain powers and obligations in terms of purchase of electricity produced, import and export of electricity, etc.

2.3 Regulated electricity market activities

The Energy Act provides for licensing regimes in the Electricity, Gas and Water supply and sewage sectors.

Subject to licensing are:

- Electricity generation (generation from hydro-installations above 10MW and for the rest of the sources – above 5MW of installed capacity) (Electricity and/or Heat);
- Transmission (Electricity, Heat & Natural Gas);
- Transmission system operation (Electricity & Gas);
- Trade of electricity and supply (Electricity & Gas);
- Distribution/ distribution grid operation (Electricity & Gas);
- Public/ end Supply (Retail) (Electricity & Gas);
- Organising of an electricity market;
- Transit transmission of natural gas, pulling power electricity distribution over the railroad transportation distribution networks.

Subject to price regulation are the following activities:

- Electricity/ heat generation (including renewable energy sources feed-in tariffs, availability and the prices of the balancing energy);
- Heat transmission;
- Public provision of electricity for consumers connected to the transmission network/ to the distribution companies, for the purpose of covering the technological costs of transmission and to end suppliers;
- Prices at which the public provider sells natural gas to public suppliers of natural gas, to consumers connected to the natural gas transmission network and selling natural gas to end suppliers of natural gas;
- Prices at which end suppliers sell electricity and natural gas to end clients – households or companies which are connected to the low voltage grid;
- Prices for transmission of electricity and natural gas to consumers through the respective transmission and/or distribution networks and for the prices of transit transmission and cross boarder transmission tariffs, respectively for connection and access to the electricity transmission and electricity distribution networks.

2.4 Material licences for electricity generation

As mentioned above, according to the Energy Act, any company which owns or intends to construct electricity generation facilities with a capacity of over 5MW must obtain a generation licence from the Commission. The requirements for the persons applying for a licence are set forth in the Energy Act and the Ordinance for licensing of the activities in the energy field, State Gazette No. 33 of 5 April 2013 ("Licensing Regulation").

The licence may be issued with a term of validity between 1 and 35 years taking into account the service life of the generation assets and the financial status of the applicant. The term of the licence may be extended for a period not longer than the initial term, provided that the licensee meets the requirements of the Energy Act and duly performs all its obligations and complies with the requirements under the licence. An extension may be granted based on a written request of the licensee made at least 1 year prior to the expiry of the initial term of the licence.

Generally, the preconditions for issuance of a licence under the Energy Act are the following:

- (a) The applicant should be a legal entity registered in compliance with the Bulgarian Commerce Act or the legislation of any EU or EEA Member State. Such entity should not be insolvent or in liquidation;
- (b) The applicant should have the technical and financial capabilities, material and human resources and organisational structure necessary for performance of the licensed activity;
- (c) The energy facilities for carrying out the licensed activity should comply with environmental protection and safety operation requirements; and
- (d) The applicant should have property rights over the energy facilities (if they are constructed). An application for a licence may also be filed before the facility is constructed.

The documents and information which need to be submitted with the application to evidence the applicant's compliance with the above-mentioned requirements include: (i) business plan for up to 5 years; (ii) application for approval of prices if the licensed activity is carried out under prices regulated by the Commission; (iii) information on the sources for financing the activity and evidence of their availability; (iv) distribution of the applicant's share capital; (v) information on the applicant's or its controlling shareholders' experience in carrying out an activity similar to the licensed one; (vi) information on the applicant's management and organisational structure and the education and qualifications of the management

personnel, including the availability, number and qualifications of the personnel involved in carrying out the licensed activity.

A licence preceding the construction of the energy production facility can be issued upon request of the applicant, provided that it can prove the necessary financial means to construct the facility. In this case the licence shall provide for the terms and conditions for construction of the facilities (i.e. wind turbines and the infrastructure thereof) and commencement of the licensed activity. The period for completion of the facility is not included in the term of the licence. In addition to the general documents required for the issuance of the licence, the applicant shall submit: (i) the design of the energy facilities and a declaration coordinated with the respective Regional Environment and Waters Inspectorate or Basin Directorate that the requirements of the environmental law necessary for the design's approval have been complied with; (ii) an approved detailed construction time schedule; (iii) a proposed term of validity of the licence and substantiation thereof; (iv) an investment analysis and financial model, including the forecast prices of the service. The Commission's approval of these financial models is a precondition for the licence's issuance.

Upon completion of the facilities' construction, the licensee should request that the Commission issue a special permit for the facilities to enter into commercial operation.

The above licences and permits are without prejudice to any other ancillary requirements which may be prescribed by the general legislation, such as building permits, health and safety approvals, environmental impact assessments, etc.

2.5 Trading and supply of electricity

(a) Trading

As of January 2007 the stakeholders in the Electricity market are subject to unbundling requirements (functional and legal unbundling). The legal framework provides for the full liberalisation of the Electricity market as of 1 July 2009. In practice however, only high voltage and middle voltage customers participate on the free/ liberalised market.

The amendments introduced in the Energy Act in 2012 and 2013 for implementation of the Third Energy Liberalization Package directives forced market liberalization, power exchange and the execution of contracts with companies – balancing group coordinators. As a result at present, according to the data of ESO, there are 617 market participants of which 11 producers, 2 auto-

producers, 532 consumers, 71 traders and 1 public provider. In addition there are 16 companies – balancing group coordinators.

There is still no operating exchange for electricity trading in Bulgaria. Recently a state-owned company (a subsidiary of the Bulgarian Energy Holding) was licensed by the Commission to act as an electricity trading exchange and it is expected to become operational by the end of 2014. The Commission in accordance with its powers has approved Rules for trade with electricity (State Gazette No. 64 of 17 July 2010). The Rules regulate (i) the rules for trade with electricity under freely negotiated prices; (ii) the transition from trade under regulated prices to trade under freely negotiated prices; (iii) the terms and conditions for participation and functioning of the market of balance energy; (iv) the mechanisms for balancing of the participants on the market of balance energy and (v) the manner for determination of the prices for balance energy.

According to the Rules the ESO can administrate deals with electricity as well as organising the balance energy market. As of 1 July 2009 a day ahead scheduling has been applied.

As of present each year the Commission issues decision for determining quotas (quantities) of electricity to be produced and sold to NEC by the producers at prices determined by the Commission. If the actual electricity produced exceeds the quota so determined, the producers can sell this electricity at freely negotiated prices. The decision of the Commission determines the overall quota of the producer and the Rules impose a few obligations for the NEC (i) within a certain period of time to enter into an electricity sale and purchase agreement with the producer and (ii) on a monthly basis to inform the producer of the actual quantities of electricity needed to be generated.

Please note that in the event of the production of electricity from renewables the NEC/ the respective distribution company (as the case may be) has the obligation to purchase at preferential prices all the electricity generated (i.e. the Commission does not determine quotas for electricity generated from renewables).

(b) Supply

In accordance with Directive 2003/54/EU the supply and distribution of electricity were separated as different activities. As a result there are four distribution and four end-supply companies in Bulgaria where the end-suppliers are licensed entities which supply electricity at regulated prices to household consumers and companies

connected to the low voltage grid who have not exercised their right to choose a supplier at the free market. End-suppliers act also as suppliers of last resort and supply electricity at special regulated prices to clients who have not entered into a supply contract at the free market or their market supplier have failed to deliver electricity to them. In accordance with Directive 2009/72/EU:

- The model of independent transmission operator was introduced;
- The producers of electricity are obliged to enter into access-to-the-grid agreements with the transmission / distribution grid operator (as applicable) where the rights and obligations of the parties are set out with respect to the dispatching, cold reserve availabilities, additional services, etc. The presence of such an agreement is a requirement for the purpose of the sale and purchase agreements to be performed;
- Any client has the right to choose a supplier notwithstanding where the supplier is registered (within the EU), provided that such a supplier complies with the Rules for trading with electricity. The grid operator performs the change of supplier pursuant to the Rules within three weeks as of receiving of a request in writing from the client.
- All consumers connected to the high and middle voltage grid are outside the regulated market and have to choose their supplier in the free market. In order to secure electricity supply for those who have not made their choice of supplier / the supplier they have chosen is still not technically capable of supplying electricity in the respective region – the figure of the last resort supplier has been introduced wherein the Commission determines the prices of the electricity to be sold by the last resort supplier.

2.6 Transmission and grid access

The transmission and the grid access are regulated by the Energy Act and a special Ordinance No. 6 of 9th June, 2004, for the connection of producers and consumers of electricity to the distribution and transmission electrical networks (the "Connection Ordinance"). Connection to the grid shall be performed by either the NEC (the owner of the national transmission grid) or the respective company owner of the regional distribution network (depending on whether the generation capacity is below or above 5MW). In any case, even if the connection to the grid is to be procured by the regional distribution network company, a positive statement by NEC is required for the presence of capacity for evacuation of the electricity to be produced.

According to the applicable rules, the procedure consists of three stages:

(a) Official statement on the terms and conditions for connection

Under the Connection Ordinance, the company shall file before the respective network owner an application for the issuance of an official statement on the terms and conditions for possible connection of the generation facility with the network. The network owner must issue a statement on the terms and conditions under which it shall connect the generation facility to the network. The statement describes the technical requirements for the facilities of the project and the facilities which have to be constructed in order for the connection to be made.

Special rules apply to connection of renewable projects. According to the Renewables Act, effective as of 1 January 2012, the distribution network owners shall on an annual basis submit to NEC information on the possible capacities for connection in the different regions for connection. NEC, based on a 10-year plan for development of its network and the information from the distribution network owners, on an annual basis (not later than 30 April each year) shall inform the Commission on the envisaged available capacities for connection to the grid in the different regions for a period of one year. This forecast shall be based on concluded preliminary agreements, actual and foreseen electricity consumption, the capabilities of the networks, etc.

Not later than 30th June each year the Commission shall approve and publish on its internet page the forecasts for the next 12 month period (as of 1st July) for available capacities for connection in the different regions of renewable projects. Effective as of 1st July, 2012, any company willing to construct a project or to increase the capacity of an existing project shall submit to the respective network owner an application for connection within the capacities per region as approved by the Commission. An application may be submitted after the date of approval by the Commission of the capacities by regions and shall be relevant only to the respective one-year period (no transfer of applications is possible for subsequent periods).

Upon submission of the application, the company shall make a guarantee deposit in favour of the network owner to the amount of BGN 5,000 per MW of the capacity for which the company is applying.

(b) Preliminary connection agreement

A company must file an application with the network owner for the signing of a preliminary agreement for connection to the network based on the terms described in the statement for connection.

The Renewables Act provides for obligatory payments to be made upon conclusion of the preliminary connection agreement, the payments for which are considered as part of the connection price. In the event that the actual costs for connection exceed these payments, the project company shall pay the excess.

The payments made cannot be refunded (for instance in the event that the actual connection costs are lower) thus, it may be considered as minimum connection price.. The payments due are as follows:

- BGN 50,000 per MW of planned capacity, when the planned capacity exceeds 5MW and
- BGN 25,000 per MW of planned capacity, when the planned capacity is equal or below 5MW.

The term of the preliminary agreement cannot exceed one year and the company must submit an application for the conclusion of a final connection agreement prior to the expiry of this term or otherwise the connection procedure is terminated and must be started from the beginning.

(c) Final connection agreement

After the issuance of a Construction Permit, the company shall file an application to the respective network owner for conclusion of a final Connection Agreement. Along with the application the company shall submit a set of documents which include, amongst others: (i) certificate of current legal status; (ii) documents proving the rights of the company for construction; (iii) the approved design schemes – section architecture which is for the installation of the facilities for connection and the way to them and section electrical installations and facilities; and (iv) construction permit.

The network owner shall prepare the Connection Agreement and invite the company to sign it within 15 days of filing the Application. The term of the final connection agreement cannot exceed two years as of its execution and it is terminated upon commissioning of the project.

(d) Access to the Grid Agreement

Upon commissioning of the project an access to the grid

agreement shall be concluded prior to a power purchase agreement. The access to the grid agreement must be subject to general terms and conditions approved by the Commission. The agreement shall deal with the indemnification payable by the owner of the network to the company in the event of limitations of the evacuated electricity.

3. RENEWABLE ENERGY

3.1 Market overview

In 2011 a new law on promoting generation from renewable energy sources was adopted. The declared purpose of the law was to deal with the issues created by the previous legal framework:

- A large amount of applications for connection of new renewable energy generation facilities – according to certain information from ESO – more than 5 GW of installed capacity, which were in many cases speculative projects, the owners of which did not have the required financial and technical capacities to complete..
- Many projects approved in environmentally sensitive areas resulting in the initiation of a procedure against Bulgaria by the European Commission for breach of EU rules on NATURA 2000 protected sites.

However, due to the late adoption of the new rules and the inadequate regulatory decisions taken, the new rules have not helped “cool down” the developments in the sector and more than about 900 MW of RES generation capacity was connected to the grid in 2012 alone (mainly photovoltaic). This created significant pressure on consumer electricity prices and urged the government and the energy regulator to practically halt any future developments and to seek various means to restrict the operation of capacities already connected.

Some of the main principles of the Renewables Act include:

- (a) The establishment of a new specialised body entitled “Agency on Sustainable Energy Development” (the “Agency”) which will be responsible for (i) the implementation and coordination of measures for encouragement of renewable energy generation and for the maintenance of a public information database about renewable energy projects and developments and (ii) issuance of certificates of origin for electricity generated from renewable sources;

- (b) The requirement that grid owners publicly announce each year the available connection capacities and the developers of new renewable projects deposit an application to obtain a positive statement that a connection to the grid is possible within such available capacities. The project owners have to make a monetary deposit of BGN 5,000 per MW planned capacity upon submission of the application;
- (c) The requirement that the owner of a project deposit a cash guarantee with the respective grid owner upon signing a preliminary connection agreement to the amount of BGN 50,000/ 25,000 per MW of planned capacity (depending on whether the planned capacity of the project exceeds 5MW or not);
- (d) The opportunity for the project owner to avoid the above restrictive procedures with respect to obtaining positive statement for available connection capacity/ payment of deposits, in the event that the project owner opts out of the feed-in tariff system, i.e. declares that he does not want to benefit from the preferential prices for purchase of electricity. In this event the electricity generated is to be sold on market terms. Another option for avoiding these payments / capacity restrictions is the installation of small plants of up to 30 kW / 200 kW over roof / facades of existing buildings.

The Renewables Act basically preserves the principles of the previous system of encouragement and provides for some additional mechanisms for the encouragement of investments in renewable energy generation:

- (a) Long-term for the obligatory evacuation of electricity at preferential prices – 20 years for photovoltaic (“PV”) projects (reduced from 25 under the abolished law on renewables) and 12 years for wind energy projects (reduced from 15 under the abolished law on renewables), where the term starts to count: (i) from the moment of commissioning of the power plant, if the commissioning is prior to 31 December 2015 and (ii) from 31 December 2015 if the commissioning is after 31 December 2015;
- (b) Preferential prices which are fixed for the whole period of obligatory evacuation at the level, which is approved by the Commission at the moment of completion of the construction works;
- (c) Express obligations of grid owners for the compensation of damages to project owners in the event of failure to fulfil their obligations for priority connection or dispatching of renewable energy generation plants.

- (d) Express obligation of grid owners to report annually to the Commission on the progress of their programs for expansion of grid for the purposes of connection of renewable energy projects.

3.2 Support schemes

The Renewables Act preserved the system of encouragement of generation of electricity from renewables based on feed-in tariffs. The system comprises the following key elements:

- (a) The owners of the national transmission grid and/or regional transmission systems are obliged to connect renewable energy generation facilities, subject to compliance with the special procedures under the Renewables Act. The interconnection costs associated with interconnection facilities up to the boundary of the electrical facilities are borne by the generation company. General costs associated with the expansion of the capacity of the grid are borne by the grid owner;
- (b) The owners of the national transmission grid and/or regional transmission systems are obliged to provide guaranteed access to the grid and transmission as well as priority dispatching of electricity generated from renewable sources subject to relevant technical requirements for the security of the system;
- (c) The national supplier (NEC) and the regional suppliers (end-suppliers) are obliged to purchase all electricity generated from renewable sources, which is certified with a generation (origin) certificate (see below). This obligation is to be reflected in long-term power purchase agreements signed with the respective purchaser; and
- (d) Special preferential prices are set by the Commission at which electricity from renewable sources is purchased (see below).

The above support schemes shall be not applied to producers who request connection of capacities after an official report of the Minister of Economy and Energy that the goal for renewable energy production in Bulgaria has been reached (i.e. the average share of the renewables in the gross end consumption of electricity is 16%).

Mandatory buy-out of electricity

According to the Renewables Act, the requirement for mandatory long-term buy-out of electricity from renewable generation facilities shall be applicable only to projects, for which a connection to the grid is requested not later than the date of issuance of a report by the Minister of Economy, Energy and Tourism, stating

that the binding national target for the share of energy from renewable sources in the gross final consumption of energy in 2020 (in accordance with Annex I of Directive 2009/28/EC), of 16%, has been met. There will be no mandatory buy-out for projects applying for connection after that date.

The electricity generated shall be subject to obligatory purchase of feed-in tariffs approved by the Commission for the following periods:

- (a) Twenty years – for electricity produced from geothermal and sun power energy as well as for electricity produced from biomass;
- (b) Twelve years – for electricity produced from wind power;
- (c) Fifteen years – for electricity produced from hydro-electric plants with installed capacity below 10 MW as well as for electricity produced by other renewables.

The period for obligatory buy-out shall commence from the date of commissioning the respective project, provided that the commissioning has taken place prior to 31 December 2015. In case a project is commissioned after 31 December 2015, the term shall count as of 31 December 2015. Particularly, the buyer of the electricity (NEC or a regional end-supplier) shall be obliged to purchase all the electricity for which a guarantee of origin has been issued, except for the electricity which is used by the owner of the project for his own needs.

Feed-in tariff

The Renewables Act explicitly provides for the following rules in terms of determining the feed-in tariff at which a project would be entitled to sell the generated electricity:

- (a) The feed-in tariff for the electricity produced from renewables shall be determined for the whole period of the power purchase agreement and shall remain unchanged until the expiry of the term for compulsory buy-out; the only exception from this rule refers to electricity produced from biomass where prices will be adjusted annually to take account of changes in prices of biomass, salaries and transportation costs;
- (b) The feed-in tariff applicable for a specific project shall be the feed-in tariff in force as of the date of completion of construction and obtaining an official certificate to that end as per the Territory Development Act;
- (c) In the event that a project is to be built in a single stage and is not commissioned within two years of the conclusion of a final connection agreement, the applicable feed-in tariff shall be that in force as of the date of commissioning of the project;

- (d) In the event that the power plant is to be commissioned in stages, the applicable feed-in tariff shall be changed with the commissioning of each stage where it shall be an average determined tariff taking into consideration the tariff applicable to each of the stages commissioned and the installed capacities thereto; the calculations shall be made as per a methodology determined by the Commission;
- (e) Upon the expiry of the compulsory buy-out term the feed-in tariff shall not be applicable, i.e. electricity shall be sold at market prices.
- (f) The feed-in tariff shall be applicable for the quantities of electricity up to the amount of the average annual working hours of the plant as determined by the Commission; any excess over such amounts shall be purchased at the price at which the public supplier (NEK) sells electricity to the end suppliers;

Under the Renewables Act the Commission has the obligation to determine feed-in tariffs by the end of June each year and they remain in force for 12 month periods as of July 1 until June 30 next year. An option exists for the Commission to approve new feed-in tariffs prior to the expiry of the 12 months period – if the Commission decides that there are material changes in the price – forming factors. The most recent decision of the regulatory Commission for setting prices for renewable projects was taken on 28 June 2013. It sets the following prices for some of the main renewable projects:

Type of project	Price (EUR per MWh, VAT exclusive)
Wind parks with installed capacity of up to 30 kW (up to 2,250 annual hours of work)	89.92
Wind parks with installed capacity of up to 200 kW (up to 2,250 annual hours of work)	82.99
Wind parks with installed capacity of up to 1 MW (up to 2,250 annual hours of work)	77.43
Wind parks with installed capacity of over 1 MW (up to 2,500 annual hours of work)	62.63
Wind parks with a-synchronic generator with a cage rotor (up to 1600 annual hours of work)	53.77
PV parks with installed capacity of up to 5 kW over roof and facades of buildings already connected to the network as well as over regulated land plots adjacent to these (up to 1400 annual hours of work)	180.98

¹ As envisaged by Article 15 of Directive 2009/28/EC

PV parks with installed capacity of up to 30 kW over roof and facades of buildings already connected to the network as well as over regulated land plots adjacent to these (up to 1400 annual hours of work)	145.30
PV parks with installed capacity of between 30 kW and 200 kW over roof and facades of buildings already connected to the network as well as over regulated land plots adjacent to these (up to 1400 annual hours of work)	108.08
PV parks with installed capacity of between 200 kW and 1000 kW over roof and facades of buildings already connected to the network as well as over regulated land plots adjacent to these (up to 1400 annual hours of work)	100.50
PV parks with installed capacity of up to 30 kW (up to 1400 annual hours of work)	99.92
PV parks with installed capacity of between 30 kW and 200 kW (up to 1400 annual hours of work)	97.72
PV parks with installed capacity of between 200 kW and 10000 kW (up to 1400 annual hours of work)	90.14
PV parks with installed capacity of over 10000 kW (up to 1400 annual hours of work)	81.90

The price of electricity from biomass varies from EUR 45 to EUR 229 depending on the exact capacity, technology used and raw materials for the production.

Guarantees of origin

It should be noted that under the wording of the Renewables Act, the compulsory buy-out obligation is conditioned on the issuance of the so-called guarantees of origin¹, issued by the Agency on a monthly basis. The specific terms and conditions for issuance, transfer and cancellation of certificates of origin are set out in an ordinance of the Minister of the Economy and Energy. In general terms each month a producer shall submit applications for issuance of guarantees of origin for the electricity produced during the previous month. In addition reports for the electricity produced shall be submitted each quarter. This means that the public suppliers will be obliged to purchase only that electricity for which a guarantee of origin has been issued. In this way the Renewables Act assigns an important role to such guarantees of origin (if for some reason the issuance of a guarantee of origin is refused or delayed, the project company will not be entitled to sell the electricity generated) and represents an additional administrative restriction for generation companies.

This role goes far beyond the concept of Directive 2009/28/EC which envisages that such instruments will be only used for proving to final customers the percentage or quantity of energy from renewable sources in an energy supplier's energy mix in accordance with Article 3(6) of Directive 2003/54/EC (i.e. they are by no means viewed as a condition for benefiting from the relevant encouragement system of obligatory purchase of electricity at preferential prices) and also that the issuance of such instruments will be only optional and at the request of the generation company.

Access to the grid

After a series of actions aimed at the actual reduction of the already applicable feed-in tariffs, in 2012 the Commission introduced a decision for setting up access-to-the-grid fees. These were subsequently abrogated by the Supreme Administrative Court as illegal. In a new decision of 13 March 2014 the Commission determined a new access-to-the-grid fee applicable for the producers of electricity from PV and wind only. The fee is for access to the transmission grid only and is BGN 2.45 / MWh (VAT excluded) (i.e. EUR 1.25).

With the Law on the State Budget for 2014 an attempt was made to introduce an additional "fee" or "tax" in the Renewables Act over the income of the producers of electricity from renewables.

The tax was named "a tax for the production of electricity from sun and wind" and the formula is: $\text{Tax} = \text{FT} \times \text{EP} \times 20\%$

Where:

FT is the applicable feed-in tariff ex-VAT, EP is the quantity of electricity sold by the producer. This tax was appealed before the Constitutional Court of Bulgaria as being anti-constitutional in its nature and the case is still pending.

4. NATURAL GAS

4.1 Market overview

The Bulgarian natural gas market is still in the process of development. The country has a well-developed gas transmission network (mostly built during the socialist era), which is operated by Bulgartransgas the state-owned company, transiting gas to Turkey, Greece and Macedonia and supplying large industrial consumers and power plants (accounting in 2008 for about 87% of local consumption).

Currently the system is fed with gas from Russia only, through the Ukraine under long-term supply agreements. Therefore, after the

Russia-Ukraine gas crisis of 2009, which resulted in a cut of supplies to Bulgaria, the government intensified work on building interconnection lines with the systems of Romania, Serbia, Greece and Turkey. These were planned to be operational by 2014 but as of the present time they are not. Projects for the construction of a terminal for liquefied natural gas ("LNG") or use of the existing terminal in Greece as well for supply of compressed natural gas ("CNG") from Azerbaijan across the Black Sea have been also discussed, although no practical steps for their implementation have so far been made.

Bulgaria participates (through the state-owned company Bulgarian Energy Holding) in the strategic natural gas transmission projects crossing the region – the Nabucco Gas Pipeline and the South Stream Gas Pipeline.

Local distribution to household and small and medium business consumers is a relatively new sector, the actual development of which started in 2000 by the issuance of a number of regional and municipal distribution licences. This sector accounts for only about 13% of local consumption and about 2% of the energy used (where the average number for the EU is ca. 45%) but registers a steady growth in last years and has a big potential.

The market is heavily dependent on imports from Russia which account for more than 75% of local consumption. Since 2004 Melrose Resources has been exploiting the Galata local deposit which is now to be converted into a storage facility. In 2010 it received concessions for another two deposits which should supply more than 10% of local demand in the next years. In 2011 the government granted a permit for exploration of shale gas to Chevron. The government is hoping that shale gas may in the coming years become a major contributor to local gas production.

The market has been fully liberalised in theory since 2007 (including exports and imports) but due to various constraints the share of deals on the free market is still negligible and more than 90% of sales are made by the public supplier Bulgargas and the regional suppliers at regulated prices.

4.2 Regulatory overview

The natural gas sector is regulated by the Energy Act and a number of Ordinances and Rules issues on its basis by the Council of Ministers and the Commission. This legislation conforms to the fundamental EU guidelines in the sector. Among other things, the law provides for:

- The unbundling of services through the establishment of an independent system operator to undertake the transportation activities previously performed by Bulgargas;
- The free development by private investors of transit and gas distribution networks and storage facilities under a licence;
- The liberalisation of supply;
- Third party access to the national transportation system, including storage facilities, on the basis of tariffs approved by the Commission.

4.3 Regulated natural gas market activities

According to the provisions of the Energy Act the supply and distribution of natural gas, as well as the construction and operation of gas transit, transmission and distribution networks and gas storage facilities, are permitted after issuance of a respective licence, which is granted by the Commission. No licence is required for trading with natural gas including for the import and export of natural gas.

Only one licence for operation of the transmission network (high-pressure pipelines) and for public supply of electricity has been issued for the territory of Bulgaria. Bulgartransgas (under the control of the Bulgarian government) holds the licence for the operation of the national transmission network and Bulgargas (also controlled by the Bulgarian government) holds the licence for the public supply of gas. Bulgartransgas holds also the only currently effective licences for transit of natural gas and for operating a gas storage facility (Chiren).

Similarly only one licence for operation of a distribution network and for supply of gas to end consumers has been issued for a particular licensed territory. Currently 4 licences have been issued for the distribution of natural gas in regions comprising several towns and 39 licences have been issued for the distribution within the territory of individual towns.

In principle licences are issued on a "first come, first serve basis" provided that the applicant meets the relevant requirements for obtaining a licence. If there is more than one applicant interested in a particular territory, the Commission must organise a competition procedure for granting the licence.

The initial term of these licences depends on the licensed activity and is up to 35 years. Upon request of the licence holder, the licences may be renewed for the same time period.

4.4 Exploration and production

All underground natural resources including hydrocarbons are exclusive public state property. The state provides rights for prospecting and exploration on the basis of a special permit. Rights for the extracting of natural resources are granted by way of a concession. The intensification of local production of gas is one of the priorities of the Bulgarian government. Until now commercial exploitation of local deposits of gas has been modest and has represented less than 10% of local consumption (mainly the Galata deposit, which has been operated since 2004 by Melrose Resources and is now depleted and in the process of being licensed as a gas storage facility). In 2010 Melrose Resources received two new concessions for the exploitation of local deposits. A number of exploration permits have been issued in recent years, including to Chevron for shale gas exploration and the government is hoping significantly to increase the share of local gas in local consumption in the next decade.

The exploration of oil and gas deposits may be carried out only on the basis of an exploration permit issued by the Council of Ministers ("CoM") after a proposal by the Ministry of Economy, Energy and Tourism. For that purpose, the CoM institutes a tender procedure and the bidder ranked in first place shall be granted an exploration permit with a term of up to 5 years (with an option for up to three extensions and the total duration of all extensions can be up to 5 years, i.e. maximum 10 years in total). Based on the exploration permit the respective bidder concludes an exploration agreement with the CoM outlining the terms and conditions for conducting exploration activities including minimum investments and business programme, fees payable to the government, etc.

The exploration rights require its holder to register the geological discovery and commercial discovery of oil and gas deposits. The geological discovery reveals the quantities and qualities of the oil and gas of the respective deposit and the exact location of the deposit, while the commercial discovery contains technical and commercial evaluation of the deposit and proposed methods for extraction of the underground resources.

A holder of an exploration permit which has registered a commercial discovery and has obtained a certificate for that commercial discovery may submit an application to the government for direct (i.e. without conduction of any tender procedure) granting of oil and gas concession within 6 months as of the issue of the certificate for commercial discovery.

If no certificate for commercial discovery has been issued upon expiry of the exploration permit or if the holder of the certificate does not apply for a concession within the 6 month term, the CoM will be free to issue a new exploration permit or an extraction concession for the respective territory following a tender procedure.

After the issuance of a decision of the CoM for granting the concession, the concessionaire shall conclude a Concession agreement for a maximum term of 35 years (which term may be prolonged with up to 15 years). During the concession the concessionaire has the right to extract and process oil and gas from the deposit and to sell the oil and gas products to third parties. The concessionaire is obliged to pay to the state a concession fee (the amount of which is to be determined in the concession agreement), to carry out the annual working programme and to re-cultivate the concession area after the conclusion of the extracting and processing works.

4.5 Transmission and access to the system

The national natural gas transportation system (high-pressure pipelines) is owned and operated exclusively by Bulgartransgas. Currently there are three entry points – one from the pipeline from Romania supplying Russian gas and two points connecting local deposits. As mentioned, a number of interconnection lines with the systems of neighbouring Greece, Romania, Turkey and Serbia are in process of development which will substantially diversify the transmission opportunities of the system.

By law Bulgartransgas and the licensed regional distribution companies are obliged to allow free and non-discriminatory access to the transmission systems to all users (consumers, traders, local producers and licensed owners of gas storage facilities) under terms and conditions established by Rules adopted by the Commission and pursuant to access agreements under general rules approved by the Commission. The fees for access and transmission are determined by the Commission.

Access to the system may be refused only on technical reasons - lack of capacity or hazard to the integrity and security of the transmission system. Refusal for access on the basis of potentially serious economic and financing difficulties for another user of the system due to contracts containing 'take or pay' clauses is also possible, but only on the basis of an express derogation issued by the Commission, which must be notified to and is subject to

control by the European Commission. The same obligation to provide access applies to the operators of gas storage facilities.

4.6 Trading and supply

The prices under which the public supplier of natural gas supplies the final suppliers and customers are approved by the Commission. The prices at which final suppliers supply protected consumers are also approved by the Commission and transactions are concluded under general terms approved by the Commission. All other transactions are concluded at market prices under Rules approved by the Commission. The transmission system operator (part of Bulgartransgas) is responsible for the balancing and administration of the transactions.

Although in theory the market is fully liberalised, virtually all supplies to large consumers are performed by the public supplier Bulgargas with few deals realised between industrial consumers and the operator of local deposits and a trader. It is expected that the liberalised market will grow significantly in the next years.

4.7 LNG and storage capacity

There are no operating LNG terminals in Bulgaria. The government has discussed ideas for the construction of a local LNG terminal or signing arrangements for the use of the existing LNG terminal in Greece for supplies to Bulgaria but no specific steps have been taken so far. Bulgaria has one operating gas storage facility, Chiren, which is operated under a licence by the transmission operator Bulgartransgas. The capacity of the facility is about 450 million m³ and about 4.3 million m³ of daily supplies. Currently a process of upgrading the facility is underway which will increase its overall capacity and capacities for daily supplies.

It is expected that the depleted Galata natural gas field, which was exploited by Melrose Resources under a concession which expires in 2026, will be converted into a new gas storage facility which will contribute greatly to the energy security and the liberalisation of the market. However, that project has been pending for some years mainly due to the lack of clear legal rules in respect of the rights over the depleted field and the procedure for choosing an operator for the facility.

5. UPSTREAM OIL MARKET

5.1 Market overview

Currently the local production of oil in Bulgaria is negligible and virtually 100% of oil is imported from Russia. In the last year the government has prioritised the exploration for local oil and gas deposits and has issued a number of exploration permits to international companies hoping to increase domestic production.

5.2 Regulatory overview

In respect of the legal regime for oil exploration and production, please refer to section 4.4 above.

5.3 Forthcoming developments in the Bulgarian energy sector

Major investment opportunities are expected in the Bulgarian energy sector in the next years in many different areas.

Nuclear energy

The project for the construction of a new Belene Nuclear Power Plant has been officially suspended by a decision of the Bulgarian Parliament in 2012, although political discussions for reopening the project are periodically held. In 2014 the government initiated negotiations with Westinghouse for the construction of a new nuclear generation unit at the site of the existing Kozloduy NPP. Should the project proceed it will be one of the major investment projects in Bulgaria.

In parallel the Kozloduy NPP is pursuing a project for expanding of the life span of the existing two units.

Renewable energy

Due to the boom in developments in 2012 no major new capacities are foreseen for the next few years. Furthermore Bulgaria has almost reached its 2020 goal for electricity from renewables in the energy mix, which is a condition for abolishing the feed-in-tariff support rules.

However, the market for existing projects is currently under restructuring and a number of projects are on sale. In addition potential is available in biomass projects, the servicing of plants from renewables (as the maintenance companies have to possess certain qualification) as well as in the construction of small facilities between 30 kW and 200 kW upon buildings and within regulated land plots.

Electricity and gas markets liberalisation

The level of liberalisation of the local electricity and gas markets is unsatisfactory at present and a procedure by the European Commission against Bulgaria is pending in that respect. It is expected that measures will be taken to effectively promote free trade in both markets which will bring significant opportunities for electricity and gas trading including cross-border.

Major gas infrastructure projects

Bulgaria is a party to the Nabucco and South Stream pipeline projects and is implementing projects for interconnection of the national transmission system to the systems of all neighbouring countries. The implementation of those projects will strengthen the position of Bulgaria as a local energy hub.

Oil and gas

Further increase of local production of natural gas and oil is one of the priorities of the Bulgarian government in the aims of ensuring the security of supplies and a certain level of independence from imports of hydrocarbons. Therefore, the government plans to attract major investments by international companies in exploration activities.





CROATIA

1. INTRODUCTION TO THE ENERGY MARKET

Croatia has, within the past decade and especially in the past couple of years, seen vivid development of the energy sector, in all of its areas such as electricity and gas markets, renewables and upstream regulation and activities. This primarily refers to the adoption of the new Energy Market Act, Electricity Market Act, Gas Market Act, Oil and Oil Products Market Act, Act on Exploration and Exploitation of Hydrocarbons, etc. The main reason for this is Croatia’s preparation for EU accession which took place on 01 July 2013 and the need for adjusting certain energy laws with the best available practices applicable across the world.

Apart from becoming a member of the EU internal energy market which to a certain extent applied even before the accession as a result of the Ratification and Accession Treaty signed in 2001, by ratifying the Energy Charter Treaty, Croatia has undertaken to comply with the principles of market economy in the energy sector, enhancing energy efficiency and environmental protection. Also, by ratifying the Kyoto protocol, it has undertaken to ensure that 20% of all energy consumed in Croatia comes from renewable energy sources. Consequently, in the last few years Croatia has been experiencing development of renewable energy projects such as wind, solar and biomass power plants, etc.

The main regulatory bodies in the Croatian energy sector are the Croatian Energy Regulatory Agency (the “Agency” or “CERA”), the Croatian Energy Market Operator (the “Market Operator”) and the Ministry of Economy (the “Ministry”).

The body in charge of regulating all energy activities in Croatia is the Agency, incorporated by the Act on Regulation of Energy Activities in 2004. The Agency is an autonomous, independent and non-profit public body established for the purpose of determining and implementing the regulation of energy activities in the electricity, heating, gas and petroleum sectors. Some of the Agency’s functions refer to the issuance of energy licences. Its work is public and partly financed from the fees collected for the issuance of energy licences.

The Agency is responsible to the Ministry of Economy. The Market Operator is a company with public competencies whose basic activities are the organisation of the electricity and gas markets and the promotion of generation of electricity and heating from renewable energy sources (“RES”), cogeneration heating plants (“CHP”) ¹ and biofuels. The major Market Operator’s obligations include: (i) signing feed-in tariff (“FiT”) power purchase agreements (“FiT PPA”), (ii) signing agreements with the suppliers for the collection of minimum share of renewable electricity, (iii) collection of the incentive fee from the suppliers, and (iv) calculation and division of financial means based on the signed agreements².

2. ELECTRICITY

2.1 Market overview

The Electricity Market Act (Official Gazette no. 120/12, 14/14) distinguishes six types of energy activities within the electricity sector – production of electricity, transmission of electricity, distribution of electricity, organization of electricity market, supply of electricity and trade of electricity. Only the energy operators holding energy licenses issued by the Agency are entitled to undertake the mentioned energy activities³.

¹ Cogeneration heating plants produce both electricity and heating.
² Please see section 3 below for detailed explanations.
³ Certain exceptions do exist primarily in relation to the production of electricity wherein, in certain circumstances, legal or private persons will not be obligated to obtain the energy license. In addition, with respect to undertaking of some of the activities such as supply and trading, additional requirements are to be complied with – obtaining of EIC sign – Energy Identification Coding Scheme, entering into an Energy balancing agreement with HOPS d.o.o., and entering into an Agreement on regulation of mutual relations on the electricity market. According to the information provided in the Agency’s report for 2012, not all energy operators holding energy licenses had fulfilled these additional requirements.

As at 31 March 2014¹, the following market participants were registered as holders of energy licenses for undertaking specific energy activities in the RoC²:

- a.) for the production of electricity - 29 different companies ;
- b.) for the transmission of electricity-Hrvatski operator prijenosnog sustava d.o.o. -HOPS d.o.o., owned by HEP d.d., a 100% state-owned company ;
- c.) for the distribution of electricity- Hrvatski operator distribucijskog sustava d.o.o.-HEP DSO, owned by HEP d.d. ;
- d.) for the organization of electricity market- the Market Operator;
- e.) for electricity supply - 20 different companies ;
- f.) for electricity trading - 16 different companies ;
- g.) for trading, mediation and representation on energy market – 5 different companies³.

According to the (latest available) Agency's 2012 Annual Report which elaborates energy markets and developments for the year 2012, the import of electricity in the RoC (due to the poor hydrological conditions and non-rentable electricity production of thermal power plants in that year) was 29% of the total quantity of electricity handed over to the buyers. The year 2013 was untypical, primarily due to excellent hydro conditions resulting in a decrease in electricity import.

The consumption of electricity has in recent years in Croatia experienced a fall, mainly due to the decrease in activities of the industrial sector. According to the recently available information on gross electricity consumption⁴ in Croatia in 2013, gross consumption was 17.37 TWh indicating a slight fall with respect to 2012 when gross consumption was 17.5 TWh. The sale of electricity to end consumers in the past 5 years also points to a mild fall given that the quantity of electricity sold in 2009 equalled to 15.51 TWh whereas in 2013 it equalled to 15.19 TWh.

The greatest quantity of electricity gross consumption in 2013 was

covered by domestic production (75%), of which (i) 11.1% was produced from natural gas and fuel oil (Cro: mazut) (all by HEP⁵), (ii) 12.8% from coal (all by HEP Group), (iii) 47.0% from hydro (almost all by HEP Group), (iv) 3.0% from wind, (v) 0.8% from other RES and CHP, and (vi) 0.1% from industrial power plants. In addition, 14.7% of imported electricity was received from the nuclear power plant Krško in Slovenia⁶.

The Croatian electricity market is only partially liberalised. Non-liberalisation exists, from both the legislative and market points of view, in relation to electricity transmission and distribution. All transmission and distribution activities in Croatia are undertaken by one of the HEP Group companies – HOPS d.o.o. for transmission and HEP- DSO for distribution. On the other side, the generation, supply and trade of electricity is liberalised from the legislative point of view while the opening of the market "in real life" is becoming more significant each year. The opening of the market is also reflected through the development of renewable energy projects. The two of the most "talked about" market players on the Croatian electricity supply market within the last years were GEN-I Zagreb d.o.o. and RWE Energija d.o.o.

2.2 Regulatory overview

The Electricity Market Act secures implementation of the following directives in the Croatian legislative framework:

- a.) Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC ;
- b.) Directive 2009/28/EC of the European Parliament and of the Council on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC; and
- c.) Directive 2005/89/EC of the European Parliament and of the Council of 18 January 2006 concerning measures to safeguard security of electricity supply and infrastructure investment.

Some of the electricity market elements encompassed by the new Electricity Market are related to the supply of electricity as a public service and protection of the buyers through the institutions of universal service and guaranteed supply, protection of vulnerable customers, monitoring of the security of supply, promotion of regional cooperation, further unbundling, introduction of smart grids, etc.

Electricity activities in Croatia are mainly regulated by the following acts:

- Energy Act (Official Gazette No. 120/12, 14/14);
- Electricity Market Act (Official Gazette No. 22/13);
- Act on Regulation of Energy Activities (Official Gazette No. 120/12);
- Statute on Licences for Undertaking of Energy Activities (Official Gazette No. 118/07, 107/09);
- Grid Rules of Electro-energy System (Official Gazette no. 36/06, 14/08);
- General Terms and Conditions for Electricity Supply (Official Gazette No. 14/06);
- Methodology for Determination of Tariff Items for Guaranteed Supply with Electricity (Official Gazette no. 158/13);
- Methodology for Determination of Tariff Items for Supply with Electricity as Universal Service (Official Gazette no. 116/13, 38/14);
- Decision on Amount of Tariff Items within Tariff System for Distribution of Electricity, without the Amount of Tariff Items (Official Gazette no. 49/12);
- Decision on Amount of Tariff Items within Tariff System for Transmission of Electricity, without the Amount of Tariff Items (Official Gazette no. 49/12);
- Statute on Usage of Renewable Energy Sources and Cogeneration (Official Gazette no.88/12, 120/12);
- Statute on Acquisitions of Eligible Electricity Producer Status (Official Gazette no. 132/13);
- Tariff System for Production of Electricity from RES and Cogeneration (Official Gazette no. 133/13, 151/13, 20/14);
- Decree on Establishment of Guarantees of Origin (Official Gazette no. 84/13, 20/14);
- Rules on Functioning of Electricity Market (Official Gazette No. 135/06, 146/10, 90/12);

- Rules on Balancing of Electro Energy System (Official Gazette No. 133/06, 135/11);
- Methodology for Determination of Prices for Calculation of Balancing Electricity Owed by Operators Responsible for Deviations (Official Gazette no. 12/13);
- Decision on the Amount of Fees for Grid Connection and Increase of Connecting Power (Official Gazette No. 135/06, 146/10);
- Decision on the Fee for Organising of Electricity Market (Official Gazette No. 94/07, 38/12);
- Statute on Energy Balance (Official Gazette No. 133/06, 135/11, 137/11);
- Regulation (EC) No 714/2009 of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity;
- Regulation (EC) No 713/2009 of the European Parliament and of the Council of 13 July 2009 establishing an Agency for the Cooperation of Energy Regulators;
- Regulation (EU) 1227/2011 of the European Parliament and of the Council of 25 October 2011 on wholesale energy market integrity and transparency.

2.3 Regulated electricity market activities

The Electricity Market Act differentiates between the market-based and regulated energy activities. Regulated activities are undertaken as public services. They are transmission and distribution of electricity, organisation of electricity market which is undertaken by the Market Operator, and the supply of electricity when such supply is undertaken as public service.

Electricity supply undertaken as public service is defined as sale and purchase of electricity according to the regulated conditions towards the end consumers who are entitled to such type of supply and are free to choose it themselves, or are using it by way of automatism, including sale and purchase (Cro: preprodaja) of electricity on the wholesale electricity market.

Such suppliers may supply the buyers under the regulated conditions by way of undertaking a universal service or a service of the guaranteed supplier. Particularities of the regulated electricity market activities will be discussed in more detail in Sections 2.5 and 2.6 below.

¹ Information is available on the Agency' website – www.hera.hr.

² Wherever an energy activity is undertaken by more than three energy operators, only the number and not the names of such operators is given.

³ Although the new Electricity Market Act does not recognize energy activity of mediation and representation on the electricity market, some companies still hold such energy licences and are registered for undertaking those activities. The reason for this is the current incompatibility between the Energy Act, Electricity Market Act and the Statute on Licences for Undertaking of Energy Activities. We hope this will be adjusted by the adoption of the new statute regulating the conditions and procedure for the issuance of energy licenses.

⁴ Gross electricity consumption encompasses sale of electricity to end consumers, losses in transmission and distribution, work of hydropower stations Velebit as consumer (pumping of water) and own consumption of other power plants from the network.

⁵ HEP Group refers to the group of companies owned by HEP d.d. (Hrvatska Elektroprivreda d.d.) - a fully state-owned company.

⁶ The nuclear power plant Krško in Slovenia is half-owned by Croatia and its electricity is treated as import.

2.4 Material provisions of electricity market law and licensing regulations

The Statute on Licences for Undertaking Energy Activities regulates requirements which any energy operator undertaking an energy activity is obliged to meet. These requirements are specific to the type of energy activity¹.

According to the Energy Act, all energy entities must meet the following requirements:

- be registered for undertaking the respective energy activity with the court registry of the respective commercial court;
- have sufficient technical qualifications for undertaking the subject activity;
- prove employment of sufficient number of employees professionally qualified for undertaking of the subject activity²;
- hold sufficient financial means necessary for undertaking of the subject activity or a proof of their capability to obtain one³;
- not to have had any energy license for undertaking the subject energy activity revoked by the entity in the five years preceding the submission of the request;
- provide a statement that the members of the management board or other responsible persons within the entity have not been convicted of a crime in an economic sector in the last five years.

The entity is further obligated to pay a fee for the issuance of the energy license determined by the Decision on the Amount of the Fees for Undertaking Works of Regulation of Energy Activities. The fees are as follows: HRK 20,000 (EUR 2,631.57) for production, HRK 15,000 (EUR 1,973.00) for distribution, and HRK 10,000 (EUR 1,315.78) for the supply and trade of electricity. Energy operators are also obligated to pay a fee to the Agency for its work related to the regulation of energy market. The fee amounts to 0.05 % of the total annual profit made out of sale of goods and services while undertaking respective registered energy activity in the preceding year.

The energy license issued indicates the period of its validity which can be extended if an application is made three months prior to its expiry. The Agency is entitled to revoke the energy license on a

temporary basis if the energy operator no longer fulfils the conditions of technical qualifications and competencies, financial or any other conditions pursuant to which the license to perform energy activities had been issued.

The transfer of energy license is regulated under the Statute on Licenses for Undertaking of Energy Activities. The subject statute stipulates the possibility of transfer of the energy license only in cases of spin-off of an energy license holder, or its merger to or with another legal entity. In the event of spin-off and merger, the transfer of energy license is possible to only one legal entity which is the universal successor of the energy license holder in question, subject to the filing of the request for such transfer to the Agency within the timelines specified in the subject statute.

2.5 Trading and supply of electricity

As previously mentioned, energy activity may be undertaken by a natural or legal person who has obtained an energy license from the Agency. Current practice of the Agency was to issue energy licenses only to those natural or legal persons registered for the undertaking of energy activities in the RoC (such registration in relation to the legal persons would imply a registration of undertaking energy activity as a business activity of such legal person in the court registry of the respective commercial court in the RoC). To the best of our knowledge, at the moment no example exists which might indicate that a foreign legal entity will be granted an energy license and thus be able to undertake energy activities on the territory of the RoC, unless it decides to undertake energy activities through its Croatian subsidiary (but not a branch).

In accordance with the new Electricity Market Act, the supplier or trader of electricity from an EU Member State or from an Energy Community member state wishing to participate in the electricity market of the RoC, as supplier or trader, is also obliged to obtain respective energy license from the Agency. However, the Agency may issue an energy license to the trader or supplier of electricity coming from the EU and/or Energy Community member state

under more simplified rules in line with the by-law which is to regulate the issuance and revocation of energy licenses. The respective by-law has not been adopted yet.

The logical interpretation of this provision would be that foreign entities from the EU and/or Energy Community member states will be allowed, subject to obtaining energy license from the Agency, to undertake energy activities in the RoC without having any type of establishment in the RoC. However, this provision may be in contradiction with the provision of the Croatian Companies Act according to which whoever wishes permanently to undertake business activities in the RoC is obliged to establish at least a branch office in the RoC. Since energy laws recognize only legal or private persons as those eligible to become energy operators, it is highly likely that the establishment of a branch office will not be sufficient; instead, the establishment of a limited liability company or a joint stock company will be necessary. However, it remains to be seen how this is going to be dealt with by the Agency.

Apart from the energy license, the Electricity Market Act sets forth additional requirements that the participants, i.e., electricity traders, must comply with. For example, each electricity trader is obliged to make accessible, during the five-year period, to the Agency, to the Croatian Competition Agency, and to other competent agencies in the Energy Community and/or EU, relevant data referring to all transactions contracted with electricity buyers on the wholesale market, the Market Operator and HOPS, in relation to the purchase or sale of electricity, including electricity derivatives.

In addition, the producer, trader and supplier of electricity ("Participants"), aside from obtaining the respective energy license, must also enter into other contracts. These are: (i) contract with the Market Operator¹ which regulates the rights and obligations between the Participant and the Market Operator, and (ii) energy balancing contract with HOPS. Also, in order to secure a cross-border trading, the Participants must enter into a contract on securing cross-border capacities with HOPS.

Finally, according to the new Electricity Market Act, the electricity market consists of a retail and wholesale electricity market, whereas the wholesale market consists of "bilateral agreements market", "energy balancing market", and "electricity stock

market". The latter is expected to be established by the end of 2014. The Market Operator and HOPS will be responsible for organizing the stock electricity market for physical trading with electricity on the whole territory of the RoC, and for the connection with other stock electricity markets.

The producer, supplier and trader provide the Market Operator with "agreed schedules" of sale and purchase of electricity which need to be balanced in such a way that the hourly plan of total take-over of electricity corresponds to the hourly plan of total delivery of electricity. The subject balancing is regulated under the Energy balancing agreement concluded with HOPS and the Rules on Balancing of Electro Energy System. Such rules determine the (i) entities responsible for deviations, i.e. producer, supplier and trader ("Responsible entities"), (ii) entities in charge of providing the balancing services, (iii) way of calculation of energy needed for the balancing (the "Balancing energy"), and (iv) way of paying for such Balancing energy. In the event of misbalance, HOPS guarantees the balance in energy. Whichever entity is responsible for the misbalance is liable to pay for the balancing according to the unit price of the Balancing energy in line with the Rules and the Methodology on Providing of Services of Electricity Balancing in Electro Energy System. The Methodology stipulates the method of calculating the unit price.

The existing Croatian legislation differentiates between electricity consumers entitled to choose their own supplier and paying the price of electricity determined by the market on the one hand, and electricity consumers entitled to the electricity supply provided as public service, on the other hand. The "public service supply" is undertaken as regulated service, under regulated prices.

Furthermore, the Electricity Market Act differentiates between the (i) public service supply as universal service established for the need of households and the (ii) public service supply as guaranteed service which is, according to its statutory definition, applied when an end consumer, under certain circumstances, remains without a supplier. In reality, this happens rarely, or almost never, and is often used by those consumers wanting to avoid "looking for a supplier" on the market. The prices of guaranteed supply are slightly higher than those set out by the market. In reality, the institution of a guaranteed supply is used by non-households when they want to avoid the market-based service of electricity supply.

¹ The subject statute is still in force but, to a certain extent, not in compliance with the Energy Act or other *legi speciali* regulating a specific energy area such as Electricity Market Act or Gas Market Act. In case of discrepancies, the Energy Act and Electricity Market Act should apply. However, due to the lack of the compliant implementation rules it remains to be seen how this issue is going to be dealt with by the Agency.

² Specific technical qualifications are set forth for each type of energy activity with the Statute on Licences for Undertaking of Energy Activities. This applies to the human resources and financial obligations requirements also.

³ The energy licence holder needs to have sufficient financial means as determined by law or a proof of its capability to obtain such means in the following amounts: HRK 50,000 (EUR 6,578.94) for production of electricity, HRK 300,000 (EUR 39,473.68) for distribution, HRK 100,000 (EUR 13,157.89) for transmission, HRK 20,000 (EUR 2,631.57) for trade, and HRK 30,000 (EUR 3,947.36) for supply of electricity.

¹ Prior to entering into the contract with the Market Operator, the Participant is obliged to obtain an Energy Identification Coding Scheme.

According to the Electricity Market Act, the Government of RoC shall determine those energy operators which will, in line with the provisions of the Electricity Market Act, be obliged to provide a service of electricity supply as universal service or as guaranteed supply on the territory of the RoC. Such energy operators are obligated to procure the electricity needed for a safe and continuous electricity supply from the producers, traders, other suppliers, the organized electricity market or from import, wherein the priority is given to the electricity produced from renewable energy sources and cogeneration.

2.6 Transmission and grid access

There are only one transmission system operator and one distribution system operator in Croatia, respectively HOPS and HEP-DSO. They are a part of a vertically integrated company – HEP Group, and are independent from one another with respect to their form, organisation and decision making.

One of the most important aspects of the transmission system is the execution of unbundling by choosing one of the possible models. Both Directive 2009/72/EC and the Electricity Market Act recognize three types of models: ownership unbundling, ISO – Independent System Operator and ITO – Independent Transmission Operator models. The Croatian legislator has opted not to impose any of the models onto the transmission system operator, but has rather left it to the vertically integrated company – HEP d.d., initial owner of the network system, to choose the model. HEP d.d. has chosen the ITO model, thus making the transmission system operator – HOPS d.o.o., the owner of the network system.

The Electricity Market Act, in line with the respective directive, sets forth all other requirements which must be met for unbundling to be fully and properly completed and whose completion and maintenance will always be subject of monitoring by the Agency undertaking the certification procedure. According to unofficial information, the subject certificate has not been issued yet. The distribution system operator, HEP-DSO, has not undergone the unbundling procedure nor, to the best of our knowledge, are there any plans for doing so.

Electricity generation facilities have a right to connect to and use the electricity grid, and those which are already connected can have their connecting power increased. TSO and DSO are in charge of reviewing technical possibilities for carrying out such connection and calculate the connection fee in accordance with the methodology and amounts regulated under the Statute on the

Fees for Grid Connection and Increase in Connecting Power, and the Decision on the Amount of Fees for Grid Connection and Increase in Connecting Power.

According to the Electricity Market Act, TSO and DSO are obliged to secure third party access to the grid in accordance with the General Terms and Conditions of Electricity Supply and the Grid Code. Such third party access may be denied only due to the limited technical conditions of the grid in which case the refusal must be explained. The party which has been denied the access may file an appeal to the Agency whose decision on the issue is final.

A successful grid connection process includes (i) the issuance of the Preliminary Electro Energy Approval (the “PEEA”) and the Electro Energy Approval (the “EEA”), (ii) conclusion of the grid connection agreement, (iii) preparation for the construction of the connection, (iv) conclusion of the grid usage agreement, (v) trial connection period, and (vi) the connection itself. The connection is also preconditioned by the fulfilment of all obligations from the grid connection agreement.

The grid connection agreement is concluded between the grid system operator and the producer of electricity in accordance with the General Terms and Conditions of Electricity Supply, the Grid Code, and other legal acts mentioned previously within this section. The connection fee is payable by the producer and covers the costs of the construction of the connection and securing of adequate technical conditions of the grid. The Grid Usage Agreement (also concluded between the grid system operator and the producer) governs the terms and conditions of the grid usage.

2.7 General approvals and permits for electricity generation facility project implementation

There is a set of interdependent regulatory steps essential to the constructing and running of an electricity generation facility. Apart from the energy licence issued by the Agency, each electricity generation facility construction also requires energy approvals (a requirement in addition to the regular construction-permitting process). Before obtaining the necessary approvals and licences, a new company must be incorporated or the existing company's incorporation deed needs to be changed;

in both cases, the generation of electricity as a business activity of the company must be registered with the court registry of the

respective commercial court. Also, in the event of renewable electricity generation, the investor/project developer should choose the appropriate project site bearing in mind the investment feasibility with regards to the optimal usage of RES, and difficulties regarding the grid connection, both of which depend on the location of generation facility.

Also, the investor's decision on the location should be based on the respective construction possibilities provided for in the spatial plans, current land ownership status, as well as on other technical and economic factors. Please note that the list of necessary licences and approvals will also include those approvals required for the renewable electricity generation facilities¹.

Licences and approvals

- a.) Preliminary electro energy approval (“PEEA”) is used to determine the potentials of the grid connection as well as technical, economic and other conditions for grid connection, grid usage and facility construction. This is a precondition for the issuance of a location permit. It is issued by TSO or DSO for a period of 2 years, with possible extension of additional 2 years.
- b.) Location permit is issued by the local government where the facility is to be constructed or by the Ministry of Construction and Spatial Planning (in the event of a facility with more than 20MW). Location permit is issued only in case of a construction in phases (Cro: fazna izgradnja) and/or in stages (Cro: etapna izgradnja), OR in case of unresolved property relations or when expropriation is needed.
- c.) Securing the Grid Access – during the location permit issuing process, a grid connection agreement or pre-agreement is concluded.
- d.) Energy approval – the energy approval is a requirement for the construction of the facility. It is a precondition for the issuance of the construction permit.
- e.) Construction Permit – must be obtained within 2 years as of the validity of the energy approval.
- f.) Preliminary Eligible Producer Status (“PEP Status”) – applies to renewable electricity generation facility only. It (eventually) gives its holder the right to a FiT price for the produced electricity².

- g.) Electro energy approval (“EEA”) is a precondition for the grid connection of the generation facility. It becomes invalid with the termination of the grid usage agreement.
- h.) A usage permit is issued by the same body which issued the construction permit, once the construction is complete. It is a precondition for the usage of the facility. The usage permit confirms that the construction has been completed and that it fully complies with the construction regulation.
- i.) The energy license entitles its holder to undertake energy activities. It is issued by the Agency which also keeps a registry of the issued energy licences.
- j.) Eligible Producer Status (“EP Status”) is preconditioned by the issuance of the energy licence, valid usage permit and grid usage agreement. When these are met and the EP Status is issued, the eligible producer may start engaging in market activities and collecting the FiT price for the power generated according to the FiT PPA with the Market Operator³.
- k.) Grid Connection is carried out by TSO or DSO, depending on the installed capacity of the facility. It is preconditioned by the completion of construction works, EEA, conclusion of the grid usage agreement and fulfilment of all obligations from the grid connection agreement.

2.8 Forthcoming developments

Forthcoming developments primarily refer to the development of significant projects in the power sector such as the construction of new inter-connections towards Bosnia and Herzegovina, the construction of new substations for increased wind-power plants potential, further activation of hydro-power plants which are technically capable for securing secondary regulation, construction of a gas -fired power plant, and construction of reversible hydro-power plants.

The two of the most talked about and discussed power projects recently, which have also been heavily “attacked” by the “green NGO” society, are the Plomin C thermo-power plant and the Ombla hydropower projects. The Ombla hydropower project appears to have been put on hold for a while. With respect to the TE Plomin, the Minister of Economy has just announced the closure of the second round of the public tender procedure to find a strategic partner to the national electricity company HEP. Three world renowned companies have submitted their offers. The

¹ The procedure for the development of integrated solar power plants is simpler than the one explained herein.

² Please see Chapter 3.2 for further explanation on the PEP Status and the FiT PPA.

³ For more information on the EP Status, please refer to Chapter 3.2 below.

negotiation procedure is expected to be finished by the end of 2014 and the works are expected to start in 2015. According to the information available, the strategic partner is to provide project financing, and maintenance and management of the power plant through a mutually owned company. HEP is to secure a long-term purchase of power, i.e., purchase of at least 50% of electricity produced in a period between 20 and 30 years. The investment is apparently EUR 800 million worth.

In addition, at the end of 2013, HOPS and the Market Operator have entered into an agreement regarding their obligations related to the establishment of the Croatian electricity stock market. The t stock market in question has not yet been established. However, according to the information provided by the Market Operator, the same is expected to take place by the end of 2014.

3. RENEWABLE ENERGY

3.1 Market overview

The Croatian Energy Development Strategy 2009 defines that the RoC has good natural conditions for the usage of RES and sets forth the following goals:

- (a) fulfilling obligations from the 2009/28/EZ Directive on the promotion of the use of energy from RES in the amount of 20% of direct gross energy consumption;
- (b) securing that 10% of energy consumed in transport comes from RES; and
- (c) ensuring that the electricity production from RES is at 35% by 2020.

Apart from the Croatian Energy Development Strategy, the National Action Plan as of October 2013 ("NAP") to a certain extent sets out the development strategy in a different manner than that set out in the Energy Development Strategy 2009. According to the NAP, the goals to be achieved by 2020 are as follows:

- a.) 39% of RES in gross direct consumption of electricity ;
- b.) 10% of RES in gross direct consumption of energy for transport ;
- c.) 19,6% of RES in gross direct consumption for heating and cooling¹.

The Energy Act determines the usage of RES and CHP to be of

interest to the RoC. The Statute on the Usage of RES/CHP² determines the RES, terms and conditions of their usage, and form and procedure for the registration of the projects/ power plants using the RES. The Registry for registration of the RES power plant projects (the "RES Registry") is kept by the Ministry. The Registry in fact shows the number of RES projects (and their respective capacity expressed in MWs) whose development has been initiated.

Many of the projects currently registered in the RES Registry have not necessarily reached further steps in their development process, nor will they necessarily be completed. Nevertheless, the status of the RES Registry shows a great interest for the development of the RES projects in the RoC. Table 1 shows that the greatest interest from the point of view of MWs was shown with respect to wind power utilization. Table 2 shows the number and capacity of the RES projects currently in operation. According to Table 2, most projects are solar projects (i.e., integrated solar systems)³ Nevertheless, the greatest installed capacity currently in operation is that of wind power.

Table 1 – RES Registry data³

Type of RES	No. of projects	El. (MW)
Solar	504	89.75
Hydro	43	49.19
Wind	88	3,804
Biomass	106	249.5
Geothermal	1	4.71
Biogas	68	92.94
Landfill Gas & Gas from WWT	4	7.15
Cogeneration	10	51.46
Total	824	4,348

Table 2 – RES projects in operation⁴

Type of RES	No. of plants	Installed capacity (MW)
Wind	14	254.25
Biomass	3	6.69
Biogas	11	11.14
Solar	423	23.7
Hydro	4	1.34
Cogeneration	4	11.49
Landfill Gas	1	2.5
Total	748	311,108

¹ Discussed in Section 3.2 below.

² Official Gazette No. 88/12, 120/12

³ Data collected from the website of the Ministry of Economy.

⁴ Data collected from the website of the Market Operator. It shows the data as at 28 February 2014.

3.2 Support schemes

A system of incentives, i.e. feed-in tariffs ("FiT"), for the production of renewable electricity¹ was developed in 2007, primarily by the Ordinance on Feed-in Tariffs for the Promotion on Electricity Production from RES/CHP². This by-law has subsequently been amended and the most recent one was adopted at the end of 2013 with its application as of 01 January 2014. In principle, the production of renewable electricity will be incentivised until the satisfactory development of the relevant equipment is reached, and until the market creates such market conditions which would enable the sale of renewable electricity with no need for FiTs. Only those producers of renewable electricity which have gained the EP Status are entitled to a FiT price.

The Statute on Obtaining Eligible Status of Renewable Electricity Producer³ regulates the conditions and procedures for obtaining such EP Status. The EP Status is issued by the Agency for a period of 12 or 14 years (depending on the tariff system in force at the time of the signing the FiT PPA with the Market Operator) and is preconditioned by the issuance of PEP Status, an energy licence, a valid usage permit and the conclusion of the grid usage agreement. PEP Status is also issued by the Agency for a period of two years (according to the old regulation regulating the issuance of the PEP Status), or one, three or four years (according to the currently applicable regulation regulating the issuance of the PEP Status) depending on the capacity of the electro-energy system to which a facility is going to be connected. PEP Status is also preconditioned by the issuance of energy approval, construction permit and PEEA.

The Market Operator buys renewable electricity based on the FiT PPA concluded with producers holding the EP Status. In fact, only those renewable electricity producers holding the EP Status and being a party to the FiT PPA are entitled to the FiT price, comprising of the electricity market price and the incentive fee.

The FiT price is provided for in the Tariff System for the Power Production from RES/CHP, which provides for a tariff calculation method and the tariff items value (dependant on the power plant energy source), all in accordance with the stipulated formulas. The formula is to reflect the reasonable investment, operation and

¹ Renewable electricity is electricity produced from the RES.

² Official Gazette No. 33/07, 155/08, 155/09

³ Official Gazette No. 67/07, 35/11

⁴ The suppliers guarantee to the Market Operator the payment of the amount corresponding to the collected incentive fee.

maintenance costs as well as a reasonable return of investment. The conclusion of the FiT PPA is preconditioned by the (i) conclusion of the grid connection agreement or pre-Agreement, and the (ii) issuance of the PEP Status. The RES electricity producer is entitled to the payment of the FiT pursuant to the FiT PPA as of the final validity of the EP Status and is valid for a period of 12 or 14 years (depending on the tariff system in force at the time of the FiT PPA's signing).

When buying electricity from the supplier, the power consumer pays to the supplier the average market price increased by the incentive fee. The incentive fee is then collected by the Market Operator (pursuant to the agreement concluded between the Market Operator and each and every one of the suppliers)⁴ and used for the payment of the FiT price to the renewable electricity producers holding the EP Status. On the other hand, renewable electricity bought from the producers holding the EP Status is proportionally divided among the suppliers by the Market Operator. The most recent changes with respect to the support schemes have taken place with the adoption of the new tariff system in October 2013. Some of the relevant changes are as follows:

- a.) The new tariff system does not recognize the domestic component as a variable part of the FiT price which was introduced by and recognized under the tariff system from 2012 ;
- b.) The new tariff system sets forth a new benchmark and rules related to the achievement of annual energy efficiency required to gain the right to a FiT price for the biomass projects;
- c.) The new tariff system no longer provides an incentive for wind power or biomass facilities with more than 5MWs of capacity.

The above are only some of the changes introduced by the new tariff system from 2013. The reasoning for the changes (especially the changes under points b.) and c.) above), is related to the adoption of the NAP. NAP shows more support for the development of biomass and biogas power projects as they potentially create more employment opportunities and development of other related sectors such as wood industry including wood processing, and agricultural sector. Furthermore, NAP limits the quota for incentivizing wind power to the amount

of up to 400 MW whereas the Croatian Energy Strategy set forth a goal of 1200 MWs. The 400 MW quota has already been “taken” thus leaving out of a significant number of wind power projects. In addition, an issue which has probably been discussed recently is the issue of unlawful aid with respect to the incentivizing of the renewable electricity production in the RoC. Although this has not been confirmed officially by the Government of RoC, the Ministry, or the European Commission, the tariff systems appear not to have obtained the necessary approvals from the Croatian Competition Agency and are thus considered unlawful. Whether or not they are compatible or incompatible with the EU common market rules will most probably be a subject, and according to unofficial information, is already a subject of discussion between Croatia and the EU. This is since the competency to decide on the lawfulness/unlawfulness and compatibility/incompatibility of state aid has upon RoC’s accession to the EU been transferred from the Croatian Competition Agency to the European Commission. This is a very important question which we expect will be extensively discussed in the months to come¹.

4. DISTRICT HEATING

4.1 Market overview

Energy activities within the heating sector in the RoC are the production, supply and distribution of heating energy. While the production and supply of heating energy are undertaken as market activities, distribution is undertaken as a public service. All energy entities operating in the district heating sector must obtain a license for undertaking these activities from the Agency, and must meet the requirements determined by the Regulation on Licences for Undertaking of Energy Activities².

Data on energy operators undertaking one of the above mentioned activities is provided on the Agency’s website (www.hera.hr). As of 31 March 2014, 22 energy operators held energy licenses for the production of heating energy, 13 energy operators for the distribution of heating energy, and 20 energy operators for the supply of heating energy.

According to the latest available data from the 2012 Agency Annual Report, energy operators within the heating sector provide services of space heating and sanitary hot water preparation to more than 155.000 buyers (end-consumers) of heating energy, 95% of which are households. Heating energy is produced in the large co-generation thermal power plants in Zagreb and Osijek, as well as in the county heating plants and boiler systems which can be found in almost all larger Croatian cities.

Energy operators deliver to the households and industrial consumers more than 2 TW/h of heating energy annually; the quantity of heating energy delivered to the end consumers in the capital city of Zagreb is three times the quantity of the heating energy delivered to all other Croatian cities together. The total longitude of the heating distribution system is 420 km approximately.

HEP Toplinarstvo ltd for the production and distribution of heating energy, a member of the HEP Group, supplies with heating energy more than 80% of the total number of heating energy end consumers, thus covering the majority of the heating energy supply market. The energy operators which undertake energy activities of production, distribution and supply of heating energy are mostly owned by municipalities or the state; some are partially in private ownership.

At the end of 2012, the Croatian parliament adopted changes to the Energy Act and of Act on Regulation of Energy Activities. By these changes, the Agency is authorized to enact or approve prices, tariff systems and fees according to methodologies for the production, distribution and supply of heat. The application of enacting or changing of the amount of tariff items to the Agency is undertaken by an energy operator. The agency as of the 30 November 2012 had enacted decisions relating to the amount of tariff items for the production, distribution and supply of heat for the company HEP Toplinarstvo ltd, for Zagreb, Samobor, Zapresic, Velika Gorica, Sisak and Osijek, and on 31 July 2013 for the city of Virovitica. At the time of the preparation of this guide, the Agency was planning to adopt new methodologies for the calculation of tariff items for the production and distribution of heating energy which were designed to replace the methodologies for production

and distribution set out in the Tariff System for Providing Energy Services of Production, Distribution and Supply of Heating Energy, without Tariff Items.

4.2 Regulatory overview

The heating energy sector in the RoC has in the past year undergone reform connected to harmonisation with the 3rd energy package principles, by way of adopting the new Heating Energy Market Act (Official Gazette no. 80/2013, 14/2014) and respective by-laws. The Heating Energy Market Act was used to implement the following directives:

- a.) Directive 2009/28/EC of the European Parliament and of the Council on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC.;
- b.) Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the energy performance of buildings; and
- c.) Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency.

The main legal act regulating the heating energy market is the Heating Energy Market Act acting as an umbrella law for the heating energy sector in Croatia. It defines the conditions for the performance of production, distribution and supply of heating energy. The legislative and regulatory framework of the heating energy market is comprised of the following legal acts:

- Energy Act (Official Gazette no. 120/12, 14/14) ;
- Heating Energy Market Act (Official Gazette no. 80/2013, 14/2014) ;
- Act on Regulation of Energy Activities (Official Gazette No. 120/12) ;
- Statute on Licences for Undertaking of Energy Activities (Official Gazette 130/2009) ;
- Tariff System for Providing Energy Services of Production, Distribution and Supply of Heating Energy, without Tariff Items (Official Gazette no. 65/07, 154/08, 22/10, 46/10, 50/10) ; This is expected to come out of force once the below-mentioned methodologies come into force ;
- Methodology for Determination of Fee for Connection to

Distribution Network (Official Gazette No. ; still to be adopted

- Methodology for Determination of Tariff Items for Production of Heating Energy (Official Gazette No. ; still to be adopted
- Methodology for Determination of Tariff Items for Distribution of Heating Energy (Official Gazette No. ; still to be adopted
- General Conditions for Supply of Heating Energy (Official Gazette no. 129/06) in force until 01 September 2014 and (Official Gazette no. 35/2014) in force as of 01 September 2014 ;
- General Conditions for Delivery of Heating Energy (Official Gazette no. 35/2014) in force as of 01 September 2014 ;
- Grid Rules for Distribution of Heating Energy (Official Gazette no. 35/2014) in force as of 01 September 2014.

The Statute on Licences for Undertaking of Energy Activities regulates requirements which any energy operator undertaking energy activity is obliged to meet. These requirements are specific depending on the type of energy activity. According to the Energy Act, all energy entities must meet the following requirements:

- a.) To be registered for undertaking the respective energy activity with the court registry of the respective commercial court;
- b.) To have sufficient technical qualifications for undertaking the subject activity¹;
- c.) To prove employment of sufficient number of employees professionally qualified for undertaking of the subject activity;
- d.) To hold sufficient financial means necessary for undertaking of the subject activity or a proof of its capability to obtain one;
- e.) That no energy license for undertaking of the subject energy activity has been taken away from the entity in the last five years prior to the submission of the request;
- f.) To provide a statement that the members of the management board or other responsible persons within the entity have not been convicted of a crime in an economic sector in the last five years.

The entity is also obliged to pay the fee for the issuance of the energy license determined by the Decision on the Amount of the

¹ Finally, at the time of the submission of this text for the preparation of the SEE Legal – Energy Guide, the Parliament of RoC had not yet adopted a new Renewable Energy Act which should annul all currently existing deficiencies in renewable energy legislation and regulation, and provide for a unified document which would regulate renewable energy sector thus avoid its regulation being dispersed across a number of by-laws as is the situation at the moment.

² Certain exception with respect to the production of heating energy exists and relates to those production facilities whose capacity does not exceed 2MW. This is also discussed in section 4.3 below.

¹ Specific technical qualifications are set forth for each type of energy activity with the Statute on Licences for Undertaking of Energy Activities. This applies to the human resources and financial obligations requirements also.

Fees for Undertaking Works of Regulation of Energy Activities. The fees are as follows: HRK 20,000 (EUR 2,631.57) for the production of heating energy; HRK 15,000 (EUR 1,973.68) for the distribution of heat energy; HRK 10,000 (EUR 1,315.78) for heat energy supply. Energy operators are also obliged to pay a fee to the Agency for its work related to the regulation of the energy market. The fee is equivalent to the amount of 0,05 % of the total annual profit made from the sale of goods and services while undertaking the respective registered energy activity in the preceding year.

The Agency is entitled to revoke the energy licence on a temporary basis if the energy operator no longer fulfils the conditions of technical qualifications and competencies, financial or any other conditions pursuant to which the licence to perform energy activities was issued.

Please note that the applicable Croatian energy legislation does not set forth specific legal rules on the minimum share capital or share transfer restrictions different from the general corporate rules regulating the same issues. For example, the minimum share capital of an entity undertaking energy activity is HRK 20,000 (EUR 2,631.37) for a limited liability company and HRK 200,000 (EUR 26,315.78) for a joint stock company. However, the energy licence holder needs to have sufficient financial means or proof of the ability to obtain them, as determined by law: HRK 15,000 (EUR 1,973.00) for the production and distribution of heating energy, and HRK 10,000 (EUR 1,316.00) for the supply of heating energy.

The energy license issued determines the period of its validity which can be extended if an application is made three months prior to its expiry. The Agency is entitled to revoke the energy licence on a temporary basis, if the energy operator no longer fulfils the conditions of the technical qualifications and competencies, financial or any other conditions pursuant to which the licence to perform energy activities had been issued. The transfer of energy license is regulated under the Statute on Licenses for Undertaking of Energy Activities. The subject statute stipulates the possibility of the transfer of the energy license only in the events of spin-off of an energy license holder, or its merger to or with another legal entity. In the event of spin-off and merger, the transfer of energy

license is possible to only one legal entity, which is the universal successor of the energy license holder in question, subject to the filing of the request for such transfer to the Agency within the timelines specified in the subject statute.

Finally, the new Heating Energy Market Act recognizes a new energy player, i.e., a buyer of energy different from the end-consumer and the supplier. The buyer is a legal or private person who in the name and on behalf of the owners and/or co-owners or a building which comprises more than one individual usable units, buys (i) fuel for the production of heating energy in the self-supported heating system (Cro: samostalni toplinski sustav) or (ii) heating energy from the supplier of heating energy in a closed (Cro: zatvoreni toplinski sustav) or central (Cro: centralni toplinski sustav) heating systems. Each such legal or private person must be registered with the registry of buyers of heating energy kept by the Agency.

4.3 Generation

According to the Heating Energy Market Act a heating energy producer is legal or private person who has obtained from the Agency a license for performing energy activity of heating energy production. However, only such production of heating energy produced with the boilers heating system whose installed capacity exceeds 2 MW requires the issuance of such license. Eligible energy operators (Cro: povlašteni proizvođači) who produce both electricity and heating energy within the co-generation activity are obliged to obtain two licenses: one for the production of electricity and the other for the production of heating energy.

Although it has been stated previously, and the Heating Energy Market Act states that the production of heating energy is undertaken as a market activity, other provisions from the same act and General Conditions on Supply of Heating Energy in fact recognize further regulation of the heating energy production price. According to the law, the production of heating energy will be considered as a public service and not as a market activity as long as the quantity of the heating energy produced by one producer exceeds 60 % of the needs of a specific district (central) heating system¹. Under such conditions, the production price is regulated and not negotiated, i.e., the price is determined by the Agency based on the methodology prepared also by the Agency.

The rule on regulated price applies in relation to the heating energy produced within the co-generation; however, such regulated price will be a bit lower than the price not produced from co-generation. At the moment in which the portion of the heating energy market undertaken by another energy operator within the same district heating system exceeds 40%, it will be considered that the conditions for opening of the heating energy market have been fulfilled and the producer will be in a position to negotiate the price with the supplier.

The General Conditions for Supply of Heating Energy recognizes several types of agreements in the heating energy sector, some of which are those concluded by the producer – agreement on the usage of the distribution network (between producer and distributor), and agreement on the sale of heating energy (between producer and supplier).

4.4 Distribution

Around 11% of the total number of households in Croatia are connected to the district heating system in Croatia. A large proportion of production capacities and heat distribution networks are technologically outdated and energetically inefficient. Losses in heat energy distribution are, therefore, high. Some of the equipment is over thirty years old resulting in the capacity efficiency of the system below the efficiency of such systems in the developed western countries. The total length of the district heating network in RoC is about 420 km. 15 cities have heating systems in Croatia, including the capital of Zagreb, 8 of which have a district heating system.

The right to perform heat energy distribution is acquired pursuant to a concession right to distribute heat energy or a concession to build energy facilities for heat energy distribution, and the licence for distribution of heat energy. The Concession Act and Heating Energy Market Act stipulate criteria according to which the selection of the concessioner for the distribution of heat energy is based. The concessionaire is obliged to pay a concession fee in the amount and manner stipulated by the concession agreement. The financial amount of the concession fee is determined as a variable amount of the concessionaire's income from heating energy distribution in the previous year regarding the distribution territory for which the concession has been granted. The Government of RoC determines the minimum initial amount, and manner of the concession fee payment.

An energy operator performs heat energy distribution by using its own energy facilities for heat energy distribution or energy facilities used pursuant to an agreement executed with the facility owner.

4.5 Forthcoming developments

It is the intention of the state to optimize centralised heat supply in the near future. This also includes investments in the production and distribution sectors, primarily in the cities of Zagreb, Rijeka, Velika Gorica and Sisak. The energy efficiency strategy in Croatia is determined by the Energy Efficiency Programme covering the period from 2008 to 2016 and is aimed at achieving significant energy savings by the end of the period. People are expected to have developed awareness of this matter, and technologies for energy use will become more and more efficient.

Finally, according to NAP, the rise of RES' usage in the centralized heat supply (and cooling) is expected to rise from the current 1.1 to 2.9 PJ by 2020. This is expected primarily to occur with urban centres with up to 10.000 inhabitants, in the areas rich with wood biomass and geothermal wells. Since those areas are lacking developed a centralized heat supply systems including the necessary infrastructure, the development is expected to "start from the scratch". The estimate is to have new centralized heat supply systems in 10 to 15 towns, and by 2020, a constructed centralized heat supply systems infrastructure of 30km in length.

5. NATURAL GAS

5.1 Market overview

The Gas Market Act (Official Gazette no. 28/472, 14/14) ("Gas Market Act") recognizes nine types of energy activities within (natural) gas sector – gas production, transport of gas, gas storage, LNG terminal management, distribution of gas, organisation of gas market, gas trading, and gas supply.

Only those energy operators which hold energy licence are entitled to undertake the mentioned energy activities. As of 31 March 2014¹, the following market participants were registered as holders of energy licenses for undertaking specific energy activities in the RoC², namely for :

¹ A central (district) heating system is a heating system which is comprised of more than one buildings in which heating energy production and supply may be undertaken by one or more energy operators and in which the distribution of heating energy is undertaken by one energy operator, based on a concession agreement for distribution of heating energy or concession agreement for construction of distribution network

¹ Information is available on the Agency' website – www.hera.hr.

² Wherever the subject energy activity is undertaken by more than three energy operators, only the number and not the names of such operators are given.

- h.) The delivery and sale of natural gas from own production - INA d.d. ;
- i.) The shipping of (natural) gas¹ - Prirodni plin d.o.o., a company in 100% ownership of INA d.d. ;
- j.) The storage of natural gas - Podzemno skladište plina d.o.o., a company in 100% ownership of Plinacro d.o.o. ;
- k.) The transport of natural gas - Plinacro d.o.o., a state-owned company ;
- l.) The distribution of gas - 36 companies ;
- m.) The management of LNG terminal - currently none, since LNG terminal is non-existent ;
- n.) gas supply - 55 companies ;
- o.) gas trading - the following companies : Lukos energija d.o.o., Prirodni plin d.o.o. and Croplin d.o.o. ;
- p.) the organization of the gas market - HROTE – Croatian Energy Market Operator.

Although the new Gas Market Act does not recognize mediation and representation on the gas market, some companies still hold such energy licences and are registered for undertaking those activities².

According to the Agency's 2012 Annual Report, 2012 is considered the year of the real opening of the Croatian gas market. The new legislative framework together with the market activities resulted in the changes within the gas wholesale sector, whereby 7% of the wholesale gas market held by Prirodni plin d.o.o. was taken over by new market participants in the gas wholesale market. The opening of the gas retail market was not as significant. In 2012, only 125 end-consumers changed their supplier which makes a change of 0.02% with respect to the number of end consumers and, 0.24% with respect to the quantities of gas delivered³.

5.2 Regulatory overview

The Gas Market Act was enacted in 2013 for the purpose of further liberalising the gas market and its harmonization with the Third Energy Package, in particular, Directive 2009/73/EC of the European Parliament and the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC (OJ L 211, 14.8.2009) ("Gas Directive").

Gas energy activities are mainly regulated under the following acts:

- Energy Act (Official Gazette no. 120/12, 14/14) ;
- Act on Regulation of Energy Activities (Official Gazette No. 120/12) ;
- Statute on Licences for Undertaking of Energy Activities (Official Gazette No. 118/07, 107/09);
- Gas Market Act Official Gazette no. 28/472, 14/14);
- Regulation on Organisation of Natural Gas Market (Official Gazette No. 126/10, 128/11, 88/12, 29/13);
- General Conditions on Supply of Natural Gas (Official Gazette No. 158/13);
- Ordinance on Security of Natural Gas Supply (Official Gazette No. 112/08, 153/09, 92/09);
- Transportation System Code (Official Gazette No. 50/09, 88/12);
- Gas Distribution System Code (Official Gazette No. 158/13);
- Rules on Usage of Gas Storage System (Official Gazette No. 50/09);
- Act on Exploration and Exploitation of Hydrocarbons (Official Gazette no. 94/13, 14/14);
- Methodology of Price Determination of Unstandardized Services for Transport, Distribution, Storage and Supply in Public Service of Gas (Official Gazette no. 158/13);
- Methodology of Determination of Energy Price for Balancing of Gas System (Official Gazette no. 158/13);
- A set of methodologies and other decision regarding the setting of the amounts of tariff items related to undertaking of regulated gas market activities, as well as decisions related to activity undertaken by the supplier of gas on wholesale market⁴;
- Regulation (EC) No 715/2009 on conditions for access to the natural gas transmission networks and repealing Regulation (EC) No 1775/2005;
- Regulation (EC) No 713/2009 of the European Parliament and of the Council of 13 July 2009 establishing an Agency for the Cooperation of Energy Regulators.

The Gas Market Act regulates: (i) rules and measures for secure and reliable undertaking of gas market energy activities, (ii)

protection of buyers, (iii) third party access, (iv) open market access, cross border gas transport, etc.

5.3 Regulated natural gas market activities

The Energy Act defines public service as a service available to end consumers and energy subjects at any time for regulated price and/or conditions of access and usage of energy services, which must be available, sufficient and sustainable in terms of security, regularity and quality of service, and environment protection, which is undertaken under the supervision of competent authorities.

Some of the previously mentioned gas market activities are within the Gas Market Act defined as regulated activities, i.e.: activities undertaken as public services. These are as follows: (i) transmission of gas, (ii) distribution of gas, (iii) organisation of gas market, (iv) supply of gas as a public service and guaranteed gas supply¹, (v) storage of gas and management of LNG terminal.

However, the storage of gas can be undertaken as a market activity, if an approval for undertaking gas storage as a market activity has been obtained from the Agency. The criteria for the issuance of such approval are determined pursuant to the level of market competition related to energy activity of gas storage in the RoC. Energy operators which undertake regulated gas market activities are (among other things) obliged to secure the application of determined amount of tariff items for transport, distribution and storage of gas, and management of LNG terminal, all in accordance with the regulated conditions. Also, the Agency will for the purpose of determination of the tariff items (for e.g., storage, distribution) adopt methodologies for their calculation².

5.4 Material provisions of the natural gas market law and licensing regulations

The Statute on Licences for Undertaking of Energy Activities regulates requirements which any energy operator undertaking

energy activity is obliged to meet. These requirements are specific to the type of energy activity³. According to the Energy Act, all energy entities must meet the following requirements:

- g.) be registered for undertaking the respective energy activity with the court registry of the respective commercial court;
- h.) have sufficient technical qualifications for undertaking the subject activity⁴;
- i.) prove employment of sufficient number of employees professionally qualified for undertaking of the subject activity;
- j.) hold sufficient financial means necessary for undertaking of the subject activity or a proof of its capability to obtain one⁵;
- k.) not to have had a energy license for undertaking of the subject energy activity revoked from the entity in five years preceding the submission of the request;
- l.) provide a statement that the members of the management board or other responsible persons within the entity have not been convicted of a crime in an economic sector in the last five years.

The entity is also obliged to pay a fee for the issuance of the energy license determined by the Decision on the Amount of the Fees for Undertaking Works of Regulation of Energy Activities. The fees are as follows: HRK 20,000 (EUR 2,631.57) for the production and delivery of own natural gas, storage of natural gas, transmission of natural gas and management of LNG terminal, HRK 15,000 (EUR 1,973.68) for distribution of natural gas; HRK 10,000 (EUR 1,315.78) for gas trade and supply. Energy operators are also obliged to pay a fee to the Agency for its work related to the regulation of energy market. The fee is equivalent to the amount of 0,05 % of the total annual profit made from the sale of goods and services while undertaking the respective registered energy activity in the preceding year.

The energy license issued determines the period of its validity which can be extended if an application is made three months prior to its expiry. The Agency is entitled to revoke the energy license on a temporary basis, if the energy operator no longer fulfils

¹ The shipping of gas is no longer recognized as an energy activity.. According to the new Gas Market Act, the shipping has now been replaced by the energy activity of gas supply by the supplier in public service. However, the necessary amendments have not been made yet with respect to the registry of energy licenses.

² Although the new Gas Market Act does not recognize mediation and representation on the gas market, some companies still hold such energy licences and are registered for undertaking those activities. However, this is only a relic from the past laws and should be properly addressed with the adoption of the new statute on licenses for undertaking energy activities.

³ Since the Agency has not yet published its annual report for 2013, we do not possess any more recent official data on this matter.

⁴ These decisions and methodologies will be defined and discussed within the respective sections of the Croatian chapter of this Energy Guide 2012.

¹ These types of gas supply are discussed in Section 5.7 below.

² The respective legal acts adopted by the Agency are: Methodology on Determination of Amounts of Tariff Items for Gas Distribution (Official Gazette no. 104/13), Decision on the

³ Amounts of Tariff Items for Gas Distribution (Official Gazette no. 158/13), Methodology on Determination of Amounts of Tariff Items for Gas Storage (Official Gazette no. 22/14), Decision on the Amounts of Tariff Items for Gas Storage (Official Gazette no. 28/14)

⁴ The subject statute is still in force but, to a certain extent, not in compliance with the Energy Act or other *legi speciali* regulating specific energy area such as Electricity Market Act or Gas Market Act. In case of contradiction, the Energy Act should apply. However, due to lack of compliant implementation rules, it remains to be seen how this issue is going to be dealt with by the Agency.

⁵ Specific technical qualifications are set forth for each type of energy activity with the Statute on Licences for Undertaking of Energy Activities. This applies to the human resources and financial obligations requirements also.

An energy licence holder needs to have sufficient financial means as determined by law, or at least proof that it is able to obtain them: HRK 50,000 (EUR 6,578.94) for production, shipping, storage, distribution of gas, managing of an LNG terminal, and delivery and sale of natural gas from own production, HRK 100,000 (EUR 13,157.89) for transportation of natural gas, HRK 30,000 (EUR 3,947.36) for supply, HRK 20,000 (EUR 2,631.57) for trade of gas and intermediation in the gas market.

the conditions of technical qualifications and competencies, financial or any other conditions pursuant to which the license to perform energy activities had been issued.

The transfer of energy license is regulated under the Statute on Licenses for Undertaking of Energy Activities. The subject statute stipulates the possibility of the transfer of the energy license only in cases of spin-off of an energy license holder, or its merger to or with another legal entity. In the event of spin-off and merger, the transfer of energy license is possible only to one legal entity which is the universal successor of the energy license holder in question, subject to the filing of the request for such transfer to CERA within the timelines specified in the subject statute.

5.5 Exploration and production

According to the 2012 Annual Energy Report prepared by Hrvje Požar Energy Institute, natural gas is produced by 17 on shore and 9 off-shore gas fields meeting 67.7 % of total domestic demand. More than half of the total gas is produced from the Adriatic seabed whilst the largest share of gas produced in Panon area comes from the Molve and Kaliniovac field. They include the Central gas stations Molve I, II and III units for processing and preparation of gas for transportation. With respect to the rules and recent developments in the sector of exploration and exploitation of gas, please refer to Section 6.4 below. Nevertheless, please find herein some further details referring to natural gas only.

According to the Gas Market Act, the producer of natural gas is entitled to: (i) connect to the transmission and distribution network in line with the Transportation System Code and Gas Distribution System Code and the respective methodology, (ii) contract the sale of natural gas with a supplier of gas in public service, with a guaranteed gas supplier, with a market gas supplier and gas trader, and (iii) access the gas storage according to the conditions set out in the Gas Market Act. The producer of natural gas is (among other things) obliged to ensure that the total quantity of natural gas produced is offered to the supplier on the wholesale market and the guaranteed supplier on the territory of RoC first.

5.6 Transmission and access to the system

The transmission of gas takes place within the gas transmission and distribution systems. The usage, technical requirements, managing, development, and connection with other parts of gas system are regulated in the Transportation System Code and Gas

Distribution System Code. The transmission system operator provides to the user of the transmission system the delivery and takeover of gas within the limits of the reserved capacity defined for each particular entrance into and exit from the transmission system.

According to the Agency's 2012 Annual Energy Report, the total length of the gas transmission system in RoC amounted up to 2,530.00 km at the end of 2012. Currently, the only transmission system operator in RoC is Plinacro, a company which manages the system of regional and major gas pipelines used for transport of domestic and imported gas across the interconnections with Slovenia and Hungary, and its delivery to the distribution system or to the end (industrial) consumers if directly connected to the transmission system. According to the data provided by Plinacro, the total quantities of natural gas transported in the RoC amounted to 31,259 million kWh in 2012, which was 1.4% less than in 2011. The total loss of natural gas within the transportation system amounted to 0.20% in 2012.

Unlike the 2007 Gas Market Act which in fact appointed Plinacro as the sole transmission system operator for the period of 30 years, the new Gas Market Act revoked that provision and, in fact, secured the full opening of gas transmission activity.

Any company which fulfils the conditions set out in the Gas Market Act and the respective by-laws, including without limitation, obtaining certificate from the Agency, may be granted an energy license for natural gas transportation. The certification procedure is to result in the issuance of the certificate provided that the transmission system operator meets the unbundling requirements set out in the Gas Market Act which recognizes three models of unbundling, namely: ownership, ITO and ISO model. According to unofficial information, Plinacro has submitted its request for the issuance of the subject certificate. Also, according to the Gas Market Act, energy operators were obliged to harmonize undertaking their business with the rules set out in the Gas Market Act within one year as of the Gas Market Act coming into force, i.e., until 14 March 2014.

The transmission and distribution of gas implies meeting the requirements for obtaining an energy license. However, the activity of gas distribution, in addition to the energy licence, requires obtaining the concession for (i) distribution of gas and/or (ii) construction of distribution system. The concession is awarded following a public tender procedure in which the provider of the best offer signs the concession agreement for a period of no less

than twenty and no more than thirty years. The Croatian Government determines the concession fee under the Ordinance on Fee and Manner of Payment for Concession for Distribution of Gas and Construction of Gas Distribution System. Special terms and conditions for termination of the concession agreement are stipulated under the Gas Market Act.

The Gas Market Act stipulates that the gas producer, transmission and distribution system operator, gas storage system operator, and LNG terminal operator are obliged to secure efficient and non-discriminated access to the network of production gas pipelines, transmission and distribution system, gas storage system and LNG terminal. Third party access to all of the systems mentioned (except for the system of production pipelines) is subject to regulation by the methodologies for the calculation of tariff items which must be applied objectively and equally for all participants on the gas market. Naturally, there are reasons to deny third party access to the natural gas network. For example, new infrastructure objects such as interstate connection gas pipelines or gas storage system can (under certain conditions), upon a request of the legal of natural persons, be exempted from the application of the third party access right and the application of the stipulated methodologies and tariff items.

5.7 Trading and supply

The new Gas Market Act recognizes four types of players within the gas supply sector, i.e., (i) Supplier on wholesale gas market (Cro. opskrbjivač na veleprodajnom tržištu) (the "Wholesale Supplier") (activity previously undertaken by the shipper of gas – Cro. dobavljač plina), (ii) Public Service Supplier (Cro. opskrbjivač u obvezi javne usluge) (the "Public Service Supplier"), (iii) Guaranteed gas supplier (Cro. zajamčeni opskrbjivač), and (iv) Supplier of gas to end consumers (different from the supplier in public services and from the guaranteed supplier). The latter undertakes market and not regulated activity.

The Wholesale Supplier, under regulated conditions, buys gas from the natural gas producer within the territory of the RoC, and sells it under regulated conditions, to the Public Services Supplier for the supply of households. It is obliged to secure reliable and safe supply, as well as the import of gas. The

Government of the RoC appoints the Wholesale Supplier for a maximum period of three years. The current Wholesale Supplier is Hrvatska elektroprivreda d.d., i.e., HEP d.d. which was appointed by the Government of the RoC on 27 February 2014 for the period until 31 March 2017¹. The Government of the RoC has determined both the price of gas sold by natural gas producer on the territory of the RoC to the Wholesale Supplier, and the price of gas sold by the Wholesale Supplier² to the Public Services Suppliers³. This price determination is applicable for a maximum period of three years only. The Government of the RoC has also determined priority for the Wholesale Supplier in the procedure of awarding gas storage capacities⁴. The Public Service Supplier for specific county unit is determined by the decision of the Government of the RoC, at the proposal of the ministry and an opinion obtained from the Agency. The Agency has adopted a Methodology for Determination of the Amounts of Tariff Items for the Public Service of Supply of Gas and Guaranteed Supply (Official Gazette no. 38/14).

The Guaranteed Supplier provides, according to the regulated conditions, the public service of gas supply to an end consumer which has under certain conditions been left without a supplier. The Guaranteed Supplier is determined by the decision of the Government of the RoC. Such a supplier is appointed for a period of three "gas years". Any end consumer has the right to choose its own supplier and to change its supplier according to the procedure set out in the Rules on Organization of the Natural Gas Market as well as according to the rules set out in the General Conditions on Gas Supply. Such a change of gas supplier is free of charge and is undertaken by the operator of the transmission or distribution system to which such end consumer is connected. With respect to gas trading, the same is poorly developed in Croatia and the adoption of the respective by-laws which should secure the development of the gas market model is still a work in progress. There are only three legal entities registered as holders of gas trading license in Croatia.

According to the Gas Market Act, traders (or suppliers) of gas coming from an EU/Energy Community Member State are obliged to obtain energy license for undertaking gas trade (or gas supply) energy activity on the Croatian territory.

¹ Decision on Determination of Wholesale Supplier (Official Gazette no. 29/14)

² Decision on Gas Price According to which Producer of Natural Gas produced on the Territory of Croatia sells to the Wholesale Supplier (Official Gazette no. 29/14).

³ Decision on Gas Price which Wholesale Supplier is obliged to Apply when Selling Gas to the Public Services Suppliers (Official Gazette no. 29/14).

⁴ Decision on Determination of Priority During the Procedure of Awarding Gas Storage Capacities to the Wholesale Supplier (Official Gazette no. 29/14)

The Agency, however, can exceptionally issue the license to such a gas trader (or gas supplier) without it fulfilling the requirements set out in the respective energy laws (as discussed above), if such gas trader (or supplier):

- a.) is registered for undertaking those energy activities in a EU/Energy Community Member State;
- b.) has delivered to the Agency a satisfactory financial security document and a statement issued by the responsible person within such energy operator on the acceptance of complying with all obligations set forth in the Gas Market Act and all by-laws adopted pursuant to it.

Before the issuance of such an energy license, the Agency is obliged to request from the regulatory body of the respective EU/Energy Community Member State (in which such trader (or supplier) has registered seat) delivery of information on its technical, financial and professional qualifications¹.

5.8 Liquefied natural gas

On 2 July 2009, the Croatian Government approved the Decision on Determination of Interest of the Republic of Croatia for the Construction of an LNG Terminal – Krk, for the purpose of planning and construction of the LNG terminal on the Croatian Island of Krk. According to the information available , the planned capacity of the terminal is 4 to 6 billion m³ annually. The planned capacity of the gas to be delivered in the gas pipeline system of Croatia is estimated at 6 billion m³ natural gas annually. According to unofficial information provided by the Ministry, the environmental impact assessment study has been obtained and the project is currently before the Ministry of Environmental Protection for determination of its impact on the environment, which procedure precedes the issuance of the location permit.

The Gas Market Act regulates that the operator of the LNG terminal will be a private or legal entity holding a licence for undertaking an energy activity of operating with the LNG terminal. In order to be granted the licence, such a private or legal entity has to fulfil all conditions listed in section 5.4 above; in particular, it has to be able to provide a certificate confirming the ability to secure necessary financial means in the amount of HRK 30,000 (EUR 3,947.36).

¹ Please note that the Gas Market Act does not define which technical, financial and professional qualifications are satisfactory for the Agency. We can only assume that the level of the subject qualifications should be greater, or at least the same as the respective level stipulated for the Croatian energy operators wishing to undertake the respective energy activity. In addition, it is not clear what a satisfactory financial security document implies.

5.9 Forthcoming developments

The forthcoming developments in gas sector are primarily reflected in the following projects:

- (a) Development and construction of gas pipelines to secure gasification of central and southern part of Croatia;
- (b) Construction of the gas pipelines interconnections with Hungary, Bosnia and Herzegovina and Serbia (connection with Serbia possible through the development of the South Stream project);
- (c) Development of Ionian Adriatic Gas Pipeline and Trans Adriatic Pipeline;
- (d) Construction of an LNG Terminal on the island of Krk;
- (e) Construction of an extension to the only existing gas storage in Croatia by 2012; construction of two new gas storages by 2014 and 2015.

6. UPSTREAM OIL MARKET

6.1 Market overview

The activities of exploration and production (exploitation) of oil in Croatia have always been undertaken by INA d.d., a national company owned by the Hungarian company MOL (47.26%) and the RoC (44.84%). According to unofficial information provided by the Ministry, INA has lost all approvals for exploration of hydrocarbons.

Therefore, no hydrocarbons exploration activity is undertaken currently in Croatia. According to the latest available Annual Energy Report – Energy in Croatia for 2012, prepared and issued by the Hrvlje Požar Energy Institute , crude oil was produced from 33 oil fields. Table 3 shows the gradual decline of quantities of oil and condensate produced in Croatia per each year from 2004 to 2012.

Table 3

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012
	1.001,0946,00	917,4	879,1	835,4	776,2	720,4	664,4	599,9	

Table 4 shows a list of approved exploration areas and exploitation fields of hydrocarbons (oil and gas) per each county.

Table 4

COUNTY Oil and Condensate Production 1000 t	Exploitation field (numbers of fields)	Area (ha)	Exploration number (number of areas)	Area (ha)
BJELOVARSKO-BILOGORSKA	8	20,509.47	/	/
KOPRIVNIČKO-KRIZEVACKA	12	37,621.25	1	480,300.00
MEDUMURSKA	4	9,234.50	1	304,700.00
OSJECKO-BARANJSKA	7	28.681,20	1	385,130.00
POZESKO-SLAVONSKA	1	500.00	1	68,400.00
PRIMORSKO-GORANSKA	/		2	2.146.300,00
SISACKO-MOSLAVACKA	9	13.,243.50	/	
SPLITSKO-DALMATINSKA	/		2	2,070,500.00
VIROVITICKO-PODRAVSKA	4	10,399.00	/	/
VUKOVARSKO-SRIJEMSKA	3	5,900.00	/	/
ZAGREBACKA	9	21,983.80	2	1,152,500.00
CONTINENTAL SHELF	3	231,934.50	3	3,783,300.00

According to the Agency's 2012 Annual Report, the energy activity of oil derivatives production in the RoC was undertaken by INA. Oil derivatives produced in refineries of Rijeka and Sisak, and at Ethan production facility in Ivanic Grad include motor fuels and fuels for industry and households.

Fuel used for the production of oil derivatives is imported crude oil and crude oil and condensates produced on the national oil (and gas) fields. The total production of oil derivatives in 2012 amounted to 3.5 million tons of oil derivatives - 6% higher than in 2011. The oil derivatives imported in 2012 amounted to 0.7 million tons.

The company in charge of oil transportation by oil pipelines is JADRANSKI NAFTAVOD d.d., a joint stock company with mixed ownership and predominantly state capital ("Janaf"). A total of 4.5 million tons of crude oil was transported through a pipeline system in 2012 - 15% less than the previous year..

A total of 21 companies hold licences for undertaking the energy activity of storage of oil and oil derivatives. According to the Agency's 2012 Annual Report, the total available storage capacities amount to 2.0 million m³ in 2012.

Some of the most significant events regarding the development of oil and oil derivatives storage capacities in 2012 were the completion of construction of three storage tanks for the storage of crude oil at Terminal Sisak, and of three storage tanks for the

¹ This number does not include INA's storage capacities within INA's refineries.

storage of crude oil on Omišalj Terminal , both owned by Janaf, and investments in Terminal Žitnjak.

6.2 Regulatory overview

The main laws and by-laws regulating the undertaking of hydrocarbons exploration and exploitation activities in the RoC are:

- Mining Act (Official Gazette no. 56/13, 14/14) ;
- Act on Exploration and Exploitation of Hydrocarbons (Official Gazette no. 94/13, 14/14) ;
- Decree on Fee for Exploration and Exploitation of Hydrocarbons (Official Gazette no. 37/14)
- Act on Establishment of Agency for Hydrocarbons (Official Gazette no. 14/2014) ;
- Regulation on Content and Manner of Preparation of Mining-Geology Studies (Official Gazette no. 142/13) ;
- Regulation on technical review of Mining Objects and Facilities (Official Gazette no. 142/13) ;
- Regulation on Procedure of Mining Projects Inspections (Official Gazette no. 150/13) ;
- Regulation on Conditions and Manner of Keeping Construction Diaries (Official Gazette no. 142/13).

Prior to the adoption of the new Act on Exploration and Exploitation of Hydrocarbons ("Hydrocarbons Act") and the new Mining Act in 2013, the undertaking of upstream hydrocarbons activities (exploration and exploitation) was regulated by the Mining Act (Official Gazette 75/09, 45/11) and appertaining by-laws. The old Mining Act regulated activities of hydrocarbons exploration and exploitation alongside regulation of the activities of exploration and exploitation of all other mineral sources.

As of 18 May 2013, the regulation of exploration and exploitation of hydrocarbons is now primarily regulated in a separate act – the Hydrocarbons Act. Its provisions refer to the exploration and exploitation of the hydrocarbons located in the ground or under the bed of internal waters or the territorial sea of the RoC or under the ground of the continental shelf of the Adriatic Sea coast, up to the demarcation line with neighbouring countries, to which the RoC exercises jurisdiction and sovereign rights pursuant to international law. It governs the management, exploration and exploitation of hydrocarbons, issue of a licence for the exploration and conclusion of an agreement on the exploitation, the fee, inspection, misdemeanour provisions and other issues.

Issues pertaining to the specification of hydrocarbon reserves, specification of exploitation fields, the registry of exploration areas and/or exploitation fields, preparation and verification of mining projects, construction and utilization of mining facilities and plants, preparation of mining plans and the performance of mining surveys, site rehabilitation, damage compensation, safety and protection measures, the qualifications and skills needed for conducting particular mining works and other issues which have not been regulated by the Hydrocarbons Act and regulations to be adopted based on this Hydrocarbons Act, shall be appropriately subject to the provisions of the Mining Act and regulations that have been adopted based on the Mining Act.

Furthermore, according to the Hydrocarbons Act, the same contains provisions which have been harmonized with the following documents of the European Union:

- Directive 94/22/EC of the European Parliament and of the Council of 30 May 1994 on the conditions for granting and using authorizations for the prospection, exploration and production of hydrocarbons, (OJ L 164, 30.6.1994), and
- Directive 2009/31/EC of the European Parliament and of the Council on the geological storage of carbon dioxide and amending Council Directive 85/337/EEC, European Parliament and of the Council Directives 2006/60/EC, 2001/80/EC, 2004/35/EC, 2006/12/EC, 2008/1/EC and Regulation (EC) No 1013/2006 (OJ L 140, 5.6.2009).

One of the most significant elements for the adoption of the subject new legislation and regulation lies with the intention of the legislator to make the subject activities more attractive for investors, those interested in undertaking the exploration and exploitation activities in the RoC.

Probably the main difference between the new and the old legislative solution lies in the fact that the new law unifies the procedures for the acquisition of an exploration license and exploitation concession whereas the old law stipulated the separation of the two procedures. According to the old law, whoever won the approval for exploration activities was not guaranteed award of the concession for the exploitation of hydrocarbons on that particular exploration area/exploitation field. This was a big set-back for the investors which was changed by the new law.

6.3 Institutional overview

The main state bodies which are each within their competency involved or envisaged to be involved in the undertaking of

hydrocarbons exploration and exploitation activities are the Government of the RoC, competent ministries, particularly the Ministry, a company founded by the Government of the RoC for the purpose of exploration and exploitation of mineral raw materials utilized for energy purposes, which is in 100% ownership of the RoC ("National company"), and the Hydrocarbon Agency.

The Ministry is in charge of (i) preparation and organization of presentations aimed at introduction of potential investors with the hydrocarbon potentials of certain regions of the RoC, (ii) implementation of the unique procedure for licence issue and agreement conclusion, and (iii) preparation of regulations with respect to the exploration and exploitation of hydrocarbons.

The Hydrocarbon Agency was established by the adoption of the Act on Establishment of Agency for Hydrocarbons. It is in charge of (i) participation in the preparation and organization of presentations aimed at introduction of potential investors with the hydrocarbon potentials of certain regions of the RoC, (ii) making proposals to the Ministry for rendering a decision on implementation of a public tender procedure for licence issue and agreement conclusion, (iii) participation in the implementation of the unique procedure for licence issue and agreement conclusion, (iv) specification of the costs of the hydrocarbon exploration and obtaining technical documentation for the exploitation field, (v) providing conditions for efficient exercise of the rights and liabilities of the investor pursuant to issued licences and concluded agreements, (vi) keeping track with exploration and exploitation tendencies and international standards thereto and ensuring their application, (vii) participation in the preparation of reports about the fulfilment of the investor's commitments pursuant to issued licences and concluded agreements, (viii) participation in the agreement-based cost control for the purpose of reimbursement of costs, (ix) cooperation and providing assistance to the investor and coordination between the investor and competent state bodies on issuing other permits needed for completion of commitments under the issued licenses and concluded agreements, and (x) cooperation and providing assistance to the investor for the purpose of regulation of relations from the field of property law with respect to land plots within the exploitation area and/or exploitation field.

The Hydrocarbons Agency shall cooperate with competent state bodies within the framework of their competences in the implementation of supervision over the performance of mining works in compliance with the issued licence, concluded agreement,

provisions of the Hydrocarbons Act and provisions of other special regulations. It shall also be entitled, at any time as long the licence and agreement are effective and valid, to request any data and/or information from the investor with respect to the fulfilment of their commitments in accordance with the conditions stated in the issued licence and provisions of the concluded agreement, provisions of this Act and other special regulations, and the investor shall submit these data to the Ministry.

6.4 Material provisions of the upstream oil market law and licensing regulations

The Hydrocarbons Act stipulates a unified procedure for the issuance of the exploration license and conclusion of an agreement for commercial usage of hydrocarbons. The issuance of the license will be achieved by way of public tender procedure which will be regulated by the decision of the Government of the RoC. The Government will announce a public tender procedure, if it deems it necessary to determine the individual hydrocarbons' reserves. The content and the conditions for the public tender, as well as criteria for choosing the best bidder, will be determined by the Government of the RoC at the proposal of the Professional committee.

The awarding of the license provides its holder with the right to explore hydrocarbons and the automatic awarding of the exploitation concession, provided that the respective exploration area proves to be commercially viable. Upon being awarded the license for exploration, the investor will enter into an agreement with the Government of Croatia which will regulate all rights and obligations of the contractual parties.

The licence shall be issued for a maximum period of 30 years and comprises the exploration and exploitation period commencing as of the direct grant of the concession, in the event of the fulfilment of all the conditions for its granting. The exploration period shall last five years at the most and due to justified reasons and following a proposal of the investor, it can be prolonged no more than two times during the exploration period in a way that each of the extensions may last six months at the most.

When the investor who has been awarded the license for exploration proves that the exploration field is commercially viable (and provided that all conditions from the agreement have been

fulfilled up to that date), an annex to the agreement is then concluded, and such an annex will be the basis for awarding the concession for hydrocarbon exploitation.

The Hydrocarbons Act recognizes three types of agreements:

- Agreement on the exploration and sharing of exploited hydrocarbons (i.e., according to the information provided by the Ministry, this is a production sharing agreement)
- Agreement on the exploration and exploitation with an obligation for paying the fee and taxes (i.e., this is a standard concession agreement);
- A mix of the two above-mentioned agreements.

The agreement is entered into between the investor and an authorized representative of the Government of the RoC, in the name and at the account of the RoC. This agreement must be concluded within three months as of adoption of the decision on the best bidder in the public tender procedure for awarding the exploration license.

According to the "Definitions" part of the Hydrocarbons Act, the fee payable by the investor in line with the Hydrocarbons Act and the subject agreement is the fee payable for the usage of extracted hydrocarbons and determined by the Government of the RoC by way of a decree. On 19 March 2014 The Government of RoC adopted the Decree on Fee for Exploration and Exploitation of Hydrocarbons, according to which the fee consists of the total monetary fee and the sharing of extracted hydrocarbons between the state and the investor. The total monetary fee comprises six individual fees while the sharing of the extracted hydrocarbons is determined as a percentage of the quantity of gained hydrocarbons belonging to the state. The percentage shall be calculated quarterly by application of special factor.

With respect to energy activities of (i) production of oil derivatives, (ii) transportation of oil (via oil pipelines) and oil derivatives (via oil derivatives pipeline) and (iii) storage of oil and oil derivatives, the entities undertaking such activities must obtain an energy license issued by CERA.

The issuance is subject to providing evidence of the following:

- To be registered for undertaking the respective energy activity with the court registry of the respective commercial court;
- To have sufficient technical qualifications for undertaking the subject activity¹;

¹ Specific technical qualifications are set forth for each type of energy activity with the Statute on Licences for Undertaking of Energy Activities. This applies to the human resources and financial obligations requirements also.

- c.) To prove the employment of a sufficient number of employees professionally qualified to undertake the subject activity;
- d.) To hold sufficient financial means necessary for undertaking of the subject activity or a proof of its capability to obtain one;
- e.) That no energy license for undertaking of the subject energy activity has been taken away from the entity in the last five years prior to the submission of the request;
- f.) To provide a statement that the members of the management board or other responsible persons within the entity have not been convicted of a crime in an economic sector in the last five years.

The energy operator must pay the fee at the submission of the request for the issuance of the energy license but also another fee of a variable amount depending on the profit made in the preceding year.

The issued energy license determines the period of validity which can be extended if an application is made three months prior to its expiry. The Agency is entitled to revoke the energy license on a temporary basis if the energy operator no longer fulfils the conditions of technical qualifications and competencies, financial or any other conditions pursuant to which the license to perform energy activities had been issued.

The Transfer of energy license is regulated under the Statute on Licenses for Undertaking of Energy Activities. The subject statute stipulates the possibility of the transfer of the energy license only in cases of spin-off of an energy license holder, or its merger to or with another legal entity. In the event of spin-off and merger, the transfer of energy license is possible to only one legal entity which is the universal successor of the energy license holder in question, subject to the filing of the request for such transfer to CERA within the timelines specified in the subject statute.

6.5 Forthcoming developments

The recent 5-month I2D seismic screening activity undertaken by the Norwegian company Spectrum has shown potential for exploration and exploitation of hydrocarbons in the Croatian

Adriatic. A public tender to award exploration approvals was announced in April 2014 for the exploration and exploitation of the Adriatic seabed. A total of 29 blocks have been identified with surface areas between 1,000 and 1,600 km². While the northern Adriatic will have eight, the middle and southern Adriatic will have 21 blocks, 16 of which will be set up at depths ranging from 100 up to 1,000m, and five at even greater depths.

A newly-founded Hydrocarbons Agency has established as data room for all investors interested in geological data structures in the Croatian Adriatic. The Hydrocarbons Agency welcomed the first visits as of 17 March 2014. The old "INA" data will be available for purchase at EUR 100 per km; the new "Spectrum" data will be charged EUR 500 per km.

The expected time line for awarding exploration approval is the end of 2014, after which the best bidder shall be selected and the three-month negotiation period regarding the production sharing agreement shall start. If the signing is not completed with the best bidder within three months, the second best bidder will be awarded the exploration license and a new three-month period for negotiations for signing of the production sharing agreement shall recommence¹.

The Ministry also intends to announce in September 2014, a public tender for gas/oil exploration and exploitation in the northern parts of continental RoC.

¹ An energy licence holder needs to have sufficient financial means as determined by law, or at least the proof that it can secure them: HRK 300,000 (EUR 39,473.68) for the production of oil products; HRK 10,000 (EUR 1,315.78) for transportation of oil and oil products and biofuels with the motor vehicle; HRK 70,000 (EUR 9,210.52) for the transportation of oil products with oil pipelines and other means of transport; HRK 50,000 (EUR 6,578.94) for storage of oil and oil derivatives.





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GREECE

1. INTRODUCTION TO THE ENERGY MARKET

Greece's strategic geo-economic location, between energy producers in the Middle East, North Africa, and the Caspian Sea region, as well as on the vital transport routes of the Aegean Sea and the Eastern Mediterranean, characterises it as an expanding hub between East and West. Greece has initiated crucial, major ventures in oil, gas, and alternative sources which put the country at the heart of the South-East European energy axis.

Greece's comprehensive energy policy which seeks to establish sustainable, competitive, and secure sources of energy, has put forth an encompassing regulatory and market framework for the energy sector. This, in combination with Greece's wide-ranging investment regulatory framework, provides for exceptional opportunities for investment.

Directive and paved the way for increased competition in the country's energy markets by advancing the unbundling of the incumbent public companies as well as by giving the country's regulator much stronger powers. As a result, the responsibilities of the HTSO and the PPC were unbundled and distributed to new subsidiaries. Since the domestic market is still in its development stages, the expansion and modernisation of the network is viewed as the first priority; therefore, and taking into account the present conditions, the model of the Independent Transmission Operator was deemed appropriate. For this reason, the market's progress cannot directly be comparable to already matured markets.

Under the current economic conditions, and pursuant to the agreement which Greece entered into with the IMF and EU on financial assistance, complete market liberalisation has been highly prioritised and is one of the main pillars of the economic model in Greece.

This liberalisation is to be achieved through the privatisation of state-owned assets (including the Public Gas Corporation, a large stake in the ITO, a small stake in the PPC, and the establishment of a "small" PPC to be sold to private investors) as well as through fully opening the electricity market to private investors.

2. ELECTRICITY

2.1 Market overview

Greece embarked on the liberalisation of the electricity market in 1999. Subsequently, the legal framework was revised, in order to comply with the provisions of European Union legislation and to incentivise private investment and competition.

The Public Power Corporation ("PPC") used to control Greece's electric production, transmission, and distribution. Since the entry into force of the Electricity Market Liberalisation Law, 37% of the Greek power market was legally opened to competition. The law enabled the entry of third-parties to compete with the PPC and required that tariffs cover all costs and provide a reasonable profit. As a result, the generation, distribution, and retail operations of the PPC were unbundled, and the independent transmission system operator, the Hellenic Transmission System Operator ("HTSO"), was established.

In 2011 The Greek government passed a new energy law which, amongst other things, implemented the EU's Third Energy

2.2 Regulatory overview

The main legislative acts regulating the Electricity market in Greece are Law 2773/1999 "On the liberalisation of the Electricity Market", Law 3175/2003, which amended Law 2773/1999, the Electricity Transmission System Operation and Power Exchange Codes (Grid Codes), Law 3426/2005 "On the Acceleration of Electricity Market Liberalisation", Law 3468/2006 "On the Production of Electrical Energy from Renewable Energy Sources", Law 3851/2010 "On the Acceleration of the development of RES and the Climate Change", and finally Law 4001/2011 On the Operation of the Electricity and Natural Gas Energy Markets and for the Research, Production and Transmission Networks for Hydrocarbons and other provisions".

These are accompanied by a series of secondary legislation in the form of Regulations, Ministerial Decisions and other Administrative

Acts, issued on the basis of the provisions of these Laws, which set the electricity market rules (organisation and operation) and the fundamentals and restrictions of the market organisation, whilst they also establish the power exchange.

The government bodies and institutions which oversee and regulate the Electricity market are:

- (a) The Regulatory Authority for Energy ("RAE") established under Law 2773/1999, which is the independent authority which promotes and safeguards the liberalisation of Greek Electricity and Natural Gas markets, supervises and monitors the operation of all sectors of the energy market, and advises the competent authorities on the necessary changes to be made to secure compliance with competition rules and consumer protection;
- (b) The Ministry of Environment, Energy and Climate Change, which is principally responsible for the formulation and implementation of Greece's energy policy vis-à-vis its international and Community obligations;
- (c) The Ministry of Regional Development and Competitiveness, which can indirectly affect energy matters through its monitoring of prices of petroleum products and, perhaps more significantly, through its responsibility of administering European Union Cohesion Funds;
- (d) The Public Power Corporation ("PPC" or "DEI" as per its Greek initials), Greece's dominant electricity producer and supplier, and owner of the Distribution Network.
- (e) The Hellenic Distribution Network Operator ("HDNO" or "DEDDIE" as per its Greek initials), a wholly owned subsidiary of the PPC in the form of a Société Anonyme, which is the operator of the Distribution Network and as such shall be responsible for all activities relating to electricity distribution activities.
- (f) The Independent Transmission Operator ("ITO", or "ADMIE" as per its Greek initials), a wholly owned subsidiary of the PPC in the form of a Société Anonyme, which is the owner and operator of the High-Voltage Transmission System, responsible for its operation, exploitation, development and maintenance. In accordance with the relevant EC Regulations, special provisions have been included in the Energy Law securing the independent and non-discriminatory operation of the ITO.
- (g) The Electricity Market Operator ("EMO" or "LAGIE" as per its Greek initials), a Société Anonyme wholly owned by the Greek State (100%), which is responsible for the operation of the electricity exchange market.

2.3 Regulated electricity market activities

According to Law 2773/1999, as amended and in force, the main activities which fall under the general term "Electricity market" are the sale and purchase of electricity and all related commercial activities (such as generation, transmission, distribution, supply, import and export etc.). In order for these activities to be lawfully performed, interested parties must obtain the relevant licensing.

2.4 Material licences for electricity generation

Under Greek electricity legislation, the development, construction, commissioning and operation of a power plant is extensively regulated by a number of legislative acts (including voluminous secondary legislation).

More specifically, Law 4001/2011 "On the Operation of the Electricity and Natural Gas Energy Markets and for the Research, Production and Transmission Networks for Hydrocarbons and other provisions" (the "Energy Law") together with Law 2773/1999 "on the Liberalisation of the Electricity Market" (the "Electricity Law") as amended and in force today, transposed the relevant EU Legislation into domestic law and set out the framework for the licensing of power generation facilities in Greece.

In the context of the above legal framework (the Energy Law, the Electricity Law and subsequent secondary legislation), the licensing process can be divided into three basic phases (milestones):

- (a) 1st Milestone: the issuance of the Electricity Generation Licence;
- (b) 2nd Milestone: the issuance of the Installation Licence, in conjunction with the Environmental Licensing of the respective facilities; and finally,
- (c) 3rd Milestone: the issuance of the Operation Licence, which follows the connection of the power plant to the Grid, its physical completion and successful trial operation.

The above milestones and associated licences are without prejudice to any other ancillary requirements which may be prescribed by the general legislation, e.g. building permits, health and safety legislation etc., which may run in parallel or as a prerequisite to reaching the next milestone.

2.5 Trading and supply of electricity

The operation of the electricity market is mainly regulated by the Grid Codes, as in force. These establish a mandatory wholesale daily market ("Pool") for power exchanges between market participants (i.e. Power Producers, Electricity Suppliers and Eligible

Customers, as defined in the Grid Codes, the latter two being the Load Representatives) and a capacity assurance market. According to the provisions of the Grid Codes, all Power Producers holding power generation licences for power plants ("Units") registered with the Registry of Units are required to submit, for each Dispatchable Unit, a separate and fully binding Energy Injection Offer for each Dispatch Period of every Dispatch Day and for the entire available generation capacity of the Unit.

The energy produced by a Power Producer has to be injected into the National Grid through its mandatory sale to the EMO, which, as per the currently applicable legislation in force, still remains the sole electricity off-taker in Greece. Currently, no private Transmission Systems exist in Greece.

In short, the operation of the Pool is comprised mainly by the following functions:

- (a) Day Ahead Scheduling ("DAS"), which precedes each Dispatch Day (24h; divided into twenty-four equal hourly Dispatch Periods beginning 00:00) and is conducted by the EMO based primarily on the following parameters:
 - Load Nominations (MWh/h) from Load Representatives (on behalf of their Customers), from Suppliers for Exports (EUR/MWh/h) etc.;
 - Energy Injection Offers (EUR/MWh/h) from Producers with Dispatchable Units per Unit for the entire available generation capacity of the Unit, from Suppliers and Self-supplied Customers for Imports, and from the EMO regarding the RES Units of the RES Law with dispatch priority against feed-in tariffs;
 - Water Resources Management Statements from Hydro and Hydro Pumping Units;
 - Reserve Energy Injection Offers from Producers with Dispatchable Units and from the EMO itself for Ancillary Services Contracted Units;
 - Total or Partial Non-Availability Statements from Producers with regard to their Units;
 - Techno-Economic Statements from Producers regarding their Generation Units; and
 - Estimated System Constraints, Foreseeable Reserve Needs and Ancillary Services, including Interconnections available capacity etc.
- (b) Dispatch Procedure, which comprises the scheduling for the operation of Generation Units (Dispatch Schedule) and the

real time Dispatch of Generation Units by virtue of Dispatch Instructions from the EMO.

On a daily basis the EMO prepares the Day Ahead Schedule in which the total anticipated load during the following Dispatch Day per Dispatch Period is contrasted to the Energy Injection Offers submitted by Producers for the same period. In particular, Energy Injection Offers by thermal power Producers should reflect no less than their Minimum Variable Cost, meaning mainly their fuel cost, which should be open to auditing by RAE.

Day Ahead Scheduling thus results in a uniform System Marginal Price ("SMP") per Dispatch Period (SMP in EUR/MWh/h).

This mandatory pool model, however, is scheduled to be changed. There is currently an on-going consultation on the complete restructuring of the wholesale electricity market (initiated by RAE) in order to move from a mandatory pool to the European Target Model ("ETM"), which shall enable bilateral agreements between market participants. This restructuring process, which is part of the complete liberalisation of the electricity market, is targeted for completion at the end of 2014.

In addition, one of the matters set out in the consultation is the use of auctions with regard to the lignite electricity production of the PPC, the dominant power producer, in order to enhance competition in this cost-effective power source. These auctions are envisaged to take place in accordance with the NOME model, as is currently the case in France.

2.6 Transmission and grid access

The Electricity market is divided into two different systems: the mainland, interconnected grid and, as they are referred to, the "non-interconnected islands". However, several islands of the Cyclades group are scheduled to become interconnected with the mainland grid system through submarine cables by 2016. The distinction between the two systems is important because different rules are applicable for each system (for instance, authorisations in the non-interconnected islands are granted upon tender procedures, whereas such a procedure is not necessary for the mainland grid system).

According to the provisions of the Electricity Transmission System Operation Code, all power producers are entitled to gain access to the System or the Network under specific financial and technical

terms concerning the connection of the power plant to the electricity grid, as such, are determined by the relevant Operator in the Connection Terms Offer.

At a later stage, power producers enter into a Connection Works Agreement with the relevant Operator of the System or Network which describes in detail the connection works required for the connection of the generation facilities to the grid, along with the financial and technical terms of the connection.

In order to participate in the wholesale electricity market, either to sell electricity (as producers) or to purchase electricity (as suppliers), participants must apply to be registered in the participant register kept by the EMO. By being registered in this register, participants enter into (i) a "DAS Transactions Contract" with the EMO and (ii) a "System Operator Transactions Contract" with the ITO.

3. RENEWABLE ENERGY

3.1 Market overview

Renewable energy plays a significant part in Greek energy production, and was initially based primarily on large scale hydro-power stations operated by the PPC.

To establish security and diversification of its energy supply, as well as to ensure environmental protection and sustainable development, Greece has established key priorities and a binding policies related to the production of electricity from renewable sources, and it promotes the establishment of power using renewable energy sources. Increasingly, renewable energy sources play an important role in Greece’s energy production profile. Greece has reached almost 15% energy consumption from RES and the total installed capacity from RES has reached 4,118MW. The increase has mainly been led by photovoltaics ("PVs"), wind parks and hydro-power stations, while the other RES technologies have not shown significant progress, mainly due to the economic crisis and difficulties in securing the necessary financing. Significant efforts must still be made, in order to reach the national targets which have been set for the production of power through RES.

Based on the EU mandate (Eel, 140/2009) and the latest law on RES Development (3851/2010) the RES national target for 2020,

states that the energy produced by RES will contribute 20% of the gross final energy consumption, whereas electrical power produced by RES will contribute at least 40% of gross electricity consumption. The aforementioned targets are to be achieved through a mix of measures related to the implementation of policies in the field of energy efficiency and the large penetration of RES technologies, both in electricity production and heat supply. The Ministry of Environment, Energy and Climate Change has estimated that the implementation of the above targets would require an investment of EUR 12 billion over the next decade. The recent global economic crisis generally, and Greece’s debt crisis specifically, affect the country’s growth rate.

However, Greece follows a long-term plan to reform and modernise its energy sector and it has taken several steps along this direction by revealing a number of competitive advantages, such as:

- (a) A comprehensive regulatory framework for energy investment;
- (b) Excellent potential of every renewable energy resource;
- (c) Attractive investment incentives;
- (d) Renewable energy project development at competitive costs; and
- (e) Continued expansion of the energy market for spin-off markets in manufacturing energy technologies.

3.2 Support schemes

Law 3851/2010 on RES Development, as well as several other amendments in the existing RES legislative and regulatory framework, aim to simplify the licensing procedure, rationalise the feed-in tariff scheme in order to, on the one hand, be able to keep projects financially attractive while, on the other hand, not overburden consumers, tackle specific barriers at the local level, and immediately advance certain key projects, all for the advancement of power production by RES and for the attainment of the targets set.

In Greece, electricity generation through renewable energy sources is mainly promoted through a guaranteed feed-in tariff. Law 3468/2006, as amended and in force, differentiates RES electricity producers according to whether or not they are located on a Greek island i.e. whether or not they are connected to the mainland grid. RES power plants also enjoy dispatch priority to the Grid. Part of the costs of the feed-in tariff system are borne by all consumers of electricity, who are obliged to pay a RES duty, which is added to their electricity bills. The feed-in tariff is limited in time. The power purchase agreement has a duration of twenty (20) years and may be extended by agreement between the parties.

This additional agreement shall be concluded three months prior to the agreement’s expiry date at the latest. Agreements regarding solar-thermal systems have duration of twenty-five (25) years. However, within the new market framework, which will be established for the operation of the wholesale electricity market, it may be reasonably expected that the RES energy market will need to be adjusted in order to comply with the new rules and market regulations. Although none of the reform options currently under examination by the Greek State explicitly provides that the current RES support schemes will also need to be re-evaluated and amended, it is the expectation of most of the key market players that the adaptation of a bilateral market structure, which RAE is currently reviewing to implement with regard to the wholesale electricity market, will also be extended to the RES market as well.

The introduction of such an option for RES producers will also be in compliance with the obligation of the Greek State, under the provisions of its recent loan agreements, to re-examine the viability of the currently existing RES support schemes and make them more compatible with the current economic and market conditions. However, the implementation of such an option would require significant investments for the upgrade of the national grid in order to become compatible with the European networks and enable also the exportation of RES energy under bilateral agreements with foreign off-takers.

Another financial instrument umbrella for the promotion of RES (with the exemption of PVs) is the National Development Law (Law 3299/2004) which covers all private investments in Greece in all sectors of economic activity, which governs the terms and conditions of direct investment in Greece and provides for incentives, available to domestic and foreign investors, depending on the sector and the location of the investment. In February 2011, the new Development Law for supporting Private Investment for Economic Growth, Entrepreneurship, and Regional Cohesion, was voted and passed by the Greek Parliament, in the aims of improving tax benefits for investors selecting this option of investment support. This Law has a strong regional character, in that the level of public support strongly depends on the particular geographic region, within which a private investment is to be implemented. In the past, investors could select one of three forms of investment support: cash grants/leasing subsidies, wage subsidies and tax benefits. As per the latest amendment of the new Development Law, the tax benefit has been increased to match the level of the cash grants/leasing subsidies, a substantial benefit for investors.

Within the new market framework, which will be established for the operation of the wholesale electricity market, it may be reasonably expected that the RES energy market will also need to be adjusted, in order to abide with the new rules and market regulations. Although none of the reform options currently under examination by the Greek State explicitly provides that the current RES support schemes will also need to be re-evaluated and amended, it is the expectation of most of the key market players that the adaptation of a bilateral market structure, which RAE is currently reviewing to implement with regard to the wholesale electricity market, will also be extended to the RES market as well.

The introduction of such an option for the RES producers will also be in compliance with the obligation of the Greek State, under the provisions of its recent loan agreements, to re-examine the viability of the currently existing RES support schemes and make them more compatible with the current economic and market conditions. However, the implementation of such an option would require significant investments for the upgrading of the national grid in order to become compatible with the European networks and enable also the exportation of RES energy under bilateral agreements with foreign off-takers.

4. NATURAL GAS

4.1 Market overview

The Greek natural gas market is still in the early stages of development and the Greek State is heavily involved in the industry through direct or indirect ownership. Natural gas is a relatively new fuel in Greece, introduced into the Greek energy market over a decade ago. Natural gas demand is projected to increase significantly (to 20% of the total energy demand in 2015) as it gains a progressively more important market share in power generation, as well as in the industrial, residential and commercial sectors.

Piped Natural Gas sales from Russia began in 1996 and from Turkey in November 2007, while Liquefied Natural Gas ("LNG") sales from Algeria began in 1999 on the basis of respective long-term supply contracts. Prior to this, the establishment of the high-pressure natural gas transmission system ("NNGTS") and LNG terminal facilities resulted from a decision by the Greek State

in 1992 to modernise its energy industries and diversify the country's energy sources through the introduction of natural gas. Greece is seeking to broaden its natural gas imports by sourcing natural gas from countries such as Azerbaijan, and is cooperating with several nations which are constructing pipelines. Azeri gas is scheduled to be transported via Turkey through the Trans Adriatic Pipeline ("TAP"), after the signing of a Memorandum of Understanding between Greece, Albania and Italy and the selection of this pipeline by the administrative consortium of the Shah Deniz gas field. This pipeline is designed to connect with the main line of the NNGTS and to provide for the transportation of natural gas from Greece to Italy via Albania.

In addition, there has been an agreement on the implementation of the IGB (Interconnector for Greece-Bulgaria) pipeline. This can potentially be used as a starting pipeline for exporting Arabian LNG from Egypt, Algeria and the Persian Gulf to the Balkans and Central Europe. In 1988 a state-controlled natural gas company named Public Gas Company ("DEPA") was established and was granted by virtue of Law 2364/1995 the rights for planning, constructing and exploiting the NNGTS and the regional distribution networks, the rights to import and export natural gas, as well as the rights to sell natural gas to the regional gas distribution and to supply companies of large end-users.

However, following the introduction of Law 3428/2005, (the "Gas Law") in 2005, all rights related to the construction and exploitation of the NNGTS have been conferred to an independent system operator ("DESFA"), which was established in 2007, while all of DEPA's exclusive rights pertaining to the import, export and trade of natural gas have been abolished. These activities have been rendered available to any party interested in such "main natural gas activities", without any licensing requirements.

Pursuant to the gas sector legislation, the exercise of natural gas activities within the territory of the Greek State constitutes a public utility and is performed under the supervision and regulation of the Minister of Environment, Energy and Climate Change.

In general, the Greek policy regarding gas related issues focuses on the following main directions:

- (a) Ensuring the security and continuity of supply;
- (b) protecting consumers;
- (c) ensuring the promotion of free competition and environmental protection; and
- (d) promoting the implementation of energy-efficient and economical, effective practices by the licensees.

The above supervision and regulation competencies of the Minister of Environment, Energy and Climate Change are exercised in consultation with RAE, as the independent administrative authority for the energy sector. Following the enactment of the Energy Law, RAE's role is now considered compatible with the role of the natural gas market regulator provided by the third EU Gas Directive (EU 73/2009). The competencies granted to RAE refer to the regulation of both the electricity and natural gas market, in compliance with the respective EU Directives.

Finally, pursuant to the Energy Law, DESFA is vested with the exclusive authority for the operation of the NNGTS and is granted the exclusive and non-assignable rights of programming, constructing, owning and exploiting the system. Under the same law, DESFA also enjoys the rights of storage (including the management of LNG terminal facilities that constitute part of the national natural gas transportation system) and the processing of natural gas by means of this system. Therefore, DESFA, upon its establishment, was granted a single ownership and operation licence with regard to the NNGTS for an initial period of fifty (50) years. At the end of 2013, the Greek government, within the framework of privatising its stake in a number of energy companies, selected, through a tender process, the State Oil Company of the Azerbaijan Republic (SOCAR) as its strategic partner in DESFA by offering 66% of DESFA's share capital. Currently, since the market has been liberalised, DEPA is no longer the only entity which imports and trades in natural gas. New players have entered the market, and the interest is high; Greece offers a unique advantage for those involved in the business of natural gas, on the one hand due to its own increasing consumption needs, and on the other due to its potential of an access point for the needs of Southeast and mainland Europe.

4.2 Regulatory overview

Until recently, the Greek natural gas market was essentially regulated by Law 2364/1995 (as amended by Laws 2528/1997 and 2992/2002). This legislation arguably conformed, to a certain extent, to the fundamental EU guidelines in the sector. However, the most crucial and significant step towards natural gas market liberalisation came with the relatively recent enactment of the Gas Market Law (Law 3428/2005), which implemented the EU Second Gas Directive (2003/55/EC) before the lapse of the derogation period granted to Greece as an emerging market under Directive 98/30/EC. The Energy Law which was enacted in August 2011 transposed the third EU Energy Package into national legislation and replaced some of the provisions of the Gas Market Law.

Among other things, the above-mentioned laws provide for:

- (a) the development by private investors of independent natural gas transportation systems, LNG installations and storage facilities;
- (b) the liberalisation of supply on the basis of an authorisation procedure;
- (c) third party access to the national natural gas transportation system, including LNG and storage facilities, on the basis of published tariffs;
- (d) accounting for unbundling;
- (e) the establishment of a natural gas spot market; and
- (f) the extension of the regulator's powers with respect to the natural gas market.

Although a lack of specific details relating to the natural gas legislative framework proved to be a critical factor in delaying the full liberalisation of the market, it appears that this framework has now been completed with the approval of a series of secondary legislation such as the Gas System Code, the Users' Registry, standard contracts and tariffs regulations. This brings further uniformity and stability in the natural gas market.

4.3 Regulated natural gas market activities

According to the provisions of the Gas Law and the Natural Gas Licences Regulation, the supply and distribution of natural gas to Eligible and non-Eligible Customers, as well as the construction and operation of Independent Natural Gas Transmission Systems, are permitted only to holders of the respective Licence, which is granted by RAE.

The initial term of these licences depends on the licensed activity and ranges from twenty (20) to fifty (50) years. Upon request of the licence holder, the licences may be renewed for the same time period. Any other sale, purchase, import and export activities of natural gas activities are conducted freely.

4.4 Exploration and production

Natural gas still represents a small percentage of Greece's primary energy consumption. However, demand is projected to increase significantly, rising to 20% by 2015, as it gains a larger market share in power generation and the industrial, residential and commercial sectors. Although Greece's natural gas demand by population size is significantly below that of other European countries, its projected 10-year compound annual growth rate for natural gas consumption is the highest among the EU-15 states. In Greece, 99.5% of the petroleum that is used is imported, while only 0.5% is locally produced.

Even though Greece has had legislation concerning the research, exploration and exploitation of hydrocarbons for many years, it only recently started taking more advanced steps to improve its productivity in this area.

The research, exploration and exploitation activities for hydrocarbons are regulated by Law 2289/1995, which was significantly revised by the Energy Law, introduced in August 2011. In accordance with the United Nations Convention on the Law of the Sea, as ratified by Law 2321/1995, the right to research, explore and produce hydrocarbons existing in onshore areas, sub lakes and submarine areas, where the Greek State has either sovereignty or sovereign rights, belongs exclusively to the Greek State.

Their exercise shall be for the benefit of the public. Following enactment of the Energy Law and by virtue of Presidential Decree 14/2012 the state company Hellenic Hydrocarbons Resource Management ("HHRM" or "EDEY" as per its Greek initials) was established to deal with certain matters relating to the management of the process of research, exploration and production of hydrocarbons as well as the announcement of tenders and tax motives to attract investors.

Foreign and Greek companies may submit their requests for research activities directly to HHRM, since HHRM will announce the relative tenders in short notice on companies' requests. The law is referred also to the "open door" tender procedure. Last but not least, the Energy Law includes flexible motives to attract investors.

For more information on the exploration and production of natural gas please see the description of the relevant legislative framework applicable to all types of hydrocarbons below (Upstream Oil).

4.5 Transmission and access to the system

The national natural gas transportation system (high-pressure pipelines) has already been commissioned but the distribution system (medium and low-pressure pipelines) is still in the development stage. The NNGTS includes the main high-pressure natural gas transmission pipeline from the Greek-Bulgarian borders to the prefecture of Attica, the high pressure branches linking various areas of the country with the main pipeline, including the branch connecting the main pipeline with the Greek-Turkish borders, the LNG facility at the island of Revythoussa, as well as additional facilities and infrastructure that service the entire NNGTS.

Natural gas is injected to the NNGTS through the following three entry points:

1. Sidirokastro located at the Greek-Bulgarian border;
2. Kipi Evros located at the Greek-Turkish borders;
3. Agia Triada on the coast opposite of the island of Revythoussa.

The Energy Law requires DESFA to provide system users with access to the NNGTS in the most economic, transparent and direct way for as long as they wish. It must conclude contracts with system users for transportation and the use of storage and LNG facilities. Such contracts are based on model contracts, the provisions of which are determined by means of Ministerial Decisions following the approval of the tariffs by the Minister and RAE.

Access to the System may be refused if:

- (a) there is a lack of capacity pursuant to the special provisions of the system's operating code;
- (b) access to the system could prevent DESFA from fulfilling its public service obligations; or
- (c) serious economic and financing difficulties occur owing to contracts containing "take or pay" clauses.

DESFA must specifically substantiate such a refusal and must communicate its decision and reasons to the authority and the user. DESFA is responsible for balancing the system load - these duties are specified in the system's operating code. In addition, DESFA may conclude load-balancing contracts with suppliers following a tender, according to non-discriminatory and transparent procedures and with due respect for market rules. DESFA will also carry out congestion management at the entry and exit points of the system based on market mechanisms and in accordance with transparent criteria, as defined in the operating code, in order to promote non-discriminatory competition between users.

With regard to independent natural gas transportation systems and storage facilities, the operator must conclude contracts for the use of such systems with users, pursuant to a model contract prepared and published by the operator following the approval of the authority and in accordance with the provisions of the respective system's operation code. Access to such systems may be refused only for reasons of capacity or where such access might prevent the operator from fulfilling its public service obligations (unless it is exempt by law from offering such third party access). DESFA is required to prepare periodical 10-year system development studies for the expansion of the national natural gas

system. Such plans must be submitted to, and approved by, the Minister and RAE.

Distribution

The Greek residential and commercial market for natural gas is relatively new when compared to most EU countries. There is a limited distribution network which existed for town gas in Athens dating back to the 19th century, which has been used to distribute natural gas since January 1998.

With the support of funding from EU programmes, DEPA has already undertaken and completed the construction of substantial medium and low-pressure pipeline infrastructures in the country's three most densely populated regions (Attica, Thessaloniki and Thessaly), which have since been transferred to regional gas distribution and supply companies ("EPAs"), established jointly by DEPA's wholly owned holding companies ("EDAs") and private investors, following a tendering process. DEPA is adopting a similar approach, supported by the Greek State and EU-funded programmes, to develop distribution networks in new regions of the country (the north and central part).

The construction and operation of distribution networks in the rest of Greece require a distribution licence, issued following an application under the Energy Law. RAE may grant a distribution network licence upon the application of the interested party, unless state aid or other applications for the same area are involved, in which case the law provides for a tender process, rather than a simple evaluation of the respective application.

All distribution and supply companies are required to provide suppliers with access to their distribution networks for the supply of eligible customers, provided that such access does not violate the legislation in force or the respective distribution licences and does not endanger the safe operation of the network.

4.6 Trading and supply

Natural gas supply companies, as well as distribution companies, are entitled to supply customers with natural gas in their respective areas of jurisdiction pursuant to the terms and conditions of their respective supply and distribution licences.

Other activities, including wholesale trading and the import and export of natural gas, are not subject to licensing requirements. The Minister's oversight and the RAE's opinions and market

monitoring in relation to each licensee's compliance with the terms of its licence constitute the official supervisory framework.

Physical trade in natural gas is determined on the basis of specific provisions in the NNGTS operation code prepared by the operator of the relevant transportation system (i.e. the national transportation system or an independent system). Further conditions are determined by the model transportation contracts which give a gas undertaking access to the national system, in order to supply an eligible customer.

Given the relatively undeveloped state of the domestic gas market, the completion of financial trades in gas follows the principles that apply to physical trades under natural gas supply contracts. Thus, the physical delivery of a quantity of natural gas (as certified by the system operator) determines the basis upon which the related financial trades are completed.

System users (e.g. importers or suppliers) are able to procure transmission services from the respective system operators irrespective of the natural gas, while customers will pay an access charge for the use of distribution and transportation networks bundled with the commodity. Retail consumers located within the operating areas of a particular distribution and supply company will purchase natural gas and the related transmission and distribution services as a bundled product, as the company will act as both the local distribution system operator and the regional supplier of non-eligible customers.

Cross-border sales and deliveries

DEPA no longer enjoys the exclusive right to purchase, import and export natural gas. Such activities are open to any party interested in the principal natural gas activities which can be undertaken without a licence.

4.7 LNG and storage capacity

LNG terminals constitute energy infrastructures of strategic importance for Greece, since they allow the further diversification of supply sources, provide further supply security and strengthen Greece's impact on the energy environment of the wider region.

Greece has one LNG import terminal. The terminal is located on the island of Revythoussa, 45km west of Athens. Historically, LNG supplies were imported solely by DEPA under a contract with Algeria's Sonatrach. However in the spring of 2010 the first two

privately owned LNG shipments entered the system. The LNG is stored in two (2) tanks with a total capacity of 130,000m³. It is then re-gasified in special installations and afterwards supplies the NNGTS.

The Revythoussa LNG facility is an additional entry point of the NNGTS and contributes significantly to the security of supply through its storage capacity, as well as through the possibility it offers to the Greek market to diversify its supply sources. The LNG facility consists of:

- (a) two storage tanks, with a total capacity of 130,000m³ LNG (useful capacity 126,500m³);
- (b) vaporisation units with total capacity of 1,000m³ LNG/hour (approximately 14 million Nm³/day (normal cubic meters);
- (c) a twin off-shore pipeline 600m long and 24 inches in diameter, which connects the LNG terminal with the NNGTS; and
- (d) facilities for unloading ships with maximum length of 290m, draught which does not exceed the difference (12.7m – 10% of vessel draught) for berthing and under keel clearance (distance between the keel and the sea bottom) of at least one meter.

The Ministry of Environment, Energy and Climate Change is reviewing the possibility of international partnerships for the construction of a second LNG Terminal in Northern Greece. It is soon expected that the Hellenic Republic Asset Development Fund ("HRADF" or "TAIPED" its Greek initials) will announce the opening of a tender process for the long-term concession of the underground gas storage area in South Kavala, where the Greek State is expected to receive significant revenue not only through the initial concession price but also through its participation in the future revenues of the concessionaire.

According to relevant studies, the South Kavala site can store up to one billion cubic meters of gas and supply up to four million cubic meters of natural gas to the network per day (or 40% of the daily consumption in the country) for a period of 90 days. Furthermore, RAE recently also approved a floating LNG terminal in the northern Aegean, comprising of an off-shore delivery and regasification station, which shall inject the natural gas into the NNGTS through an underwater pipeline.

According to DESFA, the storage facility will contribute greatly to the energy security in Greece and in neighbouring countries linked to its gas network.

5. UPSTREAM OIL MARKET

5.1 Market overview

In Greece, 99.5% of the petroleum used is imported, while only 0.5% is locally produced. Even though Greece has had legislation concerning the research, exploration and exploitation of hydrocarbons for many years, it only recently started taking more advanced steps to improve its productivity in this area.

The rights to research, explore and exploit hydrocarbons located in the national soil, lakes or sea reside solely with the State's public sector, and the use of these hydrocarbons must always benefit the State. The Greek State has the power to assign research rights to third parties; exploration and exploitation rights however, are granted through a tender process. Hydrocarbons research may be conducted through any possible means, including drilling. Exploitation of hydrocarbons refers to their mining and treatment, while exploitation does not include refinement procedures.

The areas designated for research, exploration and exploitation are set out by the Minister of Environment, Energy and Climate Change, and they usually have a rectangular shape. They can be determined by using the geographic coordinates of latitude and longitude, though in some cases the areas are determined from the shape of the country's border as well as from the coastline.

5.2 Regulatory overview

The research, exploration and exploitation activities for hydrocarbons are regulated by Law 2289/1995 which was significantly revised by the Energy Law, introduced in August 2011. The Hellenic Hydrocarbons Resource Management company, the HHRM, has been established and is concerned with all matters relating to hydrocarbons.

This company shall publish, following approval by the Minister of Environment, Energy and Climate Change, invitations for offers for hydrocarbons research in the Official Gazette of the Government and in the Official Journal of the European Union. The deadline periods for the submission of applications may not be shorter than ninety (90) days, and the application must include:

- (a) the specified area;
- (b) the terms and obligations of the licensee;
- (c) the reasons (criteria) for the applicant's choice;
- (d) the price of the submitted state fee;
- (e) letter of guarantee of good performance from a bank which operates lawfully in a European Union Member State;

- (f) the deadline to grant the licence;
- (g) any other relevant information.

The exploration area for hydrocarbons may not exceed 4.000 square kilometres when it comes to land based research, and 20.000 square kilometres for aquatic research. The relevant licence is valid for eighteen (18) months. Upon receipt of the research licence, its holder must submit the following to the Ministry of Environment, Energy and Climate Change :

- (i) the research programmes divided into specified periods;
- (ii) upon the expiration of the research programmes, the licensee must submit copies of the technical and scientific information and findings acquired during this research;
- (iii) three (3) months from the expiration of the licence, the licensee must submit an analytical report accompanied by official data and information, along with the analytical search result.

The State may lease the right to research and exploit hydrocarbon areas either through a stand-alone contract agreement or a distribution agreement for the ultimate production which includes the research and exploitation rights.

5.3 Hellenic Hydrocarbons Resource Management S.A.

The HHRM was established in 2012 by virtue of a Presidential Decree and is concerned with all matters relating to hydrocarbons. The HHRM's term is ninety nine (99) years from the date of publication of the Presidential Decree establishing it. Its tasks include, indicatively, the following:

- (a) to act on behalf of the Greek State, and to manage on its behalf the exclusive rights of research, exploration and exploitation of hydrocarbons in land and the waters;
- (b) to manage, control and monitor agreements signed by the State or for the benefit of the State with third parties;
- (c) to submit opinions to the State concerning the exclusive right to manage the research, exploration and exploitation of hydrocarbons;
- (d) to collect and evaluate information concerning the country's hydrocarbons capacity;
- (e) to collect, process, save, evaluate and manage data and information which has been acquired in the past or which will be acquired in the future during research on the country's hydrocarbons capacity, its uses and potential development;
- (f) to submit proposals to the Minister of Environment, Energy and Climate Change on areas to grant licences for hydrocarbons research, exploration and exploitation, as well as storage areas for natural gas and CO₂;

- (g) to prepare and conduct tenders, and to publish them in the international energy market in order to attract petroleum companies;
- (h) to evaluate applications submitted for these tenders;
- (i) to grant the research licenses;
- (j) to negotiate the terms for the granting of licences for hydrocarbons research, exploration and exploitation;
- (k) to make suggestions to the Ministry of Environment, Energy and Climate Change on the approval of annual works schedules and budgets, on drilling, geophysical and other research programmes of the development project, as well as on the sponsor's obligation;
- (l) to perform economic valuations of the areas which are to be licensed in the future, to estimate potential investment dangers and to perform studies for the development of oil reserves;
- (m) to cooperate with the Ministry of Environment, Energy and Climate Change, the relevant competent authorities of the European Union and other organisations and educational institutions;
- (n) additional obligations may be assigned to it by the Ministry of Environment, Energy and Climate Change.

The establishment of the HHRM is considered as the first basic step towards the exploitation of the oilfields of Greece.

5.4 Material provisions of the hydrocarbons legislation and other licensing regulations

- (a) The sponsor(s) may be physical person(s) (individuals) or legal entities, operating on their own or in cooperation with one or more other such individuals or legal entities. In addition, they must be nationals of Greece, a European Union member or of a third country as long as this third country has a reciprocity agreement with Greece;
- (b) On entering into the lease (agreement to rent), the sponsor(s) undertakes the responsibility to perform studies and to take actions necessary to research, explore and exploit hydrocarbons and their by-products. The sponsor(s) also undertakes to assume all costs (materials, staff, etc.) and risks associated with the project;
- (c) Part of the annual hydrocarbon production is given to the sponsor(s) to cover expenses. The remaining is divided among the sponsor(s) and the employer according to specified and agreed upon percentages;

- (d) The research period specified in the lease, may not exceed seven (7) years for land areas and eight (8) years for sea/underwater areas. This time period may be renewed for a period equal to half of the originally granted time period.

6. Forthcoming developments in the Greek energy sector

Greece has a liberalised energy market which has evolved in the last decade into an energy hub and represents an important sector of the country's economy.

Electricity and gas agreements with major European, American and Asian companies have positioned Greece as a point of reference in the region, and a number of energy projects linked to wider geopolitical moves and to the largest global economic players are expected to be implemented in Greece. Despite the current economic crisis and its impact on the Greek economy, a number of recent developments and significant reforms across all sectors of the economy have put Greece on a new course. The restructuring and modernisation of the Greek State has caused the markets to start to respond favourably. The Greek government is concurrently reforming the Greek economy by providing a wider range of innovative investment tools to investors who want to explore new investment opportunities across several economic sectors.

6.1 The electricity market reform

Within the framework of the Third Energy Package and under the guidance of the European Commission and the IMF to promote measures to reform pathogenic structures of the domestic wholesale electricity market, Greece is currently in the process of evaluating several options to proceed with a complete restructuring of its electricity model and to conform with the rules for market integration, based on the ETM for electricity. The restructuring of the Greek electricity market is expected also to affect the RES market which may need to adopt innovative support schemes in order to comply with the new market rules and regulations and become more compatible with the current economic and market conditions.

The fact that the ETM, which is promoted by the European Union, is strongly influenced by the north-west European market raises significant challenges for the Greek market, the design of which is fundamentally different from the approach used in north-west Europe. To address these challenges, RAE has initiated a consultation as to how the Greek State can best secure the safe

and smooth transition of the Greek electricity market into the ETM. As part of the consultation process, RAE has proposed three different high-level options under which Greece would comply with the requirements of the ETM. These are: (i) the adaptation of the current Greek model (Adaptation option); (ii) the north-western European Power Exchange Model (NWE option); and (iii) the mixture of forward bilateral agreements with a pool used for the Day Ahead Market (Hybrid option).

These actions by the Greek State display how the view that the RES market must conform to the current trends in Europe has been adopted, as the flexibility to maintain the current favourable FIT scheme no longer exists. The implementation of the electricity market reforms is expected to bring the desired results along with the certainty and stability to this market which has been recently absent.

6.2 Privatisation of Energy Companies

One of the main tenets of IMF/EU economic assistance to Greece is the complete liberalisation of the energy market, both in terms of regulation and ownership. As such, the Greek government is in the process of privatising its stake in a number of energy companies, including the PPC, the ITO, DEPA, DESFA and the Hellenic Petroleum ("ELPE"), through the assignment of its interest in the abovementioned companies to the Hellenic Republic Asset Development Fund ("HRADF").

While the tender process for the privatisation of DESFA was recently concluded with the selection of Socar as the strategic partner of the Greek State and the signing of the relevant agreement, the first attempt to privatise DEPA was unsuccessful. However, as natural gas gains a larger market share, DEPA is expected to be well-positioned to play an important role in the region, and it is, therefore, expected that the second privatisation attempt will be successful, especially since DEPA, following an investigation performed by the Hellenic Committee on Competition, has recently implemented a number of actions indicated by the latter in order for DEPA to allow for increased competition in the field of natural gas and to make its responsibilities and obligations clear to all market players. PPC is also set to be privatised. More particularly, the Greek State intends, at a first stage to offer 17% of its share in the PPC to private investors through an international public tender. At a next stage a "small" PPC is intended to be established with a portfolio including all current activities of the PPC which will then be

offered for sale to private investors. As the dominant electricity producer and supplier, PPC's position within the Greek energy market is vital. This, coupled with its relatively low market value (a result of the financial crisis), makes the privatisation of this company a very appealing investment opportunity.

In addition, the PPC recently started the process of seeking expressions of interest in the 66% stake in the ITO which operates about 11000 kilometres of high voltage power lines across the country. This is eagerly anticipated by high profile international market players and international private funds. The sale of the ITO may not be part of Greece's obligations under the memorandum, but it does comply with EU energy laws that demand stand alone grid operators instead of grids as part of a public power company.

Finally, 2014 is expected to see the HRADF opening the tender process for the long-term concession of the underground gas storage area in South Kavala, where the Greek State is expected to receive significant revenue.

6.3 Hydrocarbons Research

The first decisive step towards the commercial exploitation of possible oil reserves in Greece was recently made by the MEECC, when in July 2013 it announced the two consortiums led by Energean Oil (Energean Oil and Gas - Petra) and ELPE (ELPE-Edison- Petroceltic) which won the tenders for the research and exploitation of hydrocarbons in the areas of Ioannina and the Gulf of Patra in western Greece respectively.

Meanwhile, the first results from the seismic surveys by the Norwegian company Petroleum Geo-Services ("PGS") in the Ionian Sea and south of Crete have created some reserved optimism for the location of hydrocarbon reserves. PGS believes that, given the enthusiasm and the expectations found in relation to other fields in the Mediterranean, this region that constitutes the object of the next round of concessions shows great potential. Earlier reports pointed to the interest expressed by major names in the oil industry, such as France's Total and US giant ExxonMobil, along with Delek from Israel and Statoil from Norway. PGS will complete the processing of the data collected by the end of the year, in order that in early 2014 Greece will be able to divide the region into blocks and announce the tenders. The drilling for oil and natural gas reserves in Greece may not only increase the country's revenues but also end its dependence on oil and gas imports, on which it spends billions of Euros each year.

On May 14, 2014 three concession agreements for hydrocarbons research in the areas of the Western Patraic Gulf, Ioannina and Katakolo were signed with three different concessionaires upon the relevant unanimous approval by the tenders review committee:

- a) For the offshore area of the Western Patraic Gulf, the concessionaire is the joint venture of Hellenic Petroleum, Edison and Petroceltic;
- b) For the onshore area of Ioannina, the concessionaire is the joint venture of Energean Oil & Gas and Petra Petroleum; and
- c) For the area of Katakolo (both onshore and offshore), the concessionaire is the joint venture of Energean Oil & Gas and Trajan Oil & Gas.

The signing of these agreements marks the end of the two-year journey and paves the road for the initiation after many decades of hydrocarbon research activities in Greece.

7. CONCLUSION

Despite the current financial crisis and unlike other sectors of the economy, the energy field continues to experience increasing growth with the full support of the Greek government and of both domestic and foreign private investors. Initiatives taken by the government to ease the regulatory framework and to comply with the European directives on the complete liberalisation of the market, along with the positive reaction of investors to large scale investments opportunities in energy, define the energy market in Greece today.

The developments described above are the focal point of a comprehensive energy policy which seeks to promote existing clean energy projects, modernise and expand the energy-related infrastructure, diversify sources of energy by exploring new energy possibilities through hydrocarbons research and create new job opportunities and technological innovations.



KOSOVO

1. INTRODUCTION TO THE ENERGY MARKET

In April 2010 the Kosovo Assembly approved the latest revised Energy Strategy for Kosovo for 2010-2018. Kosovo's main sources of energy are imported petroleum products for transport purposes and domestically produced electricity, under the monopoly of "KEK" (State-owned Kosovo Energy Company). The main power system has two mine-mouth generation plants (Kosovo A and B), fed by lignite mines at Bardh and Mirash, supplying approximately 7 million tons of lignite per year. There are also several small hydro-power plants. Kosovo has a large domestic future energy potential in coal/lignite and also further potential in hydropower production.

Kosovo's Energy Market is predominantly a regulated market. Kosovo has signed the Athens Memorandum for the establishment of the Energy Community Treaty of South-East Europe that entered into force in July 2006 and is obliged to create a free market of electricity and promote competition in the energy market. The government of Kosovo is very much committed as far as possible to developing the energy sector in compliance with *acquis communautaire* of the Energy Community Treaty and EU.

2. ELECTRICITY

2.1 Market overview

The electricity supply in Kosovo is currently unable to meet Kosovo's demand for power effectively. Insufficient investment in new plant capacity and inadequate maintenance of existing plant capacity has led to a substantial shortfall in the supply of power in Kosovo. Some of the existing capacity is reaching the end of its life cycle. Simultaneously, demand for power has been growing and placing increasing the pressures on the system. The overall effect is that Kosovo currently has to import power which is much more costly than relying on domestic production.

¹ <http://www.keds-energy.com/en/about.asp>

In 2006 steps were taken to begin the restructuring or unbundling of the Kosovo electricity sector. The Division Transmission and Dispatch was the first to be unbundled from KEK, and KOSTT JSC-System Operator, Transmission and Power Market of Kosovo was established, which is licensed by the ERO. The remainder of KEK has been restructured in several divisions, such as that of distribution, supply, mining and generation.

Kosovo Energy Distribution and Supply Company (KEDS) is a joint stock company which operates throughout Kosovo. KEDS J.S.C. has the exclusivity of electricity supply and distribution. KEDS J.S.C. was established in 2009, while its operational activities were initiated on May 08 2013, when it finally split from KEK J.S.C. KEDS J.S.C. is owned by Turkish companies Çalik Holding and Limak. This consortium offered the highest price in the open bid for privatization of former -Distribution of KEK. KEDS J.S.C. has 2618 employees and as such is one of the largest employers in Kosovo.

KEDS J.S.C. under licenses from the Energy Regulatory Office operates with electricity supply and distribution to the customers. To operate in the most efficient way the company is divided into two basic divisions: Supply Division and Network Division and there are also others supporting departments within it.. These divisions, for the purpose of being closer to the customers are distributed in 7 districts located in the seven major cities of Kosovo and 30 sub districts throughout local municipalities in Kosovo¹. Private sector participation in the network distribution and supply side of KEK is anticipated to improve and expand the distribution network, increase billing and collections, reduce electricity losses, and improve the security of supply and overall service quality.

2. Regulatory Framework

The Electricity Market in Kosovo is mainly governed by Law no.03/L-201 "On Electricity" which establishes common rules for performing generation, transmission, distribution and supply of electricity, Law no. 03/L-184 "On Energy" and Law no. 03/L-185 "On Energy Regulatory Office".

The objective of the Law on Electricity is to:

- develop a competitive and sustainable electricity market, with common rules for generation, transmission, distribution, and supply of electricity, and for access to the market;
- guarantee the conditions for a safe, reliable and permanent generation, transmission, distribution and supply of electricity, adhering to principles of energy efficiency;
- set out the procedures for the granting of licenses, for activities in electricity and for authorizations and tendering for new capacity;
- provide that all household customers and, when technically and economically feasible to do so, non-household customers, enjoy a universal service, i.e. the right to be supplied with electricity of a specified quantity and quality, at a reasonable tariff; and
- provide appropriate measures to protect final customers, in particular, adequate safeguards to protect vulnerable customers and customers in rural areas including measures to help them avoid disconnection.

The ERO which is an independent administrative body (institution) established by Law “On ERO” and is responsible, inter alia, for issuing licenses for private energy enterprises such as: (i) generation; (ii) transmission; (iii) distribution (iv) supply of electricity (export or import) and (v) market operations. The ERO also monitors the unbundling and restructuring activities of the licensees in the energy sector and their compliance with the technical codes issued: technical rules, market rules, rules for access to land and premises etc.

Further, the electricity market participants in Kosovo such as licensed companies for the production, distribution, public supply and electricity supply/trade; production, distribution and district heating public supply, and the Transmission System Operator and Energy Market enterprise, report their compliance to ERO on a quarterly and annual basis in accordance with the Reporting Manual.

3. LICENCED ELECTRICITY ACTIVITIES

The performance of the following activities involving electrical energy will require the acquisition of the following licenses for:

- the generation of electricity; (the maximum term of license is 40 years)
- the co-generation of electricity of heat and electricity; (the maximum term of license is 40 years)
- the transmission of electricity including Transmission

- System Operation; (the maximum term of license is 30 years)
- the distribution of electricity including Distribution System Operation; (the maximum term of license is 30 years depending on lifespan of assets)
- the supply of electricity; (the maximum term of license is 30 years)
- export or import (the license terms shall not be less than 1 year but not more than 5 years).
- market operations. (the terms of license will depend on competitive selection process opened by Government)

The activities which do not require a license include generation of electricity at an electricity site with total capacities less than 5 MW, and the generation of electricity for personal consumption.

4. FUNCTIONS OF THE MARKET OPERATOR

The duty for the implementation of a competitive market model for the electricity sector is given to the Transmission System and Market Operator (“KOSTT”), a duly licensed state-owned entity owned by the ERO. The Market Operator operates independently from any enterprise engaged in any electricity activity other than transmission. The Law on Electricity does provide that the Market Operator will be a legal entity responsible for the organization and administration of the market for the trade of electricity and payment settlements among producers, suppliers, and customers.

The Market Operator balances financial supply and demand ahead of time. KOSTT is responsible for the economic management of the electricity system and its primary functions inter alia including :

- keeping records for all contractual obligations between suppliers and eligible customers;
- notifying trading participants and the transmission system operator of the settlement process, planning network access based on the settlement and the price of the remaining energy offered;
- accepting information from the transmission system operator regarding settlement changes required based on technical capacity and any exceptional situations in the transmission or distribution network;
- setting the final price of energy for each specified time period and notifying all parties involved in trading;

- establishing an accounting system for trading at the final price achieved, and providing information on the actual operation of the generators and availability of generation capacity for each time period;
- public announcement of market trends for any required time interval.

KOSTT performs its functions with due respect to the principles of transparency, objectivity and independence.

5. ACCESS TO GRID AND DISTRIBUTION

As provided for under the law on electricity, the Grid Code is drafted by the KOSTT (Transmission System and Market Operator) and approved by the ERO. The Grid Code covers the operating procedures and principles governing the interactions between the KOSTT and the users of the Kosovan transmission system. It covers the processes of planning, connection, operation and system balancing in both normal and exceptional circumstances. The Grid Code is a mandatory document for both the KOSTT and the users. Also the KOSTT has drafted a Metering Code aiming to establish clear rules for the instalment and use of metering devices, to ensure that the production, transfer and consumption data are available to support an efficient process of electricity transactions.

Another important document prepared by the KOSTT is the Distribution Code, which is a set of provisions defining all technical aspects of the work between the Distribution System Operator and all users of the Distribution System, in order to provide an efficient, co-ordination and an economic system for distribution of electricity. Also this code enables DSO to comply with the responsibilities arising from the Distribution System Operator License, the Grid Code and the Metering Code.

6. TRADING OF ELECTRICITY

According to Energy Legal Instruments trading energy prices shall be comply with tariff-setting methodology by the ERO which is entitled to set the methodology of following tariffs: Transmission and Distribution System Connections; Wholesale Price Tariff and

Retail Sales Tariffs, Coal Royalty which are proposed by energy enterprises.

6.1. Renewable Energy and Energy Efficiency

Market Overview

Kosovo has substantial potential for expanding the use of renewable energy sources in electricity generation. The biggest potential sources are wind, hydro-power, bio-gas, and others including solar, geo-thermal and bio-mass. The issue of renewable energy is a relatively new practice in Kosovo, taking into consideration that over 90% of electricity relies on thermal power plants. For the time being hydro-power and bio-mass in the form of wood are the only renewable energy sources used, and which contribute substantially to the energy supply in Kosovo. The use of solar energy is still at a very early phase (few pilot projects for water heating situated in some public buildings, financed from MED) ¹.

Currently in Kosovo there are two active hydro-power plants with small generation capacities. The Hydro Power Plant “Ujmani” is administered by publicly-owned company “Iber-Lepenc” and Hydro Power Plant “Lumbardh” administered by a private company.

Based on the Energy Strategy, the Government policy is to develop small Hydro-Power Plants with private investments by granting concessions on the right to use the water for power generation, in order to fulfil objectives of EU plan 20-20-20 by 2020, to increase the use of renewable energy sources to 20%.

Moreover, pursuant to Administrative Instruction No.01/2013 “On Renewable Energy Targets”, the mandatory target for the consumption of renewable energy by 2020 is 25% as determined in article 4 of the Decision made by the Ministerial Council of the Energy Community. Around 3% of total electricity production in 2010 came from renewable energy, mainly from hydro and wind sources².

To our knowledge, there is no recent updated data regarding indicators which show how much of total electricity production came from RES. Moreover, there are two wind farms in Kosovo in operation which are below the generation capacity requiring a license under the Energy Legislation.

¹ <http://www.euroqualityfiles.net/AgriPolicy/Report%202.2/AgriPolicy%20WP2D2%20Kosovo%20Final%20Rev.pdf>

² http://www.mei-ks.net/repository/docs/Discussion_Material_Energy.pdf

Support Schemes

Pursuant to the Energy Strategy, the goal of the Government is to attract private investments in the development of projects for renewable energy sources in line with EU directives on Energy Efficiency and Renewable Energy Resources.

Pursuant to the Energy Strategy of the Republic of Kosovo 2009-2018 and the applicable legal framework, Kosovo has adopted a system of feed-in tariffs aimed at stimulating electricity generation from water, wind and bio-mass (including bio-gas). The Energy Strategy pays special attention to the full adoption of European Union RES policies, through the implementation of all obligations deriving from the Energy Community Treaty (EnCT). The strategy places special emphasis on the development of Hydro Power Plant Zhur and other smaller hydro-power plants¹.

The Kosovo Law on Electricity suggests the use of feed-in tariffs as well as the use of Certificates of Origin (CoO) as components of a support scheme for promoting RES-E (RES for electricity generation) development. International experience suggests that feed-in tariffs are particularly effective in promoting the use of renewable energy in electricity generation. Investors prefer feed-in tariffs because they provide certainty on the revenue stream from the sale of electricity produced from renewable.

The ERO has adopted also the Rule for Support Scheme for RES with these main objectives: (i) to promote the development of electricity generation capacity using renewable energy sources in a transparent manner; (ii) to attract domestic and international investors by providing a conducive environment for investing in generation capacity using renewable energy; (iii) to support, or at least not hinder, the development of a competitive electricity market, in Kosovo or regionally, when the conditions of the electricity sector(s) allows it; (iv) to be compatible with Kosovo participation in "Joint Projects"³³ with EU Member States, as envisaged in Article 9 of Directive 2009/28/EC; and (v) to be simple and cost-effective to implement.

Power Purchase Agreements (PPAs) for electricity produced by RES are part of the policy and regulatory incentives. ERO has also adopted: (i) the Rule for Issuing and Usage of Certificates of Origin (CoO) in respect to electricity produced from RES, Waste and from Cogeneration, and (ii) Feed-in tariffs.

Future Developments

The Government of Kosovo with the assistance provided by the World Bank has identified 18(fifteen) locations for the construction of small hydro-power plants. A long standing priority of the government remains the concession of the Zhur Hydro-power Plant and other Small Power Plants, but this project has been blocked due to disputes over inter-boundary waters with Albania.

Energy Efficiency

The aim of Law No.04/L-016 "On Energy Efficiency" is to provide the necessary legal and institutional framework for energy efficiency. The scope of this law is to regulate issues of energy efficiency, preparation and approval of energy efficiency plans and reporting for them, determination of roles, duties and responsibilities of the institutions as well as addressing the obligations deriving from

Energy Community Treaty regarding the energy efficiency.

The Ministry of Economic Development has established the Kosovo Energy Efficiency Agency (KEEA), which is in charge of implementing energy efficiency policies though the evaluation of opportunities to save energy and implementation of energy efficiency measures in all sectors of energy consumption. The KEEA has compiled a second national mid-term plan on Energy Efficiency (2013-2015). Moreover, KEEA is supporting municipalities to work on development of municipal plans for energy efficiency.

6.2. Gas Market

Market Overview

Currently there is no internal gas market in Kosovo. The Natural Gas Market in Kosovo is isolated and is not connected with natural gas networks of other countries. Moreover, Kosovo has no natural gas reserves and the development of the gas infrastructure has stalled, hindering the establishment of a natural gas market. Kosovo is not linked to any operational natural gas supply networks. According to the Statement of Security of Supply for Kosovo (Electricity and Gas), June 2010, published by the Kosovo Ministry of Energy and Mines as part of obligations deriving from article 29 of the Energy Community Treaty. Gas supplies and consumption in Kosovo is, therefore, limited to bottled LPG (liquefied petroleum gas).

Kosovo does not produce natural gas, except as an associated product from lignite mining at the Kosovo A thermal power plant; the quantities are quite insufficient and cannot meet domestic demand. Kosovo, with international assistance, is developing a legal and policy framework for gas supply networks.

Regulatory Overview

Kosovo Law No. 03/L-133 on Natural Gas ("Gas Law") establishes a legal framework for the granting of authorisations for the transmission, distribution, supply, usage and storage of natural gas. Under this Law, the body responsible for developing and implementing policies in the natural gas sector is the Ministry of Economic Development ("MED"). The MED is also responsible for implementing EC directives and obligations deriving from the Energy Community Treaty (Athens Treaty). ERO is the regulatory body responsible for, inter alia, issuing licences for activities in the gas market.

Licensed gas market activities

As there are no natural gas reserves in Kosovo. The Gas Law contains no rules or provisions regarding the exploration or exploitation of gas.

The activities related to this energy source which are regulated by, pursuant to the Law on Energy, and for which the ERO issues licenses, include:

- (i) the transmission of natural gas (the maximum term of license is 40 years)
- (ii) the distribution of natural gas (the maximum term of license is 40 years)
- (iii) the storage of natural gas (only if over 10,000 cubic metres) (the maximum term of license is 40 years)
- (iv) the supply of natural gas (the maximum term of license is 30 years)
- (v) the transit, importation or export of natural gas (the term of license is from 1 to 5 years)
- (vi) the transmission or distribution system operation of natural gas (the maximum term is 30 years)
- (vii) the operation of a market for electricity or natural gas

The ERO is permitted to issue only one license for each licensed territory in Kosovo for the distribution of natural gas, and there may be one or several licensed territories for the distribution of natural gas. The Gas Law also envisages that an energy enterprise which holds a license as a distribution system operator of natural gas may not obtain a license for any other activity in the natural

gas sector. In order to obtain a construction permit for a natural gas "distribution network", an environmental permit is required. The Ministry of Environment will examine whether an impact assessment report is required for the construction of a distribution network a construction permit shall of course also be required.

Gas Storage

The principles relating to storage of natural gas including LNG are as follows:

- (i) The principle features/requirements arising from the Law on Natural Gas in regard to gas storage is that each storage system operator of natural gas or LNG shall operate, maintain, develop under economic conditions secure, reliable and efficient storage facilities with due regard to environment;
- (ii) Refraining from discrimination between system users particularly in favour of its related undertakings;
- (iii) Provision of any other storage operator with sufficient information to ensure that the storage of natural gas may take place in accordance with secure and efficient operation of the interconnected system;
- (iv) To provide system user with the information necessary for the efficient access to the system;
- (v) The principle of autonomy of storage system operator;
- (vi) The principle of Confidentiality to ensure information's regarding commercial advantage.

Transportation and Infrastructure

Upstream pipelines are primarily regulated by the Gas Law. Third party access shall be regulated in a similar manner by ERO to that relevant to transmission and distribution networks.

Specific operation and ownership issues related to the upstream pipeline network is not specifically regulated but would be expected to be dealt with in greater detail by secondary legislation and in accordance with obligations deriving from the Energy Community Treaty.

Access for third parties to natural gas transportation pipelines should be non-discriminatory including facilities for supplying technical service. In order to achieve a competitive market in natural gas industry this access shall be provided by taking security and regularity of supply capacity which is or can reasonably be made available and environmentally protected. In accordance with this paragraph the following should be taken into account:

¹ <http://www.energy-community.org/pls/portal/docs/2570177.PDF>

- the need to refuse access where there is incompatibility of technical specifications which cannot be reasonably overcome;
- the need to avoid difficulties which cannot be reasonably overcome and could prejudice the efficient, current and planned future production of hydrocarbons, including that from fields of marginal economic viability;
- the need to respect the duly substantiated reasonable needs of the owner or operator of the upstream pipeline network for the transport and processing of gas and the interests of all other users of the upstream pipeline network or relevant processing or handling facilities who may be affected; and
- the need to apply their laws and administrative procedures, in conformity with the legislation in force, for the grant of authorization for production or upstream development.

If access agreements cannot be secured, the ERO is entitled to approve rules for dispute settlement related to access or refusal to allow access to every facility set forth in this law.

Trading of Natural Gas

Energy trade, including natural gas trading, is regulated by the Athens Community Treaty as the present treaty creates a single regulatory space for trade in Network Energy that is necessary to match the geographic extent of the relevant product markets. This treaty has created a single energy market among signatory parties (the signatory parties to this treaty are the European Community Members, Albania, Bosnia and Herzegovina, Croatia, Macedonia, Montenegro, Serbia and Kosovo as UNMIK). The primary governing legislation is the Gas Law and the Law on Energy; and a licence is required for this activity.

6.3. Oil Market

Market Overview

All oil products which are imported are consumed within the country. Kosovo has no domestic oil supply and no pipelines, thus there is no upstream oil market.

Oil products are imported approximately 80% by trucks and 20% by rail. The current oil legislation obliges all petroleum product storage and sale points to possess at least 5% of the storage capacity for state emergency purposes.

Mostly diesel, petrol, kerosene, and residual fuel oil (mazut) are imported from there. In recent year there has been an increase in the import of diesel and petrol from Albania through their ports¹.

Regulated Activities Overview

The current law regulating and requiring the licensing of activities in the oil sector is the "Law on Trade of Petroleum and Petroleum Products in Kosovo" (Law no 2004/5) for wholesale, retail, transport, storage or sale of petroleum and/or petroleum products in Kosovo. Persons registered with the Business Registration of Kosovo for the purposes of operating in the petroleum sector or vehicle servicing, with gross annual sales not exceeding fifty thousand Euros (50,000 €) per year, may transport, store and sell or offer to sell lubricating oil, motor oil, anti-freeze and brake fluid without a license.

The responsible Ministry supervises, and is responsible for ensuring the safe, regular and quality of supply of Petroleum and Petroleum Products. Strategic reserves of Petroleum and Petroleum Products are determined as intervention stocks in the event of basic disasters, epidemics or technological disasters.

At present licensees holding a General Petroleum License or a Petroleum Storage License shall retain and earmark five percent (5%) of their Storage capacity as strategic reserve until the creation of the material reserves of Kosovo. There is a contractual relationship between the licensee and the Ministry for the purpose of dealing with the strategic reserves

6.4.Forthcoming Developments in the Kosovo Energy Sector

Without doubt the largest development is the construction of the new Kosova e Re" power plant " which together with the below, reflects the direction of the development strategy of the energy sector in Kosovo:

- Support the construction of the "Kosova e Re" Power-Plant with a capacity of 2 x 300 MW located near the existing "Kosova B" site.
- Support the opening of the coal mine in Sibovc.
- Revitalize and reconstruct the existing TPP "Kosova B" through a public-private partnership.
- Shut down TPP "Kosova A" by the end of 2017 at the latest.

- Support the development of new' generating capacity using renewable energy sources.
- With support of the German Development Bank (KfW) and European Union Commission and co-financed by Kosovo Government, and SIDA the publicly-owned company "Termokos" is building co-generation project aims at connecting the power plant Kosovo B with district heating to distribute hot water generated by the power plant to the state owned central heating company Termokos. Construction of 400 kV interconnection lines between Kosovo and Albania. There are currently large investment opportunities as noted above in the energy sector, and other smaller opportunities for exploring renewable energy production (more likely wind and hydro power).

In terms of the diversification of the energy supply, and specifically developing the gas sector, whilst Kosovo currently has no gas infrastructure or gas reserves (known of) some believe it has a strategic location for current planned regional gas pipeline links.

According to a Regional Gasification Study, Kosovo shall be linked to a Natural Gas Ring for the Western Balkan. The supply options for Kosovo include supplies with Russian Gas via Nis in Southern Serbia or via Macedonia supplying gas from Bulgarian or Greek Systems.

In conclusion, in the aims of harmonizing current legislation with provisions of the third package of EU Directives on Energy, Ministry of Economic Development is in the process of drafting the following draft-laws, which will be included in the 2014 Legislative Program:

1. Law on amendment and supplementation of Law No. 03/L-184 On Energy.
2. Law on amendment and supplementation of Law No. 03/L-185 On Energy Regulator.
3. Law on amendment and supplementation of Law No. 03/L-201 On Electricity.
4. Law on amendment and supplementation of Law No. 03/L-133 On Natural Gas.
5. Law on amendment and supplementation of Law No. 03/L-116 On District Heating.

Moreover, the Ministry of Economic Development is considering amending or replacing the existing Law on Energy Efficiency for the purposes of establishing a legal basis to create the Energy Efficiency Fund.

¹ Statement of Security of Supply for Kosovo (Electricity, Natural Gas and Oil) – July 2011





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MONTENEGRO

1. INTRODUCTION TO THE ENERGY MARKET

The Montenegrin energy market is still mainly synonymous with the electrical energy market. Other forms of energy such as gas and oil are not utilized, mainly because of a lack of appropriate infrastructure. However, the ongoing tender for offshore exploration and exploitation of oil as well as prospective development of the Ionian-Adriatic Pipeline, as a branch of the Trans-Adriatic Pipeline is set to change that. The construction of the underwater cable between Italy and Montenegro has still not commenced, mainly because of the altered route of the cable which requires approval from Croatia. If approved, it should additionally enhance the Montenegrin position in the regional energy market.

Montenegro, as part of the Energy Community, undertook the obligation to implement the third energy package by 1 January 2015. The Ministry of Economy is currently working on the amendments to the Energy Law (Zakon o energetici, Official Gazette of Montenegro no.28/2010, 40/2011, 42/2011 06/13) which are designed to align the local regulatory framework with the requirements of the Energy Community.

2. ELECTRICITY

2.1 Market overview

The bankruptcy of the "Kombinat aluminijuma Podgorica" ("KAP") aluminium smelter which accounted for 1/3 of the entire consumption of electricity in 2012 significantly reduced dependence of Montenegro on imported electric energy.

Plans for the construction of large hydro-power plants have been put on hold given the lack of interested investors and the inability of the state to participate in financing such investments. On the other hand, a revived plan for the construction of a second block of the thermal power plant in Pljevlja of around 240 MW is being

implemented by the, "Elektroprivreda Crne Gore AD Nikšić" ("EPCG") national power utility. The realization of this plan is, however, dependent on resolving the relations between main shareholders of EPCG – the Government of Montenegro with 55% of the shares and Italian utility A2A with 43.7% in EPCG. The existing shareholders' agreement is about to expire at the end of 2014 and the construction of the second block of TPP Pljevlja is part of negotiations on the new shareholders' agreement.

The Montenegrin energy market is, at least on paper, liberalized. All consumers are entitled to choose their supplier, with the exception of households which will have that right as of 1st January, 2015. However, EPCG is practically the only retail supplier since the second licensed supplier, state-owned company "Montenegro Bonus", entered the electricity supply market, with the sole aim to supply KAP with electricity, following the termination of the EPCG supply agreement.

2.2 Regulatory overview

The most important piece of legislation in the electricity sector is the Energy Law. It regulates all the relevant energy sectors, i.e. the sectors of electricity, district heating, oil and gas. Within the electricity sector it regulates specifically: a) issuance of authorisations for the performance of energy activities; b) issuance of licences for the construction of energy facilities (energy licence – "energetska dozvola"); c) regulated prices, tariffs, fees; d) renewable energy; e) specific rules for various activities in the electricity sector; f) access to the electricity system, i.e. transmission and distribution systems; g) supply of energy; h) safeguard measures in the event of market disruption. The Ministry is preparing amendments to the existing law in order to adapt it to the third energy package by 1 January 2015.

The Government, the Ministry of Economy, the Energy Regulatory Agency and other stakeholders have adopted a number of implementing regulations in the past two years aimed at creating the electric energy market, most important of them being: the Transmission Grid Code ("Pravila za funkcionisanje prenosnog sistema električne energije", Official Gazette of Montenegro, No. 5/2012), the Distribution Grid Code ("Pravila za funkcionisanje

distributivnog sistema električne energije”, Official Gazette of Montenegro, No. 20/2012), the General Terms and Conditions for Supply of Electric Energy (“Opšti uslovi za snabdijevanje električnom energijom”, Official Gazette of Montenegro, No. 20/2012 and 22/2013), Market Rules (“Tržišna pravila”, Official Gazette of Montenegro, No. 44/2012), Rules on Third Party Access (“Pravila o pristupu treće strane prenosnoj i distributivnoj mreži”, Official Gazette of Montenegro, No. 13/2007).

The key stakeholders in the Montenegrin electricity market are:

- (a) Ministry of Economy - which is in charge, inter alia, of preparing the energy strategy and its implementation, preparation and the assessment of prospective investment projects, industrial production, energy policy, energy efficiency, determining the direction and dynamics of energy development, preparation of the energy balance of Montenegro, sales of petroleum products, concessions, competition, encouraging foreign investment and others;
- (b) Regulatory Energy Agency of Montenegro (“REA”) - an independent, non-profit organisation, functionally independent of the state authorities and energy companies, exercising public authority in the field of energy, established pursuant to the Law on Energy. Its primary tasks are the development and enhancement of the electricity and gas market based on the principles of non-discrimination and effective competition by creating a stable regulatory framework;
- (c) Transmission system operator – “Crnogorski elektroprenosni sistem” – a majority state-owned company in charge of the development, safe and reliable functioning of the transmission system, enforcement of non-discriminatory and economical access to the transmission system;
- (d) Montenegrin electricity market operator - “Operator tržišta električne energije” (“Market Operator”) - an entity in charge of the management of the electricity market established in August 2011.

2.3 Regulated electricity market activities

The Energy Law prescribes the following energy activities in the electricity sector:

- (a) The production of electricity;
- (b) The transmission of electricity;
- (c) The distribution of electricity;
- (d) Electricity supply;
- (e) The operation of the electricity market;

- (f) Trading, brokerage and representation in the energy market. Energy-related activities may be performed only when the relevant licence has been obtained. The licence is issued at the request of the energy entity separately for each energy activity. The licence is issued for a period of 15 years and may be extended or shortened under certain conditions. The following energy activities may be performed without a licence:

- (i) The production of electricity for individual consumption;
- (ii) The production of electricity in buildings with installed capacity up to 1MW;
- (iii) Electricity trading for the purpose of further sale, excluding the sale to the final customers, agency and representation on the energy market.

Energy activities of public interest in the electricity sector are:

- (a) The production of electricity;
- (b) The transmission of electricity;
- (c) The distribution of electricity;
- (d) The organization of the electricity market;
- (e) Trading with electricity for supply of electricity as a public service;
- (f) Any supply of electricity that represents a public service. Activities under (e) may be performed only by the public electricity supplier. EPCG has been designated by the Government of Montenegro as the public supplier. The following activities in the electricity sector are carried out as public services in order to ensure a regular, safe, reliable and quality energy supply at reasonable prices:
 - (i) The transmission of electricity;
 - (ii) The distribution of electricity;
 - (iii) The supply of electricity, in certain cases.

The provision of public services in the electricity sector must be on a non-discriminatory basis, transparent and under controlled prices. Energy activities which are not performed as public services are carried out in accordance with market principles.

2.4 Generation

The development of generation capacities is subject to obtaining inter alia, an energy permit (“energetska dozvola”). The energy permit is issued at the very outset of the development process even before the acquisition of the requisite land on which the development will take place and prior to obtaining the act on urban technical conditions. Following the issuance of the energy permit, the investor may engage in procuring other permits and approvals

prescribed by other sectoral laws. The request may be submitted by a domestic or foreign entity and the permit is issued by the Ministry of Economy. The energy permit is not required in the event of the granting of a concession for the development of a generation facility.

An energy permit may be issued for a generation facility which complies with the energy strategy and action plan for the implementation of the energy strategy. The following criteria are taken into account when deciding on the issuance of the energy permit: safe and unobstructed functioning of the energy system, conditions regarding the location and the usage of land, environmental conditions, health and safety of people and property, energy efficiency, usage of primary energy sources, conditions related to technical and financial capability of the applicant to realise the development of the energy facility, reduction of CO₂ emission. The energy permit is issued with a validity of two years and may be extended for one additional year.

2.5 Trading and supply of electricity

According to the Energy Law, electricity trading for the purpose of further sale, with the exception of sale to final customers, agency and representation on the energy market does not require an energy licence. According to the Energy Law, all consumers are entitled to choose their supplier, with the exception of households which will have that right as of 1st January, 2015. REA is in charge of approving the regulated tariffs for supply of electricity to qualified consumers and end-consumers supplied by the public supplier. The activity of distribution of electricity and public supplier activity is currently handled by separate functional units within the EPCG. A plan for division of these activities into separate companies was due to have been implemented by mid-2011 but the division has not been yet effectuated. There is no indication as to when the actual division might take place.

According to the Energy Law, the right to participate in the electricity market is granted to producers, suppliers, public supplier, trader and qualified purchasers. The electricity market is operated by the market operator “Operator tržišta električne energije” d.o.o. Podgorica, formed in August 2011. The participants in the electricity market have balance responsibility and are obliged to participate in the settlement process and make payments determined on the basis of the settlement calculations. The functioning of the electricity market and the balancing mechanism is further regulated by the Market Rules.

Cross-border capacities are allocated pursuant to the Rules for Award of Available Transmission Capacities on Montenegrin Interconnections with Adjacent Areas enacted in 2011 by the Montenegrin TSO. According to this regulation, the available cross-border transmission capacities are awarded at annual and monthly auctions, with the possibility of allocating the remaining transmission amounts in the daily auctions or by applying the „first come - first served” principle. Prior registration with TSO is a prerequisite for participation in the auctions for the allocation of cross-border transmission capacities. The allocated capacities may be further transferred.

All participants in the allocation procedure are treated either as suppliers (entities licensed for supply of electric energy in Montenegro) or as transporters (entities which are transporting electric energy through the Montenegrin transmission system). The most important criteria for the allocation of the available cross-border transmission capacity is the category of the participant (supplier or transporter), where the supplier always has priority over the transporter. The second criteria is congestion price (price per MWh of transported electric energy in case demand exceeds cross-border capacities) and the third criteria is the time of bid submission (the earlier bid has priority). The Energy Law provides for the possibility of forming an entity for coordinated auctions of cross-border capacities at a regional level outside the scope of REA's supervision.

According to the decision of the Ministerial Council of the Energy Community from December 2008, the headquarters of the regional coordinated auction house should be in Montenegro. The Project Team Company, as a seed of the future regional auction house, has been established with the support of the international donors and is currently working on setting up the regional auction house.

2.6 Transmission and grid access

Access to the transmission / distribution system may be granted only to a participant licensed for performing electrical energy activity in the Montenegrin electricity market. Pursuant to Article 99 of the Law on Energy, TSO is obliged to enable third party access to the transmission system on a non-discriminatory basis, within its transmission capacities and in accordance with technical rules. The access may be denied only on technical grounds in the event of lack of capacity or danger to public services in the electricity sector. The dissatisfied party has the right to appeal to REA.

Pursuant to the previous Energy Law, REA has adopted the Rules on Third Party Access to the Transmission and Distribution Network ("Pravila o pristupu treće strane prenosnoj i distributivnoj mreži", Official Gazette of Montenegro, No. 13/07) ("Rules on Third Party Access"), which further elaborate the principles and procedure for third party access. The Rules on Third Party Access remain applicable only in as far as they are not in contravention of the new Energy Law which also has comprehensive provisions on this issue. The interested party first submits a request for access to the transmission/ distribution network. TSO and the interested party are required to enter into an agreement on access to the transmission system which details special conditions related to calculation of access fees, the point of access, approved power, place and manner of measuring the electricity, termination grounds etc.

The Energy Law also regulates the connection of production and consumer facilities to the transmission system. The right to connect to the transmission system may be denied only in the event of technical impediments and/or if the equipment and installations do not fulfil the technical and other requirements. The deadline for the issuance of the connection approval is 30 days and, in case of more complicated connections - the deadline is 120 days. The dissatisfied party may appeal to REA within 15 days. The decision of REA is final in the administrative proceedings but may be challenged before the Administrative Court in the administrative accountability proceedings.

The connection approval determines, inter alia, the conditions for connection, costs of connection, connection point, the manner, costs, technical conditions and deadline for connection, place and manner of measurement of delivered electricity. Based on connection approval the TSO and the interested party enter into a connection agreement. The costs of connection and preparation of the connection elaborate are borne by the interested party; TSO bears the costs of internal analysis of the transmission system.

3. RENEWABLE ENERGY

3.1 Market overview

Montenegro has not yet formally set the goal for gross final energy consumption from renewable sources by 2020, but it is expected that it will be set at 33% in accordance with the decision of the 10th Ministerial Council of the Energy Community.

In the hydro power sector the Ministry of Economy has finished the second round of tenders for the award of a concession for development of small HPPs. However, not a single project for development of small HPPs has so far been completed. In the large hydro sector, two promising projects: 4 HPPs on Moraca with envisaged installed power of 230MW and HPP Komarnica with installed power of 168MW have been put on hold. In the wind sector, the Ministry of Economy has entered into two land-lease agreements for the development of wind farms of an estimated installed power of approximately 120MW. None of these two projects has yet achieved the financial closing. Biomass, geothermal and solar energy sources are currently not used for power generation although there is a potential for all of them.

3.2 Support schemes

(a) General

The Montenegrin Energy Law generally prescribes that production from renewable resources may be increased, inter alia, by determining the minimum mandatory percentage of production from renewable resources, by reducing the investment costs and by prescribing feed-in tariffs.

A privileged producer is defined as a producer who uses renewable energy resources or waste or is involved in cogeneration, in an economically suitable manner and in compliance with environmental protection requirements. The status of privileged producer is acquired by a decision of REA subject to the fulfilment of the following requirements: the production facility a) is connected to the transmission or distribution system; b) is producing energy from renewable resources or highly effective cogeneration; c) has its own measuring point; d) does not endanger the stability of the system. The status of a privileged producer is acquired for a period of 12 years. During that period, the privileged producer is entitled to freeze the feed-in PPA and sell the electricity directly on the market for periods not shorter than 12 months. Those periods are, however, accounted within the total 12 years of the privileged status.

Privileged producers are part of one balancing group which is not charged by the Market Operator for deviations; however, if the producer sells the electricity on the market it is not exempt from bearing the balancing services. Privileged producers have priority in dispatching generated electricity

subject to the technical conditions of the system.

Each supplier of electricity is obliged to purchase electricity from privileged producers in the percentage equal to the percentage in which the renewable electricity participates in the total amount of electricity produced in Montenegro.

(b) Feed-in tariff

Pursuant to the Decree on the Tariff System for the Calculation of the Privileged Purchase Price for Electricity Produced in Renewable Energy Sources and Highly Efficient Cogeneration ("Uredba o tarifnom sistemu za utvrđivanje podsticajne cijene električne energije iz obnovljivih izvora energije i visokoefikasne kogeneracije", Official Gazette of Montenegro, No. 52/2011) ("Methodology") a feed-in tariff regime has been instituted for small HPPs, wind generators, biomass power plants, on-roof solar plants, solid waste incineration plants, landfill gas plants and biogas plants.

The right to receive feed-in tariff may be realized if the following conditions are fulfilled: a) the power plant uses renewable energy source thereby contributing to the fulfilment of the national renewable energy target in accordance with the national renewable energy action plan (which still has not been adopted), b) the highly efficient cogeneration facility is within the capacity envisaged by the programme for the development and usage of highly efficient cogeneration and c) the power plant has acquired the status of privileged producer from the REA in accordance with the procedure set forth in the Decree on the Manner of Acquiring Status and Realization of the Rights of Privileged Producer of Electricity (Uredbu o načinu sticanja statusa i ostvarivanja prava povlašćenog proizvođača električne energije, Official Gazette of Montenegro, No. 37/2011).

The power plant for which the status of privileged producer is being acquired may not be older than 3 years, except in case of refurbishment of an old plant. The status of privileged producer is acquired at the very end of the development process, i.e. after completion of construction and obtaining the operational permit for the power plant.

The guaranteed tariffs applicable to renewable energy produced by privileged producers are as follows:

- 5.04 to 10.44 cEUR/kWh for small HPPs;
- 12.31 to 13.71 cEUR/kWh for biomass plants;

- 15.00 cEUR/kWh for biogas plants;
- 9.60 cEUR/kWh for wind farms;
- 8.00 cEUR/kWh for landfill gas power plants;
- 8.00 to 10.00 cEUR for combined cycle power plants;
- 9.00 cEUR/kWh for waste-fired power plants;
- 15.00 cEUR/kWh for on-roof solar energy power plants.

(c) Certificates of origin

The Energy Law also stipulates the possibility of issuing certificates of origin by REA. The Government of Montenegro adopted the Decree on the Manner of Issuing, Transfer and Withdrawal of Guarantees of Origin for the Energy Produced from Renewable Sources and High-efficiency Cogeneration ("Uredba o načinu izdavanja, prenošenja i povlačenja garancija porijekla energije proizvedene iz obnovljivih izvora energije i visokoefikasne kogeneracije", Official Gazette of Montenegro, No. 37/2011).

The guarantees of origin are issued on a monthly basis and a request for their issuance must be submitted by the 15th day of the month for energy produced in the previous month. The request should contain information on the producer, production facility, type of primary energy being produced, data on the support schemes applicable to the facility and, in case of high efficiency generation, additional data on the minimum calorific value of the fuel, its consumption and savings of primary energy.

The first request is accompanied by a connection agreement, main design of the energy facility and a schematic overview of the measuring points. The guarantees of origin are transferrable, both within Montenegro and abroad, and may be used by the supplier to prove the percentage of renewable energy in the overall quantity of the energy it sold.

4. NATURAL GAS

4.1 Market overview

The natural gas market in Montenegro has a marginal influence on the overall energy market. Montenegro does not have any natural gas infrastructure and thus there is no access to any international gas transportation system. On the other hand, there is no domestic natural gas generation. Certain exploration projects

reveal indications of natural gas reserves in the coastal area. However, certain steps are expected to be taken, as Montenegro has formed partnerships with Croatia, Albania and Bosnia and Herzegovina on a project to develop a 400 km (of which 100 km will be through Montenegro) Ionic-Adriatic pipeline, which is intended to be a separate arm of a larger Trans-Adriatic gas pipeline. The value of the gas infrastructure to be developed in Montenegro as part of the project is estimated at EUR 60 million. Montenegro would then have a constant supply of natural gas and would be able to utilise more adequately its own underwater natural gas capacities.

4.2 Regulatory overview

Legal framework

The natural gas sector in Montenegro is mainly covered by the Energy Law. The following important laws are also applicable to the natural gas sector:

- (a) Law on Mining ("Zakon o rudarstvu", Official Gazette of Montenegro, No. 65/2008, 74/2010 and 40/2011);
- (b) Law on Hydrocarbon Exploration and Exploitation ("Zakon o istraživanju i proizvodnji ugljovodonika", Official Gazette of Montenegro, No. 41/10, 40/2011 and 62/2013);
- (c) Law on Spatial Planning and Construction of Buildings ("Zakon o uređenju prostora i izgradnji objekata", Official Gazette of Montenegro, No. 51/2008, 40/2010, 34/2011, 40/2011, 47/2011, 35/2013 and 39/2013).

4.3 Regulated natural gas market activities

The Energy Law regulates the following licensed activities: (i) the purchase of natural gas, (ii) storage, (iii) transportation, (iv) distribution and (v) supply. Any entity wishing to perform any of the natural gas activities must be a local entity registered with the Montenegrin Commercial Register and must apply for a licence to be issued by REA as the main regulatory body in the gas sector. The licences are issued for a period of up to 15 years with the possibility of renewal.

The Energy Law provides for the possibility of suspending a licence, upon request of the interested entity. REA is also entitled to cancel the licence: (i) upon the request of an energy undertaking, (ii) in the event that an energy undertaking is not fulfilling the conditions imposed by the licence, (iii) non-compliance with the material conditions for carrying out the energy activity, (iv) non-compliance with orders from the energy inspectorate. REA may also temporarily cancel a licence if the energy undertaking does not

fulfil specific conditions for a particular gas activity, does not maintain gas facilities properly, and does not determine prices against methodologies adopted by REA, etc. REA shall leave an additional remedy period, no longer than 60 days, for compliance and shall cancel the licence permanently should the energy undertaking fail to remedy the breach.

4.4 Exploration and production

The exploration and production of natural gas and other hydrocarbons in Montenegro is regulated by the Law on Hydrocarbon Exploration and Exploitation ("Zakon o istraživanju i proizvodnji ugljovodonika", Official Gazette of Montenegro, No. 41/10, 40/2011 and 62/2013) ("Hydrocarbons Law").

According to that piece of legislation, natural gas may be explored and produced only on the basis of concessions awarded by the Government through concluding a concession agreement on gas exploration or a concession agreement on gas exploitation and exploration.

This law lays down the conditions, manner and procedure for research and production of hydrocarbons and regulates a number of other related issues. The Law excludes the application of other laws potentially applicable to exploration and production of carbons, such as the general Concessions Law, the Law on Mining and the Law on Geological Exploration. The activities of research and production of hydrocarbons may be performed only with a concession awarded by the Government of Montenegro (for research) or the Parliament (for production) in accordance with the Hydrocarbons Law.

The Ministry of Economy ("Ministry") is in charge of all legal, administrative and technical issues related to the application of the Hydrocarbons Law.

The Hydrocarbons Law foresees two types of concession: for exploration and for production of hydrocarbons. However, the production concession may also cover an exploration phase.

The procedure for the award of concession is almost identical for both concession types. The public invitation by which the procedure is initiated contains, inter alia, the following elements:

- (a) subject-matter of the concession;
- (b) existing technical information;
- (c) conditions to be fulfilled by the prospective concessionaire and the operator (technical, financial, organizational, etc.);
- (d) bidding criteria;
- (e) deadlines for submission and withdrawal of bids;
- (f) bid bond details.

Interested bidders are provided with tender documents comprising the instructions for the preparation of bids, including on the content of bids and the manner of bid submission as well as other information of relevance for the award of concession. The Hydrocarbons Law specifies that one of the mandatory elements of the bid is a proposal of a working programme.

The Tender commission, formed by the Ministry, prepares the ranking list which is delivered to the Ministry and then published on the Ministry's website. The bidders are allowed to review the documents in the period of 8 days and submit an appeal within an additional 8 days deadline. The Ministry is required to reach a decision on the appeal within 8 days as of submission of the appeal. The Ministry then submits to the Government a detailed report, the ranking list and the proposal of the concession contract ("predlog ugovora o koncesiji").

The decision on the award of concession for exploration is issued by the Government, whereas in the event of a concession for production - the decision is issued by the Parliament upon the Government's proposal. A concession for exploration assumes the right of the concessionaire to perform geological, geophysical or other detailed analysis, in order to determine tectonic and structural features of the land or seabed and evaluate existence of hydrocarbons.

The exploration concession is awarded by the Government of Montenegro for a period of up to 2 years. Within 6 months following the end of the research works, envisaged by the working programme, the concessionaire is obliged to deliver a report containing research results. The mandatory content of this report is supposed to be prescribed by the Ministry.

A production concession allows the concessionaire to produce hydrocarbons in accordance with the law. A production concession consists of the following phases:

1. Exploration phase and verification of reserves - the maximum duration is 6 years and can be extended for up to 2 additional years upon a decision of the Government;
2. Development phase - based on the development and production plan submitted by the concessionaire to the grantor in accordance with the concession contract;
3. Production phase - starts on the day of first extraction of the hydrocarbons from the well, and may last up to 20 years with the possibility of extension for half of the initial period of the concession.

The main features of the concession arrangement:

- (a) The surface area of the production field is determined by the concession contract and the maximum surface area is 150km²; exceptionally, it may be increased to 300km². Any surplus surface area should be returned to the grantor once the production phase starts;
- (b) The Law prescribes two types of fees: (i) area fee, payable on the annual level based on the surface area covered by the concession and amounts to EUR 300 per 1km² (increased tenfold in the case of extension of the exploration phase) and (ii) royalty fee, determined as a percentage of the quantity of gas produced by the concessionaire and amounting to 2% of the produced quantity of gas at the point of extraction. The amounts, manner of calculation and payment of these fees is further regulated by the Decree on the Manner of Calculation and Payment of the Fee for Production of Oil and Gas (Uredba o načinu obračuna i plaćanja naknade za proizvodnju nafte i gasa, Official Gazette of Montenegro, No. 13/14);
- (c) A special corporate income tax will be payable by the concession company. The Law which envisages the introduction of this tax has still not been adopted but, according to the draft version, the tax rate is set at 59% of the tax base.
- (d) The concessionaire is obliged to incorporate a Montenegrin company to pursue the concession project;
- (e) The concessionaire is obliged to allow third party access to the facilities and the upstream network for joint use provided that it does not interfere with the regular operations of the concessionaire and other entities who already acquired the access right. The manner and conditions of access are supposed to be regulated in detail by implementing bylaws to be adopted by the Ministry;
- (f) If a well is located on territory belonging to two concessionaires, the grantor may request the concessionaires to propose a programme of joint development and production;
- (g) The Law prescribes detailed obligations of the concessionaire regarding the protection of the environment, safety of production, revitalization of the affected environment and the plan for conservation of the well and removal of the equipment following the completion of production phase;
- (h) The concessionaire is obliged to procure insurance for the duration of the concession contract in accordance with the best international practice in this industry and provide evidence thereof to the grantor. The Law prescribes for the obligation of the concessionaire to indemnify the grantor and third parties for all the damages incurred as a result of

- concessionaire's actions during the concession agreement. The concessionaire is specifically obliged to compensate all environmental damages caused in the course of execution of the concession contract for production;
- (i) Engagement of the contractor and subcontractors is subject to the Ministry's approval;
 - (j) The Law specifically prescribes for the grantor's right to impose the mandatory purchase of part or all of the oil and gas produced, at a price equal to the international market price for that quantity and quality;
 - (k) If the concessionaire is a consortium, each member is jointly and severally liable for all the obligations arising from or in connection with the concession agreement;
 - (l) A pledge or mortgage over the assets obtained under the concession contract or over production facilities is possible only with the grantor's approval;
 - (m) Disposal of stakes or other ownership interest in the project company as well as disposal of ownership or other rights of the concessionaire may be performed only with the grantor's approval.

The public tender was launched in August 2013 and bid submission deadline was set for 15 May 2014. The tender attracted the world's largest oil and gas companies, since recent geological explorations have revealed the possible presence of nearly 425 billion m³ of natural gas in the coastal area of Montenegro.

4.5 Transmission and access to the system

(a) General

Since gas infrastructure is rather undeveloped, there is no gas transportation system in Montenegro for the time being. Nevertheless, the Energy Law sets out rules for the potential future gas transmission systems.

(b) Access to the gas transmission system

A gas transmission system operator ("GTSO") is obliged to provide access to the gas transmission system ("GTS") to all customers based on non-discriminatory principles. The Government appointed state-owned "Montenegro Bonus" to act as the operator of the gas transmission system. GTSO is entitled to reject access to the system in the event of: (i) a lack of transportation capacity, (ii) if access would endanger performance of public services, (iii) GTS technical incompatibility, (iv) severe economic and financial problems caused due to the take or pay obligations (upon the request

of the supplier that has entered into the take or pay gas supply agreement).

Major new gas infrastructure such as interconnectors, transportation gas lines, LNG and LPG facilities and storage facilities, may, upon request, be exempted, from the obligation to provide access or to apply regulated tariffs and conditions under certain conditions.

4.6 Storage

Since Montenegro still does not have any gas storage facilities, the storage sector appears under-regulated. However, the public gas supplier and GTSO, storage facility operator shall be appointed by the Government in 2013, but no later than 90 days after the acquisition of the construction permit for the development of a gas transmission system in Montenegro. Operating and storing shall be subject to a licence issued by the REA. The rules applicable to the GTSO access shall be mutatis mutandis applied to gas storage and access to gas storage.

4.7 Liquefied natural gas and liquefied petroleum gas

The Energy Law regulates the following activities related to liquefied natural gas ("LNG") and liquefied petroleum gas ("LPG"): (i) transportation and storage of LNG, (ii) operation of LNG system, (iii) operation of LPG system, (iv) wholesale and supply of LNG and (v) wholesale and supply of LPG. Performance of any of the above activities is subject to obtaining a licence from the REA.

Under the previous energy law, the energy companies mostly held licences for the commercial transport, storage and supply of LPG, while under the new Energy Law, 20 licences for supply of LPG, 10 licences for storage of LPG and eleven licences for the wholesale trade of LPG have been issued by the REA.

5. UPSTREAM OIL MARKET

5.1 Market overview

Currently there are no oil exploitation capacities in Montenegro. However, years of undersea exploration have indicated that there are significant reserves of oil and gas on the seabed near the Montenegrin coast. The Government of Montenegro has launched a tender for the award of concession for further exploration and exploitation of hydrocarbons (oil and gas).

5.2 Regulatory overview

Similarly to the natural gas sector, the oil sector is governed by the Energy Law as well as the Law on Mining, the Law on Hydrocarbon Exploration and Exploitation and the Law on Spatial Planning and the Construction of Buildings.

5.3 Regulated oil market activities

The Energy Law regulates the following licensed activities: (i) oil transportation; (ii) transport of oil derivatives; (iii) wholesale trading; (iv) retail trading and (v) storage of oil and oil derivatives. Any entity wishing to perform any of the natural gas activities must be a local entity registered with the Montenegrin Commercial Register and must apply for a licence to be issued by REA as the main regulatory body in the gas sector. The licences are issued for a period of up to 15 years with a possibility of renewal.

The Energy Law provides for the possibility of suspending a licence, upon request of the interested entity. The REA is also entitled to cancel the licence: (i) upon the request of an energy undertaking, (ii) in the event that an energy undertaking is not fulfilling the conditions imposed by the licence, (iii) non-compliance with the material conditions for carrying out the energy activity, (iv) non-compliance with orders from the energy inspectorate. The REA may also temporarily cancel a licence if the energy undertaking does not fulfil specific conditions for a particular gas activity, does not maintain gas facilities properly and does not determine prices against methodologies adopted by REA, etc. The REA shall leave an additional remedy period, not longer than 60 days, for compliance and shall cancel the licence permanently should the energy undertaking fail to remedy the breach.

5.4 Exploration and production

The Law on Hydrocarbon Exploration and Exploitation governs the exploration and exploitation of oil and all the above-mentioned with regards to the exploration and exploitation of natural gas also applies to the exploration and exploitation of oil.

However, the royalty fee is determined and paid on the basis of the quantity of oil/gas extracted and the prevailing market price and the percentage rate is progressive: 5% for amounts up to 10,000 Barrels per day, 7% for amounts above 10,000 and less than 20,000 Barrels per day, 10% for amounts above 20,000 and less than 30,000 Barrels per day and 12% for amounts above 30,000 Barrels per day.

ROMANIA

1. INTRODUCTION TO THE ENERGY MARKET

The Romanian energy market has developed significantly in the past 13 years; a period during which the legislation was harmonised with the EU legal framework. Some of the most important privatisation processes in the energy field have been carried out, more specifically the privatisation of electricity and gas distribution and supply companies, as well as of one of the largest Romanian company acting in the oil sector. The Energy market has been and continues to be one of the most attractive sectors for investors, specifically due to Romania's remarkable potential for energy sources.

However, as a rapidly evolving and relatively young energy market (compared to other EU markets) regulations do not always keep pace and may be incomplete or not correlated with the market. The preferred sub-sector in the last years was the electricity market (specifically the renewable field), but due to reshaping of the renewable energy support schemes and new discoveries of gas resources in the Black Sea at present the oil & gas industry appears to be the new winner.

2. ELECTRICITY

2.1 Market overview

Following its full liberalisation in 2007, arising from European requirements, the Romanian electricity market has been constantly developing and expanding. A new electricity law was passed in 2012, in view of securing the implementation of the third energy legislative package adopted at the European level.

The complete liberalisation of the market has not been achieved yet. However, progress has been made and future legislative changes are envisaged to align the Romanian market to European requirements. It is worth noting that Romania was one of the first European markets to develop an independent platform for energy

transactions which currently supports the bilateral contracts market, the day-ahead market, the green certificates market, the emissions certificates market, the intra-day market and the OTC market. The main participants in the electricity market are: electricity generators, electricity suppliers, electricity distributors/distribution networks operators, electricity transporter/transportation network operator, eligible consumers and captive consumers.

2.2 Regulatory overview

The principles of the electricity market are currently regulated by the Electricity and Gas Law No. 123/2012 (published in the Official Gazette No. 485 of 16 July 2012), ("Energy Law") and detailed in secondary legislation including government decisions, and decisions and orders issued by the relevant regulatory authority (the National Regulatory Authority for Energy - ANRE).

Other relevant legislation regarding the field of electricity includes: ANRE Order No. 48/2013 on the approval of the Regulation for granting licences and authorisations in the electricity sector (published in the Official Gazette No. 445 of 22 July 2013 and entered into force on 24th September 2013) ("Electricity Licensing Regulation"), ANRE Order No. 59/2013 on the approval of the Regulation for the connection of users to public electricity networks (published in the Official Gazette No. 517 bis of 19 August 2013 and entered into force on 18th December 2013) ("Interconnection Regulation") and Law No. 220/2008 regarding the system for promoting production of energy from renewable energy sources (published in the Official Gazette No. 577 of 13 August 2010), as subsequently republished, amended and completed ("Renewables Law").

The Energy Law establishes the general framework for electricity regulated activities, electricity licences and authorisations and the main rights arising therefrom, electricity market principles and the main competencies of the involved authorities (i.e., the relevant ministry – currently, the Ministry of Economy, the Romanian Energy Regulatory Authority – ANRE and the Department for Energy - a governmental structure functioning within the Ministry of Economy). According to the Energy Law, the carrying out of

electricity related activities is usually subject to obtaining specific licences or authorisations from ANRE. The Electricity Licensing Regulation details the conditions and procedure to be followed for the granting of the main authorisations and licences. In addition the granting of other authorisations/ licences is contemplated in other secondary legislation.

The Government determines the national energy strategy which defines the objectives of the energy sector and the best ways of achieving such objectives in the medium or long-term.

The Ministry of Economy following the directions set out in the energy strategies and based on the Government programme, determines the energy policy consisting of measures for stimulating investment and research and development activities. The Ministry of Economy also initiates legislative projects in the field, supervises the application of and compliance with the measures regarding environmental protection.

ANRE is the Romanian regulatory authority for energy, acting as an independent body responsible for regulating and ensuring a competitive electricity and gas market environment. ANRE must accomplish the objectives provided under the Government Emergency Ordinance no. 33/2007 regarding the establishment and organization of ANRE, which refer, amongst others, to ensuring sustainable development of the national economy, diversification of the energy resources, establishment and functioning of a competitive energy market, granting non-discriminatory and regulated access to the energy market and to the public electrical networks to all participants, ensuring transparency with respect to the determination of any tariffs, taxes and prices in the energy sector, environment protection etc.

In its capacity as regulatory authority in the electricity sector ANRE has attributions related to (i) regulatory aspects; (ii) authorisation, supervision and control functions; (iii) reporting and information and (iv) mediation and jurisdiction function. Thus, it elaborates, determines and supervises the implementation of the national mandatory regulations necessary for the efficient functioning of the internal market in the energy sector, on the basis of transparency, effective competition and consumers' protection principles. ANRE acts in close cooperation with the Competition Council, the National Authority for Consumers' Protection, ministries and other relevant public administration organisations, consumer and professional associations, employers' associations and syndicates.

2.3 Regulated electricity market activities

Pursuant to the Energy Law, the implementation of new energy capacities as well as the refurbishment of existing ones is based on establishment authorisations. Furthermore, generation, transportation, providing of system services, distribution and supply, as well as the management activities of the centralised electricity markets are carried out on the basis of licences granted in accordance with the law and in the case of public assets and public services also based on specific concessions granted by the relevant authorities. The performance of any activities without the possession of proper authorisations/ licences is subject to specific sanctions.

ANRE grants the following types of authorisations and licences for electricity related activities:

- (a) Establishment authorisations – must be obtained for erecting new electricity generation capacities, including co-generation capacities, or for the refurbishment thereof, if the installed electricity power of the capacities in question exceeds 1MW;
- (b) Licences for: (i) the commercial exploitation of electricity generation capacities and of thermal energy capacities in co-generation; (ii) the performance of the electricity transportation service; (iii) the performance of the system service; (iv) the performance of the electricity distribution service; (v) the performance of centralised markets management activities and (vi) the performance of electricity supply activity.

2.4 Material provisions of electricity market law and licensing regulations

The applicable regulations set out the documentation to be prepared and criteria to be met by each applicant/ project for certain licences and authorisations. The criteria taken into account by the regulatory authority upon the analysis of the file are determined by the activities to be performed and are mainly related to the available technical and organisational, financial and human resources capabilities. Moreover, foreign entities are required to have a secondary office in Romania throughout the performance of the licensed/ authorised activity.

In general any changes which might occur with respect to the authorisation/licence holders (e.g., changes of the statute regarding the share capital or the patrimony, split-off, merger, transformation, change of name) must be notified to ANRE within 30 days as of their occurrence (with the exception of merger and

de-merger which must be notified with 60 days prior to the date when the merger/de-merger is effective) and ANRE will decide either to annul the existing authorisation/ licence and issue a new authorisation/ licence or the amendment of the conditions joining the authorisation/ licence. This requirement is further detailed in the case of each specific licence in the conditions attached to the licences issued to each applicant.

Pursuant to the general terms of the standard licences granted for performing activities of supply the titleholders of such licences have the obligation to notify ANRE of any intention of their shareholders to perform operations which may result in the disposal of the fixed assets necessary for the performance of the relevant activity or which may result in a 25% decrease of the value of the existing share capital of the titleholder.

Additionally, the titleholders of the mentioned licence must notify ANRE of any share transfer operation between the existing shareholders or between the existing shareholders and third parties. When receiving a notification as mentioned above, ANRE will have to analyse whether following the notified change the titleholder will still be able to perform its obligations under the licence and will communicate to the titleholder its decision.

The possibility to transfer the rights granted under a licence is provided in the case of most electricity licences (transportation, distribution, generation, supply). The transfer must be made by means of a contract stipulating the rights and obligations of the parties and is subject to the prior approval of ANRE, under the sanction of annulment. The transferor will remain jointly liable with the transferee in respect of the transferred obligations. Any operations on the market shall have to be performed in compliance with the unbundling principles, implemented in the Romanian legal framework in accordance with the EU directives.

In addition to the regulatory rules briefly mentioned above, merger control and corporate governance rules shall accordingly apply.

2.5 Trading and supply of electricity

Exchanges between operators take place on the electricity market which is divided into the wholesale market and the retail market. According to the provisions of the Energy Law, on the wholesale market, all transactions with electricity must be carried out on the centralized platforms managed by OPCOM in a non-discriminatory and transparent manner. The platforms managed by OCOM include the centralised market for bilateral contracts,

the centralised market with continuous negotiation (forward), the day-ahead market, the OTC platform, intra-daily market.

On the competitive segment of the electricity market, the prices are the result of the interplay between the demand and the offer. Thus, on the wholesale market, power purchase agreements have to be executed in the centralised electricity markets. This includes the centralised market for bilateral contracts, the centralised market with continuous negotiation (forward), the day-ahead market, OTC platform, intra-daily market and the balancing market. A market participant cannot enter into negotiated wholesale electricity bilateral agreements outside the organised specific markets. Furthermore, market participants wishing to conduct cross-border trading activities may also participate in public auctions for the allocation of available cross-transfer capacity.

From perspective of electricity trading and supply the specific obligations of licenses suppliers in relation to ensuring the reliability of the transmission grid are also relevant. For this purpose the license holders (i.e. generation, transmission and distribution, supply operators) have to be registered on the balancing market, to notify the daily transmissions of electricity, and additionally trade the electricity available after notifying of the daily transmissions transactions. They must also provide financial guarantees to the transmission and system operator for all the imbalances which may occur between the programmed and effectively generated electricity, between projected and actual transactions, etc. The licence holders may choose to delegate the balancing responsibility to another entity.

All electricity markets transactions are settled by the settlement operator, functioning as an independent entity. Apart from the above mentioned markets, during the period of the support scheme for electricity generated in cogeneration units (i.e., 2010 - 2023), operators of cogeneration units (i.e., combined heat and power units) may sell any electricity unsold in the centralised electricity market by regulated agreements at regulated prices. The regulated prices for electricity produced by cogeneration are set by ANRE every year at the level of 90% of the average transaction price of electricity registered for the previous years on the day-ahead market, based on the principles previously mentioned.

In respect of the electricity supply prices and tariffs, please note that although the Romanian electricity market was fully liberalised

as of 1 July 2007, the market continues to include regulated segments, such as: the supply to household consumers (regulated until 31st December 2017), consumers who have not exercised their eligibility right at the entry into force of the Energy Law benefiting of the universal service, non household consumers with an average number "on paper" of employees lower than 50 and an annual turnover or a total value of the assets from the accounting balance sheet (according to the annual financial reports) below 10 million Euro.

Household consumers and the above mentioned non-household consumers are the beneficiaries of an universal electricity supply service having the right to be supplied with electricity at reasonable, transparent, easy comparable and non-discriminatory prices. The Energy Law regulates the concept of supplier of last resort representing the supplier who provides the universal electricity supply service to the clients mentioned above. Even after the removal of regulated prices, ANRE will have the right to endorse the prices at which the supplier of last resort intends to sell electricity to the above mentioned clients.

The regulated prices or tariffs must: (i) be non-discriminatory, objective and transparent, based on methodologies approved by ANRE; (ii) cover economically justifiable costs; (iii) allow consumers who do not exercise their eligibility the right to choose the price or tariff which they deem most favourable, out of those offered by the supplier, while complying with the conditions set out by ANRE and (iv) ensure a reasonable rate of invested capital-earning capacity, in accordance with ANRE methodologies.

ANRE has issued specific methodologies regulating the electricity prices applied for the household consumers and assimilated household consumers and for end consumers who do not exercise their eligibility right. The network and system operation tariffs continue to be regulated in accordance with methodologies for determining transport and system, and distribution related tariffs and terms as approved by ANRE.

For electricity transmission services ANRE determines regulated revenue based on price cap methodology (de tip plafon), which sets out the value of the revenue required for the performance of the transmission services. When determining the regulated revenue, ANRE takes into account: a) the performance standard imposed on the transmission system; b) the evolution of the

quantity of transported electricity; c) the investment and development plan relating to the grid; d) the regulated rate of rentability; d) the justified costs of the transmission operator (e.g. operation and maintenance costs; costs for the acquisition of the energy for the technological consumption; etc). The tariffs are differentiated based on geographical areas, depending on the impact of the injection or extraction of electricity in/from the nodes of the electricity transmission system.

For the distribution service, ANRE has developed a methodology setting out the electricity distribution service tariffs which regulates the prices and tariffs for distribution services based on the following principles: (i) ANRE determines the regulated revenue for the distribution service based on a tariffs basket cap methodology (cos de tarife plafon); (ii) for the calculation of distribution tariffs any justified cost associated with distribution activity is only considered once; (iii) the calculation of the prices and tariffs takes into account the justified costs of the distribution activity, the expenses related to development and environmental protection, as well as a reasonable profit margin. ANRE may limit tariffs by limiting the level of the prices/tariffs which comprise the basket cap tariff. The tariffs for distribution operators are determined annually E.

2.6 Transmission and grid access

The general principle applicable to grid access is non-discriminatory access for all electricity market participants to the public transmission/distribution networks, regulated third party access being the right to connect to and use, in accordance with the conditions provided by law, the transmission or distribution networks. The Energy Law sets out the obligation of the transmission/ distribution operators to grant access to the relevant networks. However, applicants are required to cover the specific costs of interconnection and also part of the costs required for the enhancement of the network. Access can be denied only for just cause if the connection affects the safety of the National Power System, through the non-observance of the technical norms and the performance standards or in case the transmission/distribution network operator does not have the required capacities.

Pursuant to the Interconnection Regulation, interconnection to the electricity networks is based on an interconnection permit issued by the transmission/ distribution operator, the payment of the interconnection tariff by the applicant and an interconnection

agreement between the applicant and the transmission/ distribution operator. The interconnection permit is a standard permit. However, the interconnection agreement may be and is often subject to negotiations between the parties.

The tariffs for interconnection to the public electricity networks are determined based on a methodology approved by ANRE, and they generally have three components: a) a component relating to the costs of the interconnection installation; b) a component relating to the placing under tension of the use installation and c) a component relating to the reinforcement of the grid upstream from the interconnection point.

2.7 General approvals and permits for electricity generation facility project implementation

For the implementation of an electricity generation facility project, the following main categories of permits need to be obtained:

- (a) Permits for the prior construction phase which usually include: urbanism certificates, environmental permits and/or approvals, approval in principle from the local public authority, land planning documentations;
- (b) Permits for the construction phase, usually including: building permits, interconnection permits and establishment authorisations (issued by ANRE);
- (c) Permits for the operation phase which may include: environmental authorisations and other operating permits, the electricity generation licence as well as other relevant electricity licences, such as, for example, the electricity supply licence.

Depending on the actual features of the project, the range of applicable permits may vary significantly. Furthermore, in the case of electricity generation facilities envisaging the use of renewable energy sources for the generation of electricity and/or thermal energy, additional special permits will apply.

2.8 Forthcoming developments

While most of the secondary regulations have been updated, so as to be correlated with the Energy Law, there are still some secondary regulations which have not been amended to be in line with the Energy Law. In terms of investments in conventional and nuclear energy, we note mainly the intended construction of Tarnita-Lapustesti Pump-Storage Hydro Power Plant and the intended construction of nuclear power generation units 3 and 4 at Cernavoda Nuclear Power Plant by EnergoNuclear (a project

company established for this purpose) as well as refurbishing projects for thermo generation capacities. The mentioned projects are in the inception stages and will be expecting investors in the near future.

3. RENEWABLE ENERGY

3.1 Market overview

Romania benefits from significant potential in various renewable energy sources: wind, solar, hydro, biomass, etc. While in the past years investors have focused mainly on wind, lately there has been a move towards solar projects. In promoting its resources, Romania was quick to adopt supporting mechanisms for all renewable energy sources consisting mainly of a system of mandatory quotas combined with green certificate trading.

3.2 Support schemes

The main support schemes for renewable energy in Romania are:

- (a) Promoting system of green certificates consisting of a system of mandatory quotas combined with green certificates ("GC") trading;
- (b) Financing scheme based on Environmental Fund resources;
- (c) Financing scheme based on EU structural funds; and
- (d) Support for joint implementation projects through Emission Reduction Units ("ERUs").

GC promoting system

In Romania the main system for promoting electricity generation from renewable energy sources ("E-RES") functions as a staid aid scheme (and for generation units exceeding a certain level as individual state aid) and consists of a system of mandatory quotas combined with GC trading. Based on such system, every year each electricity supplier must purchase a number of GC equal to the mandatory quota provided by the relevant regulations multiplied by the quantity of electricity yearly supplied to end consumers. The transport system operator issues GC to the relevant generators in consideration of the quantity of E-RES generated and delivered into the network. Under such a system the GC certifies the generation from renewable energy sources of a certain quantity of electricity which may be traded distinctively from the associated electricity in a parallel market) and which represents a benefit for the E-RES generators in exchange for delivering "clean" electricity into the network. The GC are traded on the centralized green certificates market managed by OPCOM.

Last year the support scheme was changed quite significantly : (i) in the case of projects functioning at 31 December 2013 by suspending for a few years the issuance of a certain number of GC / MWh determined depending on the renewable energy source, for the future projects by reducing the number of GC/ MWh depending on the renewable energy source as follows: intending to obtain funds from the Environmental Fund are set out in the Ministry of Environment and Forests Order 714/2010 (published in the Official Gazette No. 341/2010). According to information publicly available, the financing scheme provided under Order 714/2010 was brought to the attention of the Competition Council as a state aid scheme with a duration until 31 December 2011. No publicly available information is available on the approval of a similar state aid scheme for the period after December 2011.

On an annual basis one or more financing sessions can be organised by the Administration of the Environmental Fund, relating to type of projects and within the limits of the amount established at the opening of the financing session. The framework of the financing sessions is determined by a decision of the president of the Administration of the Environmental Fund. While no session is currently ongoing, the 2014 annual budget approved for the Administration of the Environmental Fund sets the amount of RON 70 million for this type of projects.

"Rondine" Programme

The Administration of the Environmental Fund also acts as the operator of the "RO06 Renewable Energy" - Rondine Programme. This programme was established on the basis of the 2012 Memorandum of Understanding entered into by Romania with Norway, Iceland and Liechtenstein on the implementation of the 2009 - 2014 Financial Mechanism of the European Economic Area. Under this programme, the amount of Euro 8,387,406 has been allocated for the development of hydropower and geothermal projects. An additional amount of Euro 4,270,000 may be allocated by the donor States under this programme. The Administration of the Environmental Fund has announced a financing session opened for the period 20 March - 20 May 2014, the conditions of which are set out in the financing guide published at www.rondine.ro.

EU structural funds

Currently, no structural funds are available for entities who envisage developing electricity generation capacities from renewable energy sources. Under the partnership agreement

submitted by the Romanian Government to the European Commission, Romania identified proposed priorities for funding elements such as: a) promoting the production and distribution of electricity and thermal energy from renewable energy resources (biomass, geothermal, micro hydro); b) improving energy efficiency in enterprises by high efficiency low power cogeneration systems rated less than 8 MW, etc. The exact type of projects which will be funded through structural funds will be detailed in the operational programmes to be adopted by the Romanian Government, once such programmes have been approved by the

European bodies

The state aid scheme for the granting of structural funds for electricity generation projects from renewable energy sources was approved by Government Decision No. 750/2008 (published in the Official Gazette No. 543/2008) only until December 2013. Thus, currently, there are no structural funds available for the development of electricity capacities generation from renewable energy sources.

ERUs

ERU's may be issued for Joint Implementation ("JI") projects that have been developed or are in the process of being developed in line with the 1997 Kyoto Protocol to the United Nations Framework Convention on Climate Change (the "Convention"). Pursuant to this international framework and enactments adopted by Romania for its implementation, JI projects could be carried out, amongst others, for the promotion of power generation using renewable sources (including wind farm projects).

4. NATURAL GAS

4.1 Market overview

The Romanian gas market has undergone significant transformation in recent years due to sector reorganisation and restructuring and the development of the regulatory framework as a result of the sector's dynamics and the implementation of the European Union's regulations in the national legislation. The restructuring of the natural gas sector is a consequence of the commitment of the public authorities to adapt to the realities of the natural gas sector, as well as of the collaboration with European structures.

The liberalization of the natural gas market, in accordance with European rules requirements, has as goals the creation of a real competitive environment allowing consumers the possibility to choose their natural gas supplier and increasing investments in the gas sector. New regulations continue to be implemented in order to achieve the full liberalisation of the natural gas market.

The natural gas market is still divided into the competitive market and the regulated market. On the former, the prices for supply of gas are formed freely, irrespective whether the transactions are wholesale or retail. The regulated market includes regulated activities such as transmission, distribution or storage as well as regulated supply. The contractual relationships on the regulated market are based on regulated framework agreements and prices and tariffs determined and approved based on specific procedures approved by ANRE.

The regulated prices for the supply of gas are being gradually phased-out, as follows: (i) supply to non-household consumers should last until the 31st of December 2014, with the option that such a measure be postponed for one year (if it is considered that the market stability would be endangered by the liberalization) and (ii) for household consumers shall apply until the 31st December of 2018.

The participants in the natural gas market are: natural gas producers (entities possessing an oil agreement and supply licence); natural gas suppliers (entities possessing a supply licence for natural gas); national transmission system operator (the national company Transgaz – entity possessing a transmission licence for natural gas, as well as the concession for natural gas transmission and related public property items); natural gas distributors (entities possessing a licence for natural gas distribution, as well as the concession for natural gas distribution); natural gas underground storage operators (entities possessing a storage licence, as well as a concession agreement for natural gas storage and related assets); clients (wholesale, final, or any other entity purchasing natural gas).

4.2 Regulatory overview

Electric energy and natural gas law no. 123/2012 as amended and completed (published in the Official Gazette No. 485/2012) ("Energy Law") is the main legislation governing the natural gas sector. In the case of transport and upstream activities the provisions of the Energy Law are complemented by those of the

Petroleum Law No. 238/2004, as amended and completed (published in the Official Gazette No. 535/2004) ("Petroleum Law"). Further regulations are included in secondary legislation, such as: ANRE Order 34/2013 approving the Regulation for granting of set-up authorizations and licenses in the natural gas sector (published in the Official Gazette No. 427/2013) ("Natural Gas Licensing Regulation"), ANRE Decision No. 1271/2004 approving the Framework conditions for the validity of the natural gas distribution licence, Framework conditions for the validity of the natural gas supply licence and Framework conditions for the validity of the functioning authorisation for the natural gas distribution objectives/ systems, as amended and completed (published in the Official Gazette No. 1165/2004), ANRE Decision No. 1362/2006 approving the Framework conditions for the validity of the natural gas transmission licence (published in the Official Gazette No. 27/2007), ANRE Decision No. 824/2004 approving the regulation relating to the regulated access to the underground storage of natural gas (published in the Official Gazette No. 562/2004) ("Storage Regulation"), Government Decision No. 1043/2004 (published in the Official Gazette No. 693/2004) ("Transmission System Access Regulation"), ANRE President Order no. 16/ 2013 approving the Network Code for the natural gas national transmission system (published in the Official Gazette No. 171/2013) ("Network Code").

The Energy Law sets out the general framework for carrying out activities specific to the natural gas sector in competitive and transparent conditions.

To this end, the Energy Law sets forth the main principles regarding:

- Competences of the relevant authorities for the natural gas sector;
- Concession of transmission, storage and distribution services;
- Authorizations and licenses required for regulated activities;
- Production, transmission, distribution, underground storage and supply of gas as well as the operating of centralized markets;
- Access and connection to the network;
- Liquefied petroleum gas (LPG), compressed natural gas for vehicles (CNG) and liquefied natural gas (LNG);
- Ensuring the quality of equipments, installations, machines, products and procedures used in the natural gas sector;
- New infrastructure;
- Public service obligation;
- Natural gas market;

Prices and tariffs; The Government, the Ministry of Economy and other specialised institutions of the central public administration undertake measures to achieve the objectives included in the energy strategies and monitor the level of compliance. The Ministry of Economy develops policy in the natural gas field and ensures its compliance. At present, the regulatory authority in the field of natural gas is ANRE which functions as an autonomous public institution. ANRE develops, applies and monitors compliance with the mandatory regulations at the national level necessary for the functioning of the natural gas sector and market in an efficient, safe, competitive, transparent, non-discriminatory manner, protecting the consumers and the environment.

According to the Energy Law, natural gas related activities are usually performed on the basis of on specific licences or authorisations issued by ANRE and in the case of public assets and public services also based on specific concessions granted by relevant authorities. The Natural Gas Licensing Regulation further details the conditions and procedure for granting the main authorisations and licences.

4.3 Regulated natural gas market activities

In order to set up, operate and/or make changes to production, transmission, storage, and distribution capacities of natural gas, and to carry out the supply, transmission, storage, and distribution activities in the natural gas sector, Romanian or foreign entities must possess authorisations and/or licences issued by ANRE based on specific regulations. Concessions must be awarded by public tender by the relevant authorities in relation to the use of public property assets required for the transmission of natural gas and storage (facilities and systems), and the public services of transmission, storage and distribution of natural gas.

- ANRE issues the main types of permits for the natural gas sector:
- (a) Set-up authorisations for new upstream pipelines auxiliary to the production of natural gas, transmission, storage, distribution systems;
 - (b) Licences for performing activities such as supply of natural gas, operation of transmission, distribution or storage systems and operating centralized markets.

4.4 Material provisions of the natural gas market law and licensing regulations

Similar to the electricity market, the applicable regulations require that certain documentation is prepared and criteria are met by each

applicant/ project for certain licences and authorisations. In principle, the applicant for a natural gas authorization/ license must be a legal person with its registered office in Romania. In the event that the applicant is a foreign legal person without a stable office in Romania, the Natural Gas Licensing Regulation expressly requires the establishment of a secondary office in Romania as a mandatory pre-condition, in order for a foreign entity to apply for a natural gas authorization/ license (however, no further provision is made as to whether such secondary office must be a subsidiary, a branch or any other type of secondary office opened in Romania).

ANRE shall analyze the submitted documents, in order to assess their conformity with the legal requirements and will notify the applicant, within 30 calendar days from the submission of the request, in the event of any shortcomings. The authority decides on the granting/ refusal of the authorization/license within 30 days from the date of the submission by the applicant of the complete documentation.

Reasons for the refusal to grant an authorization/license must be objective and non-discriminatory, the refusal is issued and grounded through a decision of the ANRE President and the applicant may challenge the decision in the administrative disputes court, pursuant to the law.

4.5 Exploration and production

The exploration and production of natural gas are governed by petroleum laws and corresponding regulations, as detailed below.

4.6 Transmission and access to the system

Access to the transmission system is pursuant to non-discriminatory procedures and criteria of the transmission system operator. Access may be refused only in certain cases, namely if: (i) the capacity of the objective/ system is insufficient (i.e., the capacity of the national transmission system is insufficient); (ii) the access to the system impedes on the fulfilment of the public service obligations and the safety in exploitation; (iii) the access to the system may lead to serious economic and/or financial difficulties related to the “take-or-pay” contracts for the license/ authorization holder to whom access is requested from; (iv) the quality of natural gas which is to be introduced in the systems and/or in the gas storage facilities does not comply with the requirements imposed by the regulations in force and also (v) in the event that there are no objectives/ pipes as components of the systems to which the connection is envisaged to be made or in the event of failure by

the applicant to pay the connection tariff. The transmission system operator cannot refuse to grant access to the system and has the obligation to finance the necessary works to the extent that the performance of the objectives/necessary pipes for connection is economically justified and confirmed as such by ANRE. In certain cases when the establishment of certain objectives/ pipelines is not economically justified for the system operator, the applicant may contribute in a certain portion to the financing of the relevant objectives/ pipelines. Secondary legislation regulating the access to the network is yet to be adopted/ amended. The right of obtaining access to the transmission system is currently detailed in the Transmission System Access Regulation and the Network Code.

Besides connection to the transmission system, in order to benefit from transmission services, an interested entity must also reserve a capacity in the entry and exit points of the transmission system. The relevant capacity reservation is done on a “first-come, first-served” basis among all entities requesting reservation of capacity. Refusal of capacity reservation may be based on the following grounds: (i) the grounds for refusal of access to the transmission system provided by the Energy Law, as mentioned above; (ii) in the event that the transmission network user does not meet the legal conditions related to the requested capacity type; (iii) the user does not meet the financial and technical criteria required for the signing of the transmission agreement or (iv) the user has outstanding debts related to the performance of the previous transmission agreements, except for debts arising as a result of the fulfilment by the user of its public service obligations.

4.7 Trading and supply

The natural gas market continues to be formed of two segments: the competitive segment and the regulated segment. The competitive segment of the market is related to the trading of natural gas between suppliers and eligible clients. In the competitive segment prices are formed freely, based on supply and demand and competition mechanisms. The regulated segment of the market consists of natural gas supply at regulated prices and is based on regulated framework contracts at regulated tariffs: natural gas transmission, underground storage and distribution. For this segment of the market, the tariffs and prices systems are set by ANRE based on specific methodologies.

In relation to the regulated segment, until the full liberalisation of the domestic natural gas market and convergence of the price of

domestic production with the price of imported natural gas and in order to ensure non-discriminatory access for all consumers to domestic sources of natural gas, the supply of natural gas to consumers will be a "mix basket" consisting of quantities of current/ stored domestic production and imported gas (current/ stored). The "mix basket" shall be determined in such a manner as to ensure full coverage of the consumption demands at national level. The structure of the "mix basket" for non-household customers is proposed monthly by a specialized department of the transmission operator and approved by ANRE. For domestic customers and heat producers, the "mix basket" is set monthly by ANRE. Import gas price is determined on the basis of an indexation formula on oil prices and certain petroleum products listed on international stock exchanges.

The Government has imposed special taxes on the additional income obtained as a result of deregulation process in natural gas prices. Thus, companies operating both as natural gas producers and as suppliers have to pay a special tax amounting to 60% of additional income minus corresponding royalties and investments in the upstream segment. This special tax will continue to apply until 31st of December 2014.

4.8 Forthcoming developments

Although the Energy Law and subsequent secondary legislation have implemented Directive 2009/73/EC concerning the general rules for the internal market in natural gas and repealing Directive 2003/55/EC, there are still areas in which legislative developments and updates are expected. Certain steps have also been taken towards ensuring physical capabilities for the export of gas to other countries and in this respect there are several cross-border interconnection projects at various stages of development. As a current alternative, entities wishing to export gas to other countries have the possibility of using the back-haul procedure. Another development of interest is the possibility that a certain percentage of natural gas transactions shall be mandatorily done in a centralized market.

5. UPSTREAM MARKET

5.1 Market overview

Oil-related activities can be carried out by Romanian or foreign legal entities, in compliance with the conditions provided by the regulatory framework. The oil market is open to all interested

participants who are able to prove their financial and technical capabilities for carrying out oil-related activities. The market involves certain major players, either at a global or regional level, such as ExxonMobil and OMV Petrom SA. The interest in Romania's gas production capabilities has increased recently with the discovery of certain important reserves in the Black Sea. The possibility of shale gas exploitation is also considered by certain companies.

5.2 Regulatory overview

Unlike the natural gas sector, the Romanian oil market is regulated only to a certain extent. Oil-related upstream activities (e.g., exploration, development, and production) are mainly regulated by the Petroleum Law and the subsequent Methodological Norms for its implementation, approved in Government Decision No. 2075/2004 (published in the Official Gazette No. 1170/2004) ("Methodological Norms"). The main regulations are supported by a variety of secondary legislation.

The Petroleum Law contains the main principles applicable for carrying out oil activities; the principles of the regime of classified information; the main types of oil activities and concessions related thereto (petroleum agreements); and the main rights and obligations arising from the oil concessions together with the situations in which such may be suspended or revoked. The Methodological Norms describe in more detail the public procedure for the granting of oil concessions and the regime of the various types of oil concessions as well as the rights and obligations of the titleholders.

The National Agency for Mineral Resources ("NAMR") is the specialized authority for the oil sector. It is a body of the central public administration and is legally authorised and functions under the authority of the Government. The main duties of NAMR are: (i) the management of the state oil resources; (ii) negotiation of the terms and conditions of oil agreements and conclusion of such agreements on behalf of the state; (iii) secondary regulations; (iv) receipt, verification and registration of data and information regarding oil resources and reserves, ensuring the storage, systematisation and valorification; (v) monitoring and verification of oil production for the purposes of calculating royalties; (vi) monitoring the application of measures relating to surface and underground protection during the oil operations; (vii) monitoring compliance by the titleholder of the petroleum agreements, the applicable laws and regulations and ordering measures for compliance with such; (viii) approving the abandonment plan and

termination of concession based on compliance with the provisions of the environment recovery plan as approved by the competent environmental authorities.

NAMR is responsible for maintaining the Petroleum Book, a registration document comprising all data about the legal regime of the areas: the development and exploitation perimeter; ownership; topographical situation of the works related to the oil activities; the oil and production resources/ reserves; and data regarding the demarcation of oil perimeters and operations in the prospecting and exploration stages.

5.3 Regulated oil market activities

NAMR is responsible for granting concessions for petroleum activities (such as exploration, development, exploitation, storage, transmission, etc.) and public assets related thereto. The concession is awarded by public tender for a term of 30 years with the possibility of extension for another 15 years. NAMR may also grant prospecting permits which allow the titleholder to undertake exploration activities in a specific concession block for a maximum period of three years. The term of a prospecting permit cannot exceed 3 years.

The concession takes the form of a petroleum agreement concluded between NAMR and the Romanian or foreign legal entity who has been awarded the public tender. The concession enters into force subject to specific governmental approval. The titleholder of the concession pays an oil royalty for the entire duration of the concession. The percentage of the royalty payable by the titleholder of the petroleum agreement is determined in consideration of the type of activity undertaken by the titleholder (i.e., production, and transmission, underground storage of natural gas).

The current oil royalty payable for the performance of oil production activities varies between 3.5% and up to 13.5%, percentage applied to the value of the extracted oil quantities. The main types of petroleum agreements are:

- Exploration-development-exploitation petroleum agreement;
- Development-exploitation petroleum agreement;
- Exploitation petroleum agreement;
- Development petroleum agreement;
- Underground storage of natural gas petroleum agreement – please note that the performance of the natural gas storage activity requires both an ANRE licence and a NAMR petroleum agreement;
- Petroleum agreement for the concession of the national oil pipeline system;
- Petroleum agreement for the concession of the oil terminals.

The granting of oil petroleum agreements is based on transparent and non-discriminatory criteria. The transportation of oil is performed through main pipelines on a contractual basis in compliance with national and international legal provisions. The transportation agreements may not include unjustifiably restrictive conditions, or conditions endangering the security of supply and the quality of services. The transport of oil through the national transport system is a public national interest service for which Conpet possesses the concession. Conpet has the status of ordinary transport operator under the Petroleum Law and is thus obliged to ensure non-discriminatory treatment for all its clients and perform oil transport on the basis of tariffs regulated by NAMR.

The national oil transportation system is public property of the state and the concession for its use is the subject of a public tender procedure. Nevertheless, within the duration of the concession agreement, any investments made from the concessionaire's own resources and which relate to the operation of the national oil transportation system (such as modernisation and developments of the transportation system) shall be deemed to be assets in the public property of the state.

5.4 Material provisions of the oil market law and licensing regulations

A titleholder of a petroleum agreement may transfer to another legal entity, in full or in part, the rights and obligations acquired on the basis of the petroleum agreement only with the prior approval of NAMR, under the sanction of nullity of the transfer. The approval of the transfer shall be made provided that the transferee can prove that it has the technical and financial capacity necessary for the performance of the oil activities in compliance with the conditions provided in the petroleum agreement.

For the approval of the transfer the following cumulative conditions must be met:

- The petroleum agreement must be in force;
- The Romanian legal entity to which the petroleum agreement shall be transferred (i.e., a Romanian based company or a Romanian based secondary office of a foreign company) has no outstanding debts towards the state budget, social security state budget or other related state budgets;
- The obligations undertaken by the titleholder on the basis of the petroleum agreement have been fulfilled or the transferee undertakes to fulfil also the non-fulfilled obligations;
- The transferee has the legal and technical capacity required for undertaking the obligations under the petroleum agreement;

- The transfer does not affect the conditions of the concession, as established in the petroleum agreement;
- The transferee is specialised in carrying out oil activities or has appointed an authorised firm in the role of operator which possesses the appropriate technical capacity in relation to the oil operations provided in the transferred agreement.

5.5 Forthcoming developments

An important discovery of natural gas resources in the Black Sea has created optimism for both investors and authorities, despite the fact that the size of the reserve has not yet been accurately determined as there are still exploration operations being performed. Exploitation of such reserves are expected to commence at the end of the current decade.

Further developments are also expected in relation to Romania's shale gas potential given the fact that it was ranked third in the list of European countries with highest estimated potential of shale gas prepared by US Energy Information Agency. The interest in Romania's shale gas potential comes both from investors seeking favourable opportunities and from the authorities which tend to regard shale gas as one of the sources which could sustain Romania's future energy independence.



SERBIA

1. INTRODUCTION TO THE ENERGY MARKET

The reform of the Serbian energy sector and its opening pursuant to the EU acquis is still underway. The Serbian Ministry of Mining and Energy has prepared a draft of the new Law on Energy which it is supposed to be in line with the third energy package. The energy markets are still dominated by the incumbent utilities: "Elektroprivreda Srbije" the state-owned electricity utility runs the electricity market as the dominant producer, public supplier and distributor; "Srbijagas", the state-owned gas utility, holds the grip on the gas sector as the TSO, producer and supplier; the oil sector is dominated by "NIS", former state-owned oil utility now in majority ownership of Gazprom.

Serbia is still highly dependent on imported energy – roughly one third of the energy consumed is imported.

57/2011). The new Energy Law which would be in line with EU's third energy package is currently under preparation and is expected to be adopted by July 2014.

The Energy Law is comprehensive legislation regulating all relevant energy sectors, i.e. electricity, district heating, oil and gas. The Energy Law deals with: a) the rights and obligations of the relevant stakeholders in the energy sector; b) the issuance of authorisations for performance of energy activities; c) the issuance of licences for the construction of energy facilities (energy licence – "energetska dozvola"); d) regulated prices; e) renewable energy; f) specific rules for the electricity, gas, oil and district heating sectors; g) access to the energy system, i.e. transmission and distribution systems; h) supply of energy.

The key stakeholders in the Serbian electricity market are:

- (a) The Ministry of Mining and Energy ("Ministry") – responsible for preparing the most important strategic and action documents for adoption by the Government of Serbia, enacting various implementing regulations and technical standards and overseeing the overall implementation of the Law;
- (b) The Agency for Energy of the Republic of Serbia ("AERS") – an independent, regulatory body established pursuant to the Law on Energy. Its primary tasks are to develop and enhance the electricity and gas market based on the principles of non-discrimination and effective competition by creating a stable regulatory framework;
- (c) Transmission system operator – "Elektromreže Srbije" ("EMS") – a state-owned public company in charge of the development, safe and reliable functioning of the transmission system, enforcement of non-discriminatory and economical access to the transmission system.

2. ELECTRICITY

2.1 Market overview

The state-owned utility EPS with its 100% subsidiaries is still virtually the only producer, distributor and supplier on the electricity market. Transmission is separated from EPS and is handled by "Elektromreže Srbije", another 100% state-owned entity, whereas distribution is in the hands of the regional distribution companies; all of them subsidiaries of EPS. There is a high degree of dependence on lignite which accounts for more than 60% of the total installed electricity generation capacity in Serbia. Development of significant new generation facilities, although planned, is still years away.

2.2 Regulatory overview

In July 2011, the Serbian Parliament adopted the new Energy Law and it has been amended three times since, mostly to address issues related to the development of renewable energy projects ("Zakon o energetici", Official Gazette of Republic of Serbia, No.

2.3 Regulated electricity market activities

The Energy Law prescribes the following energy activities in the electricity sector:

- (a) The production of electricity;
- (b) The combined production of electricity and heating energy;
- (c) The transmission of electricity and management of the transmission system;
- (d) The distribution of electricity and management of the distribution system;

- (e) The supply of electric energy (i.e. energy trading);
- (f) The public supply of electric energy (i.e. supply of small consumers);
- (g) Electricity market operation.

The performance of each of these activities is subject to the granting of a licence by the AERS. Furthermore, with the exception of the activities under (a), (b) and (e), all other activities in the electricity sector are considered activities of general interest and, therefore, may be performed either by public, state-owned companies or by privately owned companies expressly authorised by the Government of Serbia to perform a specific activity of general interest pursuant to the Law on Public Companies ("Zakon o javnim preduzećima", Official Gazette of Republic of Serbia, No. 119/2012, 116/2013) or the Law on Public Private Partnerships and Concessions (Zakon o javno-privatnom partnerstvu i koncesijama", Official Gazette of Republic of Serbia, No. 88/2011).

2.4 Generation

The development of generation capacities is reliant on the granting of numerous permits by various state authorities. A licence for the production of electricity described in the previous section is granted only at the end of the entire development process and follows after the issuance of the operational permit for the power plant. The following section describes only the most important steps which are part of the development of generation capacity.

First of all, the construction of any electricity generation facility with the installed power of more than 1MW has to be first approved by the Ministry of Infrastructure and Energy by the issuance of an energy permit ("energetska dozvola"), whereas for construction of small hydropower plants with installed power of up to 1MW an approval from the Ministry is required. The energy permit and approval are not transferable.

The energy permit is not required in the case of a concession awarded for the development of a generation facility. Secondly, the construction of any larger power plant requires the preparation of adequate planning documents which set out conditions for the construction of such a power plant. Furthermore, the design of the power plant is subject to an assessment of the environmental impact pursuant to the Law on Assessment of the Environmental Impact ("Zakon o proceni uticaja na zivotnu sredinu", Official Gazette of Republic of Serbia, No. 135/2004). Hydro-power plants with an installed capacity of up to 2MW and wind farms with an

installed capacity of up to 10MW are exempt from this obligation. Moreover, power plants with a capacity of less than 50MW must prepare an environmental impact assessment only if the municipal authority responsible for environmental protection decides that this is necessary.

Thirdly, when the production of electricity in a power plant is based on natural resources (e.g. coal) or public goods (e.g. water), the prospective producer of electricity must acquire the right to use such a natural resource or public good, either by obtaining a concession in a competitive tender procedure pursuant to the Law on Public Private Partnerships and Concessions ("Zakon o javno-privatnom partnerstvu i koncesijama", Official Gazette of Republic of Serbia, No. 88/2011) or through obtaining sector-specific permits pursuant to the Law on Mining and Geological Explorations ("Zakon o rudarstvu i geološkim istraživanjima", Official Gazette of Republic of Serbia, No. 88/2011) or the Law on Waters ("Zakon o vodama", Official Gazette of Republic of Serbia, No. 30/2010, 93/2012).

Finally, the Law on Planning and Construction provides for various permits, approvals and other documents to be issued before and during the course of the construction of a power plant. The most important of these are the construction permit and the operational permit. The operational permit is issued only upon a successful technical inspection and a trial operation of the power plant.

2.5 Trading and supply of electricity

The Energy Law distinguishes between the regular market activity of supply (which also covers electricity trading) and the activity of public supplier of electricity; the latter being considered as an activity of general interest which may be discharged only after specific authorisation is obtained from the Government of Serbia (see section 2.3 above).

The Serbian energy market is gradually opening up. The Energy Law prescribes that all electricity consumers have the right to freely choose their supplier, with the exception of households which will have that right as of 1 January 2015. The Rules on Changing the Supplier specify the procedure for changing the supplier of electricity, deadlines and conditions; However, since "EPS Snabdevanje" is practically the only supplier currently on the Serbian electric energy market (the second supplier "GEN-I" has only one client, "Messer Tehnogas", a subsidiary of German "Messer Group"), its real effectiveness still remains to be ascertained.

The Energy Agency of the Republic of Serbia, as an independent regulator, is in charge of approving the price of electricity and gas for public supply, as well as the price of access to the transmission and distribution systems. As of 1st January 2014, regulated electricity prices apply only to households and small industrial consumers (i.e. companies with less than 50 employees, less than EUR 10 million in revenue and connection to the distribution grid of up to 1kV). The activity of distribution of electricity and the activity of public supplier, previously managed by the 5 regional subsidiaries of EPS, have been separated so that the activity of public supplier is handled by newly formed "EPS Snabdevanje".

The Energy Law divides the electricity market into a bilateral electricity market; a balance electricity market; and an organised electricity market. The Government recently announced adoption of a separate law that should govern specifically the electric energy market but a draft of this law is still not available. A bilateral electricity market is based on bilateral power purchase agreements. A balance electricity market enables the transmission system operator to secure proper operation of the transmission system by selling and purchasing the required quantities of electricity. It is managed by the transmission system operator. An organised electricity market comprises day-ahead and intra-day trading and is supposed to be managed by the market operator.

EMS holds licences for both transmission system operator and market operator. The Market Rules prepared by EMS and approved by AERS are in force as of end of 2012. The Market Rules govern the balance electricity market and there are yet no specific rules to govern the organized electricity market (i.e. power exchange). EMS is in the process of forming the power exchange and it is expected to become operational by the end of 2014.

2.6 Transmission and grid access

Pursuant to Article 122 of the Law on Energy, EMS must allow third party access to the transmission system on a non-discriminatory basis, under regulated prices and through public procedure. Access may be denied only on technical grounds in the event of lack of capacities, system overload or threats to system stability. The access agreement signed by EMS and the interested party determines, inter alia, the point of access, capacity, accounting period etc.

The procedure for connection to the transmission system begins with the acquisition of an opinion on the possibilities and conditions for connecting the power plant or the consumer's facility to the transmission system. Such an opinion is to be

obtained from EMS. When the opinion has been issued, the interested party then submits a request to EMS for the preparation of an analysis of the best possible connection to the transmission network. The primary and execution designs of the power plant should be prepared in accordance with the EMS analysis.

The producer and/or consumer of electricity may connect to the transmission system only upon the granting of a connection approval by EMS. The deadline for the granting of a connection approval is 60 days for electricity producers and 30 days for consumers. AERS is responsible for deciding on any appeal submitted against a decision issued by EMS. The decision of AERS is final in administrative proceedings but may be challenged before the Administrative Court of Serbia in the case of administrative accountancy proceedings. Connection approval is issued after the construction of the power plant / consumer's facility.

EMS will grant the connection approval if the equipment and installations of the power plant/ facility are determined to be in accordance with the opinion issued by EMS and the relevant technical rules and regulations. The connection approval granted by EMS specifically determines the connection point, technical conditions for connection, place and manner of measuring electricity, deadline for establishing connection and the cost of connection.

Following the issuance of the connection approval, the interested party and EMS enter into an agreement on access to the transmission system. Pursuant to the Transmission Grid Rules, EMS may unilaterally terminate the connection agreement only in the following cases:

- (a) If the operator fails to fulfil its obligations within an additional period of time granted for compliance or it follows from its behaviour that it shall not fulfil its contractual obligations even within the additional time period;
- (b) The performance of the agreement becomes impossible;
- (c) An annulment of the access permit issued by EMS.

The costs of connection are borne by the applicant and are determined by EMS in accordance with the methodology developed by AERS. Temporary structures, construction sites and structures in trial operation may also be connected to the grid temporarily during the validity of the temporary permit, construction period or trial period, as the case may be.

3. RENEWABLE ENERGY

3.1 Market overview

Serbian power generation is dominated by the large hydro-power plants with a total installed power of 2,832MW which amounts to approximately 34% of the total installed power generation capacity in Serbia. In the last couple of years, several small hydro-power plant ("HPP") projects were completed and commenced commercial operation. During 2013, the Ministry launched two rounds of public invitations for the potential investors interested in development of small HPP's on 459 locations throughout Serbia.

Even though the Ministry has, during the past couple of years, issued a number of energy permits for wind power plant projects with total envisaged installed power of around 1,300MW, not a single wind power plant has been put into operation. However, there are several serious developers who are now in the process of finalizing financing for their projects and one of the projects (WPP Plandiste), sponsored partially by the Serbian state oil company "NIS", is already under construction. Not all of the envisaged power plants will be able to obtain the status of privileged power producer given the caps introduced by the governmental decrees (see Section 3.2(b)).

The use of biomass, geothermal and solar energy is negligible at the moment. The mandatory renewable energy target by 2020 amounts to 27%. In order to achieve this target Serbia intends to develop renewable power plants with additional 1092 MW.

3.2 Support schemes

(a) General

Support for renewable energy generation has been one of the key focus points of the Ministry in the last couple of years. This is obvious from the fact that all amendments to the Energy Law made after its initial adoption have been, directly or indirectly, tied to promoting the development of renewable energy sources.

The currently valid Energy Law provides for the following set of incentives for the privileged power producers: mandatory purchase of renewable energy, feed-in tariff, balancing responsibility of the public supplier, priority dispatching.

Wind power and solar plant developers may acquire the temporary status of privileged producer (which lasts up to two years for wind power plants and one year for solar plants, with the possibility of a one-year extension) and entering into a pre-contract for the purchase of electricity with a public supplier.

Temporary status may be obtained upon the procurement of a construction permit for a relevant renewables project and posting a deposit or a bank guarantee to the amount of 2% of the investment. This temporary status guarantees the developer with at least the set of incentives existing at the moment of acquiring such temporary status.

The Energy Law specifically provides for the obligation of the public supplier to enter into a power purchase agreement with the privileged energy producer. The existing feed-in tariff adopted under the Energy Law will remain in place until the end of 2015.

The Energy Law also introduced the system of certificates of origin to be set up and managed by the Serbian transmission system operator. In early 2014, the Government adopted the Rulebook on Guarantees of Origin ("Pravilnik o garanciji porekla električne energije proizvedene iz obnovljivih izvora energije", Official Gazette of Republic of Serbia, No.24/2014) further regulating the procedure of issuance of certificates of origin. The procedure set forth by the Rulebook will be implemented starting from 1 January 2015.

(b) Feed-in tariffs

Currently valid feed-in tariff regime for renewable energy is prescribed by the Decree on Incentives for Privileged Power Producers ("Uredba o merama podsticaja za povlašćene proizvođače električne energije", Official Gazette of Republic of Serbia, No. 8/2013) ("Decree").

The maximum overall installed power of solar power plants eligible for feed-in tariffs is limited up to 10MW, whereas the maximum for wind farms amounts to 300MW until 2015 and 500 MW until 2020.

In order to be eligible, renewable power plants must be certified by the Minister of Mining and Energy pursuant to the Decree on Conditions for Acquiring the Status of Privileged Status and Criteria for Evaluation of these Conditions ("Uredba o uslovima i postupku sticanja statusa povlašćenog proizvođača električne energije", Official Gazette of Republic of Serbia, No. 8/2013).

Amounts

The guaranteed tariffs applicable to renewable energy produced by privileged producers are as follows:

- 5.9 to 12.40 cEUR/kWh for small HPPs;
- 8.22 to 13.26 cEUR/kWh for biomass plants;
- 12.31 to 15.66 cEUR/kWh for biogas plants;
- 9.2 cEUR/kWh for wind farms;
- 6.91 cEUR/kWh for waste and landfill gas power plants;
- 6.92 to 9.67 cEUR/kWh for geothermal power plants;
- 8.04 cEUR for coal combined cycle power plants;
- 8.89 cEUR for gas combined cycle power plants;
- 8.57 cEUR/kWh for waste-fired power plants;
- 16.25-20.66 cEUR/kWh for solar energy power plants.

The guaranteed prices are subject to annual indexation each February for the annual inflation in the Euro zone as published by Eurostat.

Duration

The above feed-in tariffs are valid until 31 December 2015. "EPS Snabdevanje" as the public supplier is obliged to purchase eligible renewable energy from certified privileged producers based on a standard power purchase agreement ("PPA") prepared in accordance with the standard templates enacted by the Ministry in the Rulebook on Standard Models of Agreements and Pre-Agreements for the Purchase of Entire Power Output ("Pravilnik o utvrđivanju standardnih modela ugovora i predugovora o otkupu ukupnog iznosa električne energije", Official Gazette of Republic of Serbia, No. 62/2013 and 10/2014). PPAs are concluded for a period of 12 years, i.e. for the duration of the status of privileged producer.

Funding

The funding for the feed-in tariff and other incentives for renewable electricity sources is obtained through a special fee paid by the end-consumers as part of the access fee to the transmission or distribution system. The Government determines the amount of this special fee annually.

(c) Certificates of origin

The certificates of origin are issued by the transmission system operator for the energy produced in a renewable power plant at the request of the producer. The request may be submitted for a past period of up to 24 months, in case of renewable power plants with installed power of up to 30 kW,

for past period of up to 7 months for renewable power plants with installed power above 30kW and up to 1MW. For power plants above 1MW the request may be submitted for upcoming period of up to two years. The certificates of origin are issued within 10 days if the request is submitted for the past period or, for requests submitted for the upcoming period, monthly by the 20th day in a month for previous month. The certificates of origin are issued per 1MWh of produced electricity and are valid for a period of one year starting from the end of the production period to which that certificate of origin relates.

4. NATURAL GAS

4.1 Market overview

The Serbian natural gas market significantly depends on imported natural gas, i.e. approximately 82% of consumption is imported. Serbia imports gas from Gazprom Neft, i.e. it is entirely dependent on gas supplies from Russia. Currently, there are 36 companies engaged in the distribution and supply to end consumers, 2 companies engaged in gas transportation and 12 companies are registered for gas trading. The gas storage facility Banatski Dvor, a joint venture between "Srbijagas" and "Gazprom Germania GmbH" (Srbijagas holds 49% share in the joint venture), with a capacity of around 450 million m³ has been operational since 2011 and has significantly improved the security of supply on the Serbian gas market. Expansion of the gas sector in Serbia is significant – a 28% annual increase in consumption of gas in 2014 in comparison to 2013 is estimated.

4.2 Regulatory overview

Legal framework

The gas sector in Serbia is governed by the Energy Law and by-laws elaborating it as main pieces of gas legislation. The following important laws (and supporting bylaws) are also applied to the gas sector:

- (a) Law on Pipeline Transportation of Gas and Liquid Hydrocarbons and Distribution of Gas Hydrocarbons ("Zakon o cevovodnom transportu gasovitih i tečnih ugljovodonika i distribuciji gasovitih ugljovodonika", Official Gazette of Republic of Serbia, No. 104/09);
- (b) Law on Public Enterprises ("Zakon o javnim preduzećima", Official Gazette of Republic of Serbia, No. 119/2012, 116/2013);

- (c) Law on Public Private Partnerships and Concessions ("Zakon o javno-privatnom partnerstvu i koncesijama", Official Gazette of Republic of Serbia, No. 88/2011);
- (d) Law on Planning and Construction ("Zakon o planiranju i izgradnji", Official Gazette of Republic of Serbia, No. 72/2009, 81/2009, 64/2010, 24/2011, 121/2012, 42/2013, 50/2013, 98/2013);
- (e) Law on Mining and Geological Explorations ("Zakon o rudarstvu i geološkim istraživanjima", Official Gazette of Republic of Serbia, No. 88/2011);
- (f) Law on Geological Explorations ("Zakon o geološkim istraživanjima", Official Gazette of Republic of Serbia, No. 44/95 and 101/2005).

By adopting the Law on Energy, Serbia has made one significant step towards its harmonisation with the second package of EU gas regulations (Directive 2009/73/EC, Regulation (EC) 715/2009 etc). Now, the Ministry prepares a new Law on Energy that would be aligned with the third energy package.

The Energy Law envisages a gradual opening of the natural gas market. Namely, all end customers, except for households have the right to choose their gas supplier freely. Households will have this right as of 1 January 2015. Similarly to the electricity sector, the Rules on Changing the Supplier specify the procedure for changing the supplier of electricity, deadlines and conditions; in 2012, "Srbijagas" accounted for 69% of total natural gas sales. The circle of customers entitled to purchase gas from the public supplier under regulated prices is gradually shrinking: as of 1 January 2015, regulated prices will apply only to households and small industrial consumers (i.e. companies with less than 50 employees, less than EUR 10 million of revenue and connection to the distribution system).

The Energy Law introduced the unbundling obligations from the second energy package, i.e. the legal and functional unbundling of gas transportation (system operation) and supply.

However, the unbundling obligation has not been implemented in practice and "Srbijagas" is neither legally nor functionally unbundled. For this failure, the Secretariat of the Energy Community began dispute settlement procedure against Serbia in October 2013 and transmitted its case against Serbia to the Ministerial Council for decision on this breach of the gas unbundling obligation. The decision of the Ministerial Council is expected in September 2014.

4.3 Regulated natural gas market activities

The Energy Law provides for the following natural gas related activities:

- (a) gas transportation and operation of the gas transport system;
- (b) gas storage and operation of the gas storage facilities;
- (c) gas distribution and operation of the gas distribution system;
- (d) gas supply;
- (e) public supply of gas.

The performance of any of these activities is subject to the issuance of an energy licence by AERS as a principle regulatory body in the gas sector. Licences are issued within 30 days of the proper application, provided that all conditions are met. The validity period of the licences for the activities in the gas sector is 10 years and they are renewable upon the request of the energy undertaking, provided that the request is filed no later than 30 days prior to the expiry date.

Licences are not transferable. AERS is entitled to suspend the licence temporarily, should the energy undertaking fail to: a) comply with the requirements of the Energy Law; b) maintain energy facilities in accordance with the regulations; c) comply with the obligations imposed by the licence; d) determine the prices according to the methodologies rendered by AERS. If the energy undertaking does not remedy the breach within a given deadline, the licence may be permanently revoked. An appeal to the decision of AERS may be filed with the Ministry of Mining and Energy.

It should be noted that apart from the activity of supply, all other gas activities are declared as activities of general interest and may be performed either by public, state-owned companies or by privately owned companies which are specifically authorised by the Government of Serbia to perform a specific activity of general interest pursuant to the Law on Public Companies or the Law on Public Private Partnerships and Concessions.

4.4 Exploration and production

(a) Exploration

Exploration for natural gas in Serbia is regulated by the Law on Mining and Geological Explorations ("Zakon o rudarstvu i geološkim istraživanjima", Official Gazette of Republic of Serbia, No.88/2011), while the principle regulatory body in this domain is the Ministry.

The law distinguishes between fundamental and specific explorations. Fundamental explorations are performed by the

Geological Survey Institute, now a part of the Ministry, whereas specific explorations may be performed by companies registered in the respective commercial registry for the activity of geological explorations and employing an adequate number of geological professionals.

Prior to commencement of geological explorations, the appropriate geological project and exploration elaborates must be prepared, both of which are, generally, subject to mandatory technical review, and Exploration Approval must be obtained from the Ministry. The Exploration Approval determines, inter alia, the minimum amount of exploration works, validity period, deadline for commencement with the exploration works, reporting obligation, termination grounds.

(b) Production

The production of natural gas is also within the regulatory scope of the Ministry. Natural gas production (i.e. exploitation) is performed by the companies registered with the competent commercial registry for mining activities.

Gas production is based on permits issued by the Ministry. Namely, the following permits are required:

- Exploitation Approval (for the purpose of natural gas exploitation and its refinement);
 - Approval for Performance of Mining Works (for the purpose of drilling gas wells and gas wells operation);
 - Approval for Operation of the Mining Facilities (for the purpose of development of the gas wells).
- A n exploitation fee of the natural gas, in the amount of 7% of the income earned from exploitation of the natural gas, shall be paid to the Republic of Serbia. Further increases of the exploitation fee are expected with the upcoming amendments to the Law on Mining and Geological Explorations.

All gas fields in Serbia are located in Vojvodina and are exploited by the dominant market player "NIS" a.d. Novi Sad (majority owned by Gazprom Neft) with more than 60 gas wells in Banat, Elemir, Kikinda and Plandište.

4.5 Transmission and access to the system

(a) General

The Serbian Gas Transmission System ("GTS") is comprised of gas pipelines with a total length of 2,230.00 km and a pressure from 16 up to 50 bars. Serbia has two Gas Transmission System Operators: the public company

"Srbijagas" and "Yugorosgaz" (the "GTSO"). GTS Rules have been adopted by "Srbijagas" and approved by AERS in 2013, whereas "Yugorosgaz" which accounts for 5% of the GTS still has not prepared its GTS Rules.

In addition to GTS operations, the GTSO is also, among other duties, responsible for the organisation and management of the gas market, system balancing, purchasing of gas for balancing and adoption of the decision on access prices.

(b) Access to the GTS

According to the Energy Law, the GTSO is obliged to provide access to all customers under regulated prices based on the principles of transparency and non-discrimination (obligation to provide access). The GTSO and the interested party enter in an access agreement which regulates the rights and obligations of the parties with respect to access to the GTS. The right to utilise the transport capacities of the GTS is regulated by the gas transportation agreement entered into between the GTSO and the customer. This agreement may be a long-term (over one year) or short-term agreement (less than one year) and the agreed capacity may be a cut-off or constant capacity.

Access prices are regulated prices determined by the GTSO and approved by AERS. The methodologies for determining access prices are prescribed and adopted by AERS. GTSO is entitled to reject access to the system for the following technical reasons: (i) transportation under-capacity, (ii) if access would endanger the stability of gas supply or (iii) severe economic and financial difficulties caused due to the take or pay obligations (upon the request of the supplier that has entered into the take or pay gas supply agreement).

(c) Exemption from the obligation to provide access

Major new gas infrastructure, interconnectors and storage facilities, may, upon request, be exempted, from the obligation to provide access under the following conditions:

- The investment must enhance competition in gas supply and enhance security of supply;
- The level of risk attached to the investment must be such that the investment would not take place unless an exemption was granted;
- The infrastructure must be owned by a natural or legal person, independent of the system operators in whose systems that infrastructure will be built;

- Charges must be levied on users of that infrastructure; and
- The exemption must not be detrimental to competition or the effective functioning of the internal market in natural gas, or the efficient functioning of the regulated system to which the infrastructure is connected. Exemption is granted by a resolution of the Ministry of Infrastructure and Energy.

Additionally, the supplier of natural gas is also entitled to request from the Ministry to exempt the GTSO from the obligation to grant access to the system in the event that it envisages severe financial and economic difficulties due to undertaken take or pay obligations.

4.6 Trading and supply

The trading and supply of natural gas is performed on the free gas market. As mentioned above, public supply under state regulated prices shall be gradually reduced until 1 January 2015, when only the households and small gas consumers shall be entitled to public supply under regulated prices.

Gas is supplied and traded on the market based on gas purchase agreements. The amount of natural gas contracted under the gas purchase agreement may be pre-agreed for a specific period or determined based on consumer consumption, in the event of gas purchase agreements with full supply. The new Energy Law also prescribes for “take or pay” gas purchase agreements. According to the Energy Law, participants to the free natural gas market may be: (i) natural gas producer, (ii) supplier, (iii) public supplier (i.e. “Srbijagas”), (iv) end consumers and (v) GTSO, storage operator and gas distribution system operator (but only for the purpose of its own consumption and balancing due until the unbundling principle is introduced). All participants are obliged to regulate their balance responsibility by entering into balancing services agreements with the GTSO.

4.7 Storage

Natural gas storage and operation of storage facilities may be performed by an entity holding a licence for gas storage and operation of storage facilities issued by AERS. So far, only one licence has been issued for this activity to Underground Gas Storage “Banatski Dvor” doo, the operator of the Banatski Dvor underground gas storage facility. This storage facility has been operational since 2012 and in that year it accounted for 6% of the total gas consumption in Serbia. However, the operator has not yet adopted the gas storage access rules.

5. UPSTREAM OIL MARKET

5.1 Market overview

One of the sectors which make up the energy economy of Serbia is the oil sector. There is exploitation of domestic oil reserves, as well as the import, transport and processing of crude oil and oil derivatives, and distribution and sales/ export of oil derivatives.

5.2 Regulatory overview

Oil-related activities in Serbia are governed by the Law on Energy and the Law on Mining and Geological Explorations. The principle regulatory body in this domain is the Ministry and the AERS which issues licences for carrying out the energy activities in the sector. In addition, AERS keeps a register of issued and revoked licences.

5.3 Exploration and production

(a) Exploration

Exploration of oil may be performed by companies registered in the respective commercial registry for the activity of geological explorations and which employ a sufficient number of geological professionals. Prior to commencement of geological explorations, the main geological design and exploration elaborates must be prepared. These documents are subject to mandatory technical review, whereupon Exploration Approval must be obtained from the Ministry Mining and Energy. The Exploration Approval determines the validity period and the deadline for commencement with the exploration works. The licensee is obliged to regularly update the Ministry on the exploration findings.

(b) Production

The production of oil is also within the regulatory scope of the Ministry of Mining and Energy. Oil production is based on a licence issued by the Ministry in the course of regular administrative procedure.

The fee for exploitation of oil paid to the Republic of Serbia amounts to 7% of the income earned from the exploitation of oil. Note that a significant increase in the exploitation fee (until 2011 the fee was 3%) did not bring an expected increase in revenues for the state since all significant oil fields in Serbia are exploited by the dominant market player “NIS” a.d. Novi

Sad, majority owned by Gazprom Neft and protected from increases in the exploitation fees by the Russia Serbia Intergovernmental Treaty on Cooperation in Gas and Oil Industry (“Zakon o potvrđivanju sporazuma između vlade Republike Srbije i vlade Ruske Federacije o saradnji u oblasti naftne i gasne privrede”, Official Gazette of Republic of Serbia – International Treaties, no. 83/2008)

5.4 Other oil-related activities

For the performance of other oil-related activities a licence issued by AERS is a prerequisite. The procedure for the issuance of these licences is identical to the procedure for the issuance of licences in the electricity sector. Energy companies (legal entity or entrepreneur registered to perform one or more energy activities) can apply for a licence to perform the following activities:

- The production of oil derivatives;
- Oil transport by oil pipelines;
- The transportation of oil derivatives;
- The storage of oil and oil derivatives;
- Trade with oil and oil derivatives;
- Retail of oil derivatives (fuel supply stations for motor vehicles).

REPUBLIC OF MACEDONIA

1. INTRODUCTION TO THE ENERGY MARKET

As a candidate country for EU membership, the Republic of Macedonia is further developing its legislation by harmonising it with EU Directives and complying with the Stabilisation and Association Agreement.

The Republic of Macedonia is a signatory to the Energy Charter Treaty and Energy Community Treaty which further harmonise its energy legislation with the EU *acquis communautaire* with regards to the energy sector, environment, competitiveness, renewable sources of energy, energy efficiency and oil reserves. The Republic of Macedonia has also signed and ratified the UN Framework Convention on Climate Change and the Kyoto Protocol, as a non-Annex I country. With this status it may use the Clean Development Mechanism for attracting foreign investments in projects for the reduction of greenhouse gas emissions.

These developments resulted in the passing of the Energy Law in February 2011 ("Energy Law") which led to important changes in the legal regime governing the energy market. It aimed to achieve further harmonisation with the Energy Community Treaty, with the ultimate goal of the further liberalisation of the energy market and providing for a sustainable energy sector.

The Energy Law has achieved high compliance with the EU Directives in the energy sector. It has managed to partially delegate the secondary regulations to the system operators (with the grid codes). The law also deals with issues of no relevance to the Republic of Macedonia at this stage but which will apply once full EU membership is achieved.

As result of this law, the liberalisation of the electricity and natural gas energy markets started on 01 April, 2014. On that day 222 domestic companies, each with more than 50 employees and an annual turnover of more than EUR 10 million obtained the right to satisfy their need for electricity on the open market. It is planned that an electricity exchange should be established in 2015.

1.1 Regulatory overview: Energy Regulatory Commission

For the purpose of securing efficient, competitive and uninterrupted operation of energy markets, the Energy Regulatory Commission of the Republic of Macedonia ("ERC") was set up as an independent legal entity, authorised to regulate matters pertaining to energy activities performance stipulated under the Energy Law. It is composed of five members, elected by the Parliament of the Republic of Macedonia, after nominations by the Government. It has specific duties and obligations, as well as rights and authorities on the energy market related to the energy market participants regarding the implementation of legally stipulated obligations of the entities which perform regulated energy activities, in the aims of guaranteeing the reliability of electricity, natural gas and heating energy supply.

The ERC passes bylaws (regulations, decisions, resolutions), approves documents (plans, programs) of the market participants, monitors the functioning of the energy markets, resolves disputes among performers of the regulated energy activities and consumers, adopts methodologies and tariffs for the services of the regulated energy activities and tariff systems for energy sale and passes decisions on the tariffs and the prices.

The ERC issues all licences for the performance of energy activities. The Energy Law regulates the manner of financing of the ERC by determining that, in addition to the payment for the issued licences, a certain annual amount of the profit made by the licence holders shall be paid to the ERC but no more than 0.1% of the total revenue. By means of tariff-setting regulations and methodologies for services provided as regulated energy activities, the ERC stipulates the manner of calculation, approval and control of revenue generation from the performance of regulated energy activities. Electricity and natural gas price-setting regulations for consumers supplied by the supplier of last resort and the means by which the ERC sets out the manner of determination, approval and control of electricity and natural gas end prices to be paid by consumers. These shall include electricity or natural gas generation or purchase price, relevant tariff on use of energy systems and markets, balancing costs, supply charge, as well as financial and

other forms of reimbursements awarded for the purpose of implementing the obligations on public service provision. Price-setting regulation and methodology for oil derivatives and fuels for transport are the means by which the ERC stipulates the manner of setting, approval and control of refinery and retail prices for petrol, diesel fuels, light fuel oil and heavy oil (mazut), as well as retail prices for blends of fossil fuels and biofuels for transport.

1.2 Energy Agency

The Energy Agency of the Republic of Macedonia has been established to support the implementation of the energy policy in the Republic of Macedonia. It has the capacity of a legal entity and it is independent in its work. The support in the implementation of the energy policy shall be realized by the Energy Agency through engagement in relation to: the preparation of medium and long term strategies and development plans; the preparation of long and short term programs for energy efficiency and use of renewable energy resources, the preparation and coordination of activities for the implementation of investment projects, regional cooperation and coordination of regional projects, drafting bills, by-laws and technical regulations proposals, in the field of energy, and performing other activities in the field of energy, as determined by the Energy Law.

2. ELECTRICITY

2.1 Market overview

The main functions of the electricity system of the Republic of Macedonia are the generation, supply, transmission and distribution of electric energy.

Participants in the electricity markets are the electricity generators, electricity transmission system operator, electricity distribution system operator, electricity market operator, suppliers and traders with electricity and the consumers. Each has certain rights and obligations, as well as stipulated conditions on undertaking activities and use of the electricity system.

The process of restructuring the Electric Power Company of Macedonia ("ESM") commenced in 2004 and was completed in September 2005. As part of the Government's programme to liberalise the electricity market, the restructuring resulted in the unbundling of the vertically integrated ESM into four legally

separate enterprises. The Macedonian Electricity (Transmission) System Operator ("MEPSO") is owned and controlled by the Government and is responsible for transmitting electricity and managing the high voltage transmission network, operating the electricity central dispatching system and implementing market operations. Electricity generation is performed by JSC Electric Power Plants of Macedonia ("ELEM") which is owned by the Government, and JSC TPP Negotino – a thermal power plant also owned by the Government. ESM, now EVN AD Makedonija, joint stock company, performs distribution and retail supply for tariff consumers and was privatised in 2006 through a sale of 90% of its shares to the Austrian company EVN AG.

The Energy Law imposes further requirements on the legal unbundling of the electricity transmission system operator and the electricity distribution system operator. The aim is to secure independence in the electricity transmission and distribution activity performance, as well as for the purpose of implementing the obligation of public service provision in a non-discriminatory, objective and transparent manner. These legal entities cannot hold licences for electricity generation, transmission or distribution as applicable, trade, supply or supply of last resort activities. Each of these operators must adopt a compliance programme to prevent discriminatory behaviour, as well as guaranteeing independence in the decision making on the assets required for the system operation, maintenance and development, which must be independent of the interests of the vertically integrated company to which the operator belongs or the interests of the related company. This programme must be submitted for approval to the ERC.

The electricity market operator is responsible for the electricity market organisation, efficient operation and development, pursuant to the principles of publicity, transparency, non-discrimination and competitiveness. It is also obliged to provide the services falling under its competences, pursuant to the Energy Law and the terms and conditions stipulated in the licence. It keeps records of physical transactions of electricity, based on information of electricity purchase/ sale and transit transactions submitted by electricity market users. It further calculates the electricity consumed, transited or delivered between electricity market participants, as well as the imbalances occurring with regard to announced and realised transactions and submits these calculations to the electricity transmission system operator. As already stated above, on 01

April 2014, as the day of the official liberalisation of the electricity market, 222 domestic companies, each with more than 50 employees and an annual turnover of more than EUR 10 million obtained the right to satisfy their need for electricity on the open market. Namely, such companies are designated as eligible electricity consumers, with the right to choose the electricity supplier of their own preference. On the other hand, liberalization of the electricity market for all electricity consumers, including households, should start as of 01 January 2015.

2.2 Regulatory overview

In accordance with the Energy Law, the following energy activities in the electricity market are regarded as regulated energy activities:

- (a) electricity transmission;
- (b) electricity market organisation and operation;
- (c) electricity distribution;
- (d) electricity supply of last resort; and
- (e) electricity generation for the needs of the electricity supplier of last resort.

A licence for regulated energy activity performance can be issued only to companies or public enterprises registered in the Republic of Macedonia for a period of no less than 3 years and no more than 35 years. The same validity period of a license applies to all types of licensed activities in the energy sector. Entities which perform regulated energy activities are required to comply with the obligations of the provision of a public service. The ERC determines or approves the prices and terms and conditions for providing a public service. The additional obligations for providing a public service, imposed by the ERC must be clearly stipulated, easily verifiable and non-discriminatory, and should be defined in the relevant licence and published on the website of the ERC.

The services provided by entities performing regulated energy activities should secure reliable, high-quality and uninterrupted energy and energy fuel delivery to consumers, under equal terms and conditions, prices and tariffs, taking into due consideration the need for energy efficiency improvements and environmental protection and promotion. The ERC is authorised to pass the Electricity Market Code and the Supply Rules, in addition to the regulation described above.

2.3 Generation

The Energy Law stipulates that an electricity generator may sell electricity and/or ancillary services to domestic and foreign traders,

electricity suppliers, electricity transmission system operator and electricity distribution system operators. This is to assist in the liberalisation of the energy market and creating the framework for competitive energy market, which is the main idea of the revisions in the Energy Law.

The electricity generator can sell electricity and/or ancillary services to domestic and foreign traders, electricity suppliers, electricity transmission system operator and electricity distribution system operators. The electricity generator is obliged, inter alia:

- (a) to secure the availability of agreed energy and/or ancillary services at the point of receipt in the transmission or distribution system, pursuant to the licence;
- (b) to operate in compliance with the laws, other regulations, as well as the Transmission Grid Code or Distribution Grid Code, Market Code and terms and conditions stipulated in the licences;
- (c) to submit to the electricity market operator and the electricity system operator data and information on electricity purchase and sale contracts, as well as the availability of generation capacity and/or ancillary services; with the exception of commercial and financial data, pursuant to the Market Code; and
- (d) to secure electricity for own consumption from its facilities or on the open market.

The Energy Law stipulates that electricity generation for the needs of the electricity supplier of last resort is a regulated energy activity. Such an electricity generation licence includes the obligation to provide a public service by electricity generation aimed to meet the demand of households and small consumers supplied by the electricity supplier of last resort. An electricity generator which already holds a licence to provide public service for tariff consumers, as granted under the previous law, is obliged as of the day of entry into force of the Energy Law to comply with the obligation stipulated for this regulated energy activity.

The generator and electricity supplier of last resort must submit to the ERC electricity purchase and sale contracts for approval for the forthcoming year. The duration of these contracts cannot be shorter than one calendar year. If the parties fail to submit the contract within the given deadline or if the ERC does not approve the contract within a period of ten days from its submission, the ERC shall by 15th December in the calendar year at the latest, adopt a decision setting out the relations between the generator and the electricity supplier of last resort.

When the demands of consumers defined under the contracts with the electricity supplier for last resort have been met, the generator can sell excess electricity in the electricity market pursuant to the rules previously approved by the ERC. The rules for the sale of excess electricity in the electricity market shall be prepared by generator setting out the terms and conditions, manner and procedure concerning the sale, and shall be based on the principles of transparency and non-discrimination.

Liberalisation of the electricity market shall be achieved by 31st December 2014. Until this time households shall remain tariff consumers. An electricity generator licensed for the regulated energy activity shall, therefore, be further obliged at that time to generate electricity for the demands of tariff consumers, and to provide ancillary services, operational reserve and balancing energy to the transmission system operator, within the limitations and possibilities of its generation units, under the prices approved and published by the ERC.

2.4 Trading and supply of electricity

The electricity trader may purchase electricity in the country and from abroad, for the purpose of selling it to other traders, suppliers, the electricity transmission system operator and electricity distribution system operators, as well as for the purpose of selling it to consumers abroad. The electricity trader in the role of supplier can sell electricity to consumers which meet the requirements for independent participation on the electricity market, as stipulated under the Electricity Market Code.

They must also submit information to the electricity market operator regarding the electricity quantities and relevant time schedules relating to all electricity purchase/ sale contracts, as well as related to contracts on cross-border transactions through the transmission grid. An electricity trader when performing cross-border electricity transactions must provide sufficient interconnection transmission capacity and/or distribution capacity and regulated services, pursuant to the relevant bylaws (Electricity Market Code, Transmission and/or Distribution Grid Code, Rules on Awarding Cross-Border Transmission Capacity) for the electricity it has undertaken to deliver to its consumers.

The electricity supplier purchases electricity in the country and from abroad, for the purpose of selling it to consumers, traders, other suppliers, the electricity transmission system operator or the electricity distribution system operators, as well as to consumers

abroad. For the electricity it has committed to deliver to its consumers, the electricity supplier must secure the necessary transmission and/or distribution capacity from the relevant operators, pursuant to the applicable tariffs, Electricity Market Code, Transmission and Distribution Grid Codes.

The electricity supplier shall invoice the consumers for the electricity delivered under the agreed price and the electricity market use charge. When the supplier has signed a contract with the electricity distribution system operator on charging the distribution costs, the electricity supplier shall also invoice the consumers for the transmission and/or distribution system charges. The invoices shall be issued on the basis of active and/or reactive electricity consumed and engaged power, as metered by the relevant system operator.

The electricity supplier of last resort purchases electricity to address the demands of households and small consumers which have selected the supplier of last resort. The purchase prices and relevant contracts with the generator are approved by the ERC.

In order to address the demands of its consumers, the electricity supplier of last resort shall guarantee the necessary transmission and/or distribution capacity, as well as the services of the electricity market operator. The electricity supplier of last resort shall invoice its consumers for the electricity delivered and services provided pursuant to the Tariff System on electricity sale to households and small consumers. As an exemption, it may purchase electricity at market and below market prices provided that (i) market terms and conditions and market prices are more favourable compared to terms and conditions and prices set for the generator; or (ii) at given periods, the electricity generated by the generator is insufficient to meet the electricity demand of households and small consumers. As an exception, electricity consumers which meet the requirements for independent participation on the electricity market as set out in the Market Code can purchase electricity directly from electricity traders.

The relevant system operator shall discontinue electricity supply to consumers without signed electricity supply contracts, unless the consumers in questions come into the categories of households and small consumers which are to be supplied by the electricity supplier of last resort.

For the purpose of the transparent, efficient and competitive trade in electricity and ancillary services, electricity market participants can conduct trade in electricity or ancillary services on the

electricity exchange in the Republic of Macedonia established pursuant to the law or on the regional electricity exchange.

2.5 Transmission

The electricity transmission system operator shall maintain, upgrade and expand the transmission grid, operate the electricity transmission system of the Republic of Macedonia and secure connection of the transmission system to the transmission systems in the neighbouring countries.

The charge for the use of the electricity transmission system is regulated, pursuant to the published tariff. The electricity transmission system operator shall invoice the system use charge to:

- (a) consumers directly connected to the electricity transmission system who act independently on the electricity market;
- (b) suppliers or traders, for the consumers directly connected to the electricity transmission system, who do not act independently on the electricity market;
- (c) electricity distribution system operators or electricity suppliers for the consumers connected to the electricity distribution systems.

The electricity transmission system operator shall invoice the electricity market participants for the deviations from announced physical transactions, in accordance with prices calculated pursuant to the price-setting methodology for balancing services. The electricity transmission system operator is obliged, inter alia, to connect generators, consumers and distribution system operators to the transmission grid, as well as to allow third party access for electricity transmission system use, pursuant to the present law and the Transmission Grid Code. Based on the principles of objectivity, transparency and non-discrimination, new interconnection capacities with neighbouring countries are required to be constructed, taking due consideration of the efficient use of existing interconnection capacities and the balance between investment costs and benefits for the consumers, to provide cross-border electricity flow through the transmission grid of the Republic of Macedonia within the available transmission capacity, as well as to develop, upgrade and maintain the transmission system, for the purpose of safe and efficient system operation.

In order to cover losses in the electricity transmission system, electricity is purchased under market terms and conditions and

in a transparent, non-discriminatory and competitive manner. Also, ancillary services and the relevant operational reserve are purchased under market terms and conditions and in a transparent, non-discriminatory and competitive manner, pursuant to the Electricity Market Code. The electricity transmission system operator is required to adopt and publish the Rules on Interconnection Transmission Capacity Awarding.

2.6 Distribution

The electricity distribution system operator is responsible for the maintenance, upgrading, expansion and operation of the distribution system used to perform its activity, and shall be obliged to secure its connection to the electricity transmission system. The distribution system usage charge shall be payable by electricity consumers connected to the distribution grid. The electricity distribution system operator shall invoice the electricity distribution system use charge to consumers connected to the electricity distribution system, as well as the electricity transmission system use charge, pursuant to the published tariffs. As an exception, the electricity distribution system operator can sign contracts with electricity suppliers or traders by means of which it shall authorise them to collect these charges.

2.7 Access and connection to grids

The Energy Law sets out the obligation for the transmission and/or distribution system operators, on the basis of the published tariffs, to allow access to the relevant system for eligible customers, in a transparent and objective manner that prevents discrimination of system users.

The transmission and/or distribution system operators shall be obliged to allow connection to the relevant system, pursuant to the relevant Grid Code:

- (a) to all electricity consumers and users of the electricity transmission system and the distribution systems on the territory of the Republic of Macedonia;
- (b) to all natural gas or heating energy consumers and users of the natural gas or heating energy transmission and distribution systems on the territory where the service is provided, when deemed cost-effective.

The electricity transmission or distribution system operators shall provide priority access to electricity systems for the electricity generated from renewable sources, taking into due consideration the limits stemming from the possibilities in the electricity system.

The relevant energy or natural gas transmission or distribution system operator shall be obliged to allow existing and new grid users access to the relevant energy transmission or distribution grid, pursuant to the relevant Grid Code and Supply Rules:

- (i) in an objective, transparent and non-discriminatory manner;
- (ii) based on the principles of regulated third party access; and
- (iii) in accordance with prices and tariffs previously approved and published by the ERC.

The relevant energy transmission or distribution system operator can deny access to the relevant grid only in cases of electricity or natural gas transmission or distribution capacity shortage. It shall be obliged to inform the access applicant in writing, with a detailed and unambiguous explanation of the reasons for the denial of access. The natural gas transmission system operator can deny access to the system also in cases of risks to the reliability of supply in the Republic of Macedonia.

The relevant energy transmission or distribution system operator, as part of the relevant Grid Code, shall be obliged to set out the connection rules for the relevant grid and the connection charge-setting methodology. The connection rules shall take into due consideration the consequences caused by the connection and which affects other grid users, the connection points at plants, facilities and devices and type of installation required for grid connection.

2.8 Forthcoming developments

The market is expected to grow in parallel with the growth of the economy. An increase in the generation of energy is one of the main targets, along with the liberalisation of the market. There are several planned investment projects in high-voltage power lines and investments in generation plants.

3. RENEWABLE ENERGY

3.1 Market overview

The legal framework in the Republic of Macedonia is aimed at stimulating investments in renewable energy and the greater involvement of renewable energy resources in total energy consumption and increasing energy efficiency. There are favourable conditions for the use of hydro energy, geothermal energy, solar and wind energy, as well as energy derived from

biomass. The Energy Law strengthens the legal and institutional aspects of promoting the use of renewable energy sources.

Of all the renewable sources of energy in Macedonia, hydro-power is used for the production of electric power, biomass is most frequently used in the form of firewood for households, and geothermal energy is mostly used for heating greenhouses. Solar thermal energy is used for heating domestic hot water. The most common renewable sources of energy are hydro-power, wood and geothermal energy which together contribute approximately 16% of the total annual consumption of energy in Macedonia.

- (a) **Small hydro-power plants ("SHPPs")**
SHPPs offer attractive opportunities for the production of electric power from renewable sources of energy. In Macedonia 400 locations are determined as suitable for the construction of SHPPs, with individual installed capacity of up to 5MW, or an aggregate installed power of approximately 250MW and expected annual production of 1,200 GW/h.
- (b) **Solar thermal**
Solar energy in Macedonia is already used for domestic water heating. However, given Macedonia's geographic position and climate, there is even greater potential for the use of solar energy. The total annual solar radiation varies from minimum 1250 kWh/m² in the northern part of the country to a maximum 1530 kWh/m² in the south-western part and provides an average annual solar radiation of 1385 kWh/m². The annual average daily solar radiation varies between 3.4 kWh/m² in the northern part of the country (Skopje) and 4.2 kWh/m² in the south-western part (Bitola). Climatic conditions – high solar intensity and duration, temperature, humidity – provide favourable conditions for the successful development of solar energy. The continental climate with hot and dry summers classifies Macedonia among the countries with high potential for use of solar energy, compared to the average European countries.
- (c) **Geothermal**
The territory of the Republic of Macedonia belongs to the Alps-Himalayas region with a sub-zone characterised by no contemporaneous volcanic activity. At the moment, 18 geothermal fields are known with more than 50 geothermal springs and wells. The total flow is about 1000 l/sec at a

temperature of 20-78 °C. The hot waters are predominately of hydrocarbon nature, with dominant anion and mixed structure with equal presence of sodium, calcium and magnesium. Dissolved minerals are within the range of 0.5 to 3.7 g/l. All thermal waters in Macedonia are of meteoric origin. The hot spring is the regional flow of heat, and in the Vardar area it accounts for 100 mV/m², under earth layer thickness of around 32 km.

- (d) **Biomass**
Biomass has a significant contribution to the energy balance of the Republic of Macedonia. It comprises 166 ktoe (1930 GWh; 6950 TJ), accounting for 11.5% of the total energy generated in the Republic of Macedonia (2006 data), i.e. 6% of total primary energy consumed and 9.5% of total final energy consumed. Biomass for combustion accounts for 59% in the use of renewable energy sources in Macedonia.
- (e) **Biodiesel**
The oil and gas retailer JSC AD Makpetrol opened the first biodiesel plant in Macedonia in 2007. The plant has an annual capacity of 30,000 tonnes. The privately-held joint stock company, AD Makpetrol, financed the project from its own funds. The biodiesel plant is expected to meet European standards EN 14214 and AD Makpetrol aims to sell its production both at home and abroad. It will use non-refined rapeseed oil imported from the EU.
- (f) **Wind**
According to the geographical location and landscape configuration, the favourable sites for wind power plants construction in Macedonia include the valley of the river Vardar, in the Povardarie region, Ovce Pole in the vicinity of Sveti Nikole, as well as higher mountains characterised by its high wind speeds.
At the present time there are eight registered power plants for the generation of electricity from renewable energy sources and sixteen preferential electricity generators (generators which have the right to sell electricity under feed-in tariffs). The electricity market operator is obliged to purchase the electricity generated by preferential electricity generators. At the request of the preferential generator, the electricity market operator is obliged to sign an electricity purchase contract for the purchase of electricity from the above-mentioned generators. The electricity market operator shall sell the electricity to electricity suppliers and traders supplying electricity to

customers who meet the requirements for independent participation in the electricity market as stipulated under the Market Code.

3.2 Support schemes

- The Strategy on Renewable Energy Sources sets out the policy on the use of renewable energy sources which set the targets on the use of renewable energy sources and the manners for attaining these targets, in particular:
- (a) renewable energy sources potential;
 - (b) feasibility of the use of renewable energy sources;
 - (c) target volume and dynamics for increasing the share of electricity from renewable sources and share of biofuels in the gross final energy consumption; as well as the share of biofuels in the total consumption of fuels for transport; and
 - (d) incentives for the use of renewable energy sources, aimed at:
 - (i) reducing the costs for electricity generation from renewable sources and production of biofuels;
 - (ii) increasing the prices of electricity generated from renewable sources or prices for biofuels; or
 - (iii) obligations for purchasing the electricity generated from renewable sources or the obligation for blending fossils fuels and biofuels in the fuels for transport.

These incentives include in particular: investment support, tax credits, obligation of the electricity suppliers to purchase electricity generated from renewable sources and obligation on mandatory placing on the market of blends of fossil fuels with biofuels, issuing guarantees of electricity origin, feed-in tariffs for generated electricity purchase, and increased prices for the consumers, as regards the use of energy from renewable sources. In the aims of stimulating the construction of new power plants using renewable energy sources or high-efficiency cogeneration plants, the said generation facilities can obtain the status of a preferential generator and thereby the right to sell electricity under feed-in tariffs.

The Energy Law has simplified the procedures for acquiring the status of preferential electricity generator by authorising the ERC to issue a decision on granting the status and maintaining the relevant registry while the Government is authorised to determine the feed-in tariff and duration. In order to stimulate investments in renewable sources, temporarily status of preferential electricity generator may be awarded if the investor has obtained the construction authorisation for the energy facility in question, or has obtained a construction permit for the energy facility, when

the construction thereof does not require a construction authorisation or has signed a concession contract for the use of natural resources or has acquired the right to construction of the energy facility in an open call procedure, pursuant to the Energy law.

Preferential generators are entitled to apply the feed-in tariff under the terms and conditions in effect on the day when the temporary decision was issued. The ERC shall delete the entry of the power plant from the Registry of Preferential Generators if the power plant in question has not come into operation within the deadline stipulated in the temporary decision and thus shall terminate its status of preferential generator.

The electricity market operator purchases the generated electricity from the preferential electricity generators and incorporates the costs arising from the difference between the regulated price of electricity and the feed-in tariff in the transmission tariff paid by all consumers. Thus, any increase in the cost of electrical power system required to bring these generators on-line is socialised to all consumers of electricity.

The Government of the Republic of Macedonia passed an Act on Electricity Feed-In Tariffs, which stipulates, for each type of preferential generator separately, the following:

- (i) the specific terms and conditions to be met by the power plant in order to obtain the status of preferential generator;
- (ii) the upper threshold for the power plant installed capacity required for obtaining the status of preferential generator; and
- (iii) electricity feed-in tariffs and the period for their application.

The Energy Agency issues, transfers and revokes guarantees of electricity origin from renewable sources. The guarantee of origin is a document issued by the Agency for the purpose of securing evidence for consumers that a particular energy quantity has been generated from renewable sources. The guarantees of electricity origin issued by foreign states can also be recognised if they fulfil certain conditions prescribed by law. This also represents one of the incentives applied for the purpose of promoting renewable energy sources. The guarantees of electricity origin from renewable sources issued by foreign countries shall be recognised under the terms and conditions and in a manner stipulated pursuant to the present law.

4. DISTRICT HEATING

4.1 Market overview

The market participants are defined by the Energy Law as generators, operator of the distribution system and district heating suppliers, following the market model for the electricity market with the necessary differences arising from the energy type in question.

The municipalities, as units of the local self-government, are obliged to enable the performance of the following energy activities for the purpose of reliable, safe, uninterrupted and quality heating energy supply to the consumers on their territories:

- (a) heating energy generation;
- (b) heating energy distribution; and
- (c) heating energy supply.

The heating energy supplier is required to provide consumers with whom it has signed contracts, with reliable, uninterrupted and quality heating energy supply, pursuant to the Heating Energy Supply Rules, the signed supply contracts and the licence issued. For all heating energy systems where it supplies consumers, the heating energy supplier is required to sign annual contracts with the heating energy distribution system operator for heating energy purchase intended to address the consumers' demand, as well as a contract for distribution system use, under prices and tariffs previously approved and published by the ERC. These contracts are subject to approval by the ERC, and stipulate in detail the mutual rights and obligations of suppliers and distribution system operators, based on the Distribution Grid Code and Heating Energy Supply Rules.

The supply of thermal energy is fully liberalised. Heating energy consumers connected to the distribution system in places where a heating energy system is already established are entitled to choose their supplier at own preference. The heating energy supplier, based on data from reading metering devices and local allocation devices, presents invoices and collects the heating energy delivered to consumers under the price calculated, which comprises the average price for heating energy for the regulatory period, the tariff on distribution system use and the heating energy supply charge. The threshold of the supply charge is determined by the ERC by means of a decision adopted prior to the beginning of any calendar year.

4.2 Regulatory overview

Under the Energy Law, the distribution of thermal energy and the regulated generation of thermal energy are regarded as regulated energy activities. A licence for the regulated heating energy generation activity is granted on the basis of an open-call procedure by the ERC. In the case of distribution systems with only one generator of thermal energy, it shall by exemption be granted a licence for regulated generation of the thermal energy.

At the request of the regulated generator, the ERC shall set the charge to be paid to the regulated generator for the services provided in the heating energy system. When setting the charge, due consideration shall be taken of the fixed and variable costs of the regulated generator, as well as the reasonable return of capital. The charge shall comprise of two portions - charge for the provision of ancillary services and system reserve and regulated price for the heating energy generated.

The ERC shall adopt the Price-Setting Rulebook for Heating Energy and Ancillary Services, by means of which it shall stipulate the manner, procedure and price-setting methodology for ancillary services and system reserve charges, the regulatory price for the heating energy generated, as well as the manner of calculating and the regulatory period for which the average price for heating energy is calculated. The licence holder for regulated heating energy generation cannot hold a licence on heating energy distribution, supply activities, heating energy generation and supply activities. The regulatory regime on the thermal energy supplier is explained in section 4.1 (Market overview).

4.3 Generation

Independent generators generate thermal energy as secondary products in the combined thermal electricity and regulated generators of thermal energy which, in addition to the requirement to provide public service, are obliged to provide energy to cover losses in the system, system reserve and system services.

The charge of the regulated generator for the ancillary services is stipulated by the ERC. The regulated heating energy generator shall be obliged to provide the public service of heating energy generation in order to meet the consumers' demand and provide energy to cover system losses, ancillary reserves and services for the purpose of maintaining the required operational parameters (temperature and pressure) within the heating energy system to which it is connected.

The heating energy generator shall own and operate the heating energy generation plant pursuant to the law, other regulations, grid code and the terms and conditions and criteria stipulated in the licence and shall sell the heating energy to the heating energy distribution system operator to which it is connected, under the terms and conditions stipulated in the Energy Law. The heating energy generator can also sell the heating energy to consumers which are not connected to the heating energy distribution system but are directly connected to its generation plant.

4.4 Distribution

The distribution of heating energy is carried out by legal entities who are the owners of systems for the distribution of heating energy or on the basis of an agreement for PPP for the construction of a new system or an agreement for the establishment of a PPP for a public service, management, use, maintenance and expansion/upgrading of an existing system for distribution of thermal energy or by public enterprises established by the local self-government units. The construction of new systems for the distribution of thermal energy in the area of a local self-government unit shall be carried out on the basis of a PPP agreement awarded by the council of the local self-government unit. This agreement also includes the right to carry out the regulated energy activity of distribution of thermal energy. The period for which the PPP agreement is granted can be no longer than 35 years. The heating distributor shall not have the right to transfer the PPP agreement to a third party without the prior written consent from the public partner.

The procedure for awarding a PPP for the management, use, maintenance and expansion/upgrading of an existing system for the distribution of thermal energy by the local self-government units. The period for the PPP agreement can be no longer than 35 years. The private partner shall not have the right to transfer the PPP agreement to a third party without the prior written consent from the public partner.

The distributor is obliged, inter alia, to maintain, upgrade and expand the heating energy distribution grid in the system.

The heating energy distribution system operator shall purchase the heating energy generated by the generators connected to the distribution system and shall be obliged, upon previously obtained approval from the ERC, to sign a contract with the regulated heating energy generator for a period no shorter than one year.

It is obliged to purchase the heating energy produced by the (heating energy) generators to the distribution system, on the condition that the heating energy price offered by the generator is lower than the regulated price for the heating energy generated by the regulated generator. The heating energy distribution system operator shall be obliged, upon previously obtained approval from the ERC, to sign contracts with heating energy suppliers on heating energy sale intended to address the consumers demand.

4.5 Forthcoming developments

New electricity and heating energy generation facilities and electricity and heating energy co-generation facilities can be constructed on the basis of construction authorisation for new electricity and/or heating energy generation facilities issued:

- (a) by the Government on the decision on authorisation of the construction of new or expansion of existing electricity generation and electricity and heating energy cogeneration facilities; and
- (c) by the Municipal Council of the local government unit on the decision to authorise construction of new or expansion of existing heating energy generation facilities.

5. NATURAL GAS

5.1 Market overview

The usage of natural gas in Macedonia commenced in 1997. In the absence of its own natural gas deposits, Macedonia’s needs for natural gas are met by the connection of a single gas pipeline from Russia through International corridor No. 8. The magistral gas pipeline enters Macedonia near the border crossing Deve Bair and extends to Skopje, with a length of 98 km. GA-MA AD Skopje is the sole natural gas transmission network operator in Macedonia. In 2012, the total quantities of natural gas transmitted to qualified consumers and tariff consumers amounted 136.587.341 n m³.

The Energy Law the legal basis for the development, stability and economic functioning of the natural gas system in the Republic of Macedonia. Again, as a model for this market, the electricity market system is used, and, therefore, the distribution and transmission systems of the natural gas have the same obligations of the electricity transmission and distribution operators. The other subjects (suppliers, supplier of last resort and traders) have the same rights and obligations as in the electricity market.

Taking into consideration the possibility of building smaller regional systems for the transmission and distribution of natural gas in the Republic, the law allows for the institutionalising of a combined operator of transmission and distribution systems.

With the passing of the Energy Law, all consumers of natural gas are regarded as eligible customers, with the exception of current tariff consumers which shall acquire the status of eligible consumers once regulations for the supply, grid regulations for transmission, tariff system and tariff system for transmission and distribution are set (Natural Gas Supply Rules, Rules on Natural Gas Supply of Last Resort, Price-Setting Regulation for the Natural Gas Supplier of Last Resort, Natural Gas Market Code and the Natural Gas Transmission and Distribution Tariff Systems).

A new feature of the Energy Law is a supplier of natural gas of last resort who supplies all consumers connected to the natural gas system, if these have not or cannot enter into an agreement with other suppliers. In this section of the energy market, special market rules are not allowed but they shall be a constituent part of the grid regulation for the transmission of natural gas. As in the section for electricity, the activities of transmission of natural gas and operating the natural gas system are merged, and a single licence is issued. In the event that the operators of the transmission systems do not fulfil the obligations from the development plans, the ERC may intervene as appropriate. In this market, the legal unbundling of the operators of the systems in relation to the performing of other energy activities is stipulated.

5.2 Regulatory overview

The ERC is the main regulatory body in the segment of natural gas energy market. It approves the Natural Gas Market Code, regulates the natural gas market organisation, the terms and conditions to be met by natural gas market participants, the manner and terms and conditions for grouping of natural gas customers and/or sellers into balancing groups for the purpose of reducing balancing costs, establishes the organisation and control of natural gas and ancillary services trading, including cross-border trading. It also regulates the methodology for setting the balancing charge and manner of charge collection, as well as financial guarantees for the liabilities of natural gas market participants related to the settlement of balancing services.

By means of price-setting regulations for natural gas for consumers supplied by the supplier of last resort, the ERC regulates the

manner of setting, approving and control of electricity and natural gas end prices to be paid by consumers. This includes the electricity or natural gas generation or purchase price, relevant tariff on use of energy systems and markets, balancing costs, supply charge, as well as financial and other forms of reimbursements awarded for the purpose of implementing the obligations on public service provision.

The regulated energy activities on the natural gas market are:

- (a) natural gas transmission;
- (b) natural gas transmission system operation;
- (c) natural gas distribution;
- (d) natural gas supply of last resort.

5.3 Exploration and production

According to the Strategy for Energy Development in the Republic of Macedonia by 2030, Macedonia does not have its own natural gas deposits. Hence, the Energy Law contains no provisions regulating the production and exploration of deposits of natural gas in Macedonia.

5.4 Transmission and access to the system

The natural gas transmission system operator is a public enterprise or company owned by the Republic of Macedonia or a company where the Republic of Macedonia is the dominant owner which operates the natural gas transmission system and connects it to the transmission systems in the neighbouring countries. The natural gas transmission system operator shall be obliged to adopt and publish a Transmission Grid Code for the system which it operates.

The natural gas transmission system operator shall invoice the natural gas market participants for any deviations from the announced physical transactions, under prices calculated pursuant to the price-setting methodology for balancing services, which is an integral part of the Natural Gas Market Code. A legal entity who holds a licence for natural gas transmission cannot hold licences for transmission system operation, natural gas trade, natural gas supply and supply of last resort activities. A legal entity who holds a licence for natural gas transmission system operation cannot hold licences for natural gas transmission, natural gas trade, natural gas supply and supply of last resort activities.

Obligations to allow third parties access to the grid are set out in the same manner as those for the operator of the electricity transmission system. These are described in section 2.7, Access and connection to grids.

5.5 Trading and supply

The natural gas supplier shall sell natural gas to consumers, traders, other suppliers, electricity and/or heating energy generators, natural gas transmission or distribution system operators, as well as to consumers abroad. With regards to the natural gas which it has committed to deliver to its consumers, the natural gas supplier shall secure the relevant transmission and/or distribution capacity and regulated services pursuant to the applicable tariffs, Natural Gas Transmission Grid Code and Distribution Grid Code.

The natural gas supplier of last resort shall supply consumers in the Republic of Macedonia who are connected to the natural gas transmission or distribution system and who have not signed contracts with any natural gas supplier or whose previous supplier has discontinued the implementation of obligations from the supply contracts. In order to meet the demand of its consumers, the natural gas supplier of last resort shall secure the necessary transmission and/or distribution capacity and other services from the transmission and distribution system operators, under prices and tariffs approved and previously published by the Energy Regulatory Commission.

The natural gas trader shall purchase natural gas for the purpose of selling it to other traders, suppliers, electricity and/or heating energy generators, natural gas transmission and distribution system operators, as well as consumers abroad.

By exception, the trader in the capacity of natural gas supplier can sell natural gas to consumers which fulfil the requirements for independent participation in the natural gas market, as stipulated under the Natural Gas Market Code. The mutual rights and obligations between the trader and consumer, as well as the obligations regarding the transmission system operator and/or distribution system operators shall be stipulated by means of a contract.

All natural gas customers shall be deemed eligible natural gas customers. They can sign natural gas supply contracts with natural gas suppliers pursuant to the terms and conditions stipulated in the Supply Rules. As an exemption, consumers which meet the requirements for independent participation in the natural gas market, as stipulated under the Natural Gas Market Code, as well as electricity and/or heating energy generators can purchase natural gas from traders and from abroad. For the purpose of meeting their own demand, the natural gas consumers shall secure relevant transmission and/or distribution capacity or shall transfer this obligation to their suppliers.

5.6 Storage

Wholesale traders in fuels must own or have the right to use storage premises for crude oil, oil derivatives, biofuels and/or fuels for transport. Storage facilities or reservoirs for crude oil, oil derivatives, biofuels or fuels for transport must be constructed and used pursuant to the stipulated requirements related to their construction, maintenance and safe operation. Owners or leasers of storage facilities for crude oil, oil derivatives or fuels for transport which are not used for own needs or are not an integral part of petrol stations, must obtain a licence for the storage of crude oil, oil derivatives, biofuels and/or fuels for transport activity.

5.7 Liquefied natural gas

The Energy Law contains no provisions regulating the production and exploration of deposits of liquefied natural gas in Republic of Macedonia.

5.8 Forthcoming developments

The construction of new distribution systems, new natural gas transmission networks and new crude oil and oil derivatives transport facilities must be performed by legal entities on the basis of an issued authorisation. Upon proposal by the Energy Minister, the Government of the Republic of Macedonia shall adopt a decision regarding construction authorisation for new systems, networks or facilities.

The construction of new natural gas distribution systems for a service area within the territory of the Republic of Macedonia shall be performed by legal entities and on the basis of a PPP agreement awarded by the Government of the Republic of Macedonia. The period for which the concession is awarded can be no longer than 35 years. The concession holder is entitled to transfer the agreement to another entity only on the basis of the prior consent of the Government of the Republic of Macedonia.

New facilities planned for the expansion of the existing energy system, including the construction of new and upgraded existing connections owned by the natural gas system or network operator and anticipated by the Energy Law shall be constructed and owned by the relevant system or network operator.

Macedonia also has a 98 km gas pipeline system extending to the capital, Skopje, with a total capacity of 800 million m³ per year. Macedonia aims to utilise the excess gas supply capacity from the combined heat and power plants in Skopje, for the gasification of

urban areas along the gas transportation corridor. This is also expected to be extended to the southern and western parts of Macedonia.

In 2010, a feasibility study for the natural gas system in Macedonia with a preliminary design (the "Gas Pipeline Feasibility Study") was completed. The Gas Pipeline Feasibility Study sets out the possible routes for the construction of a pipeline within the Republic of Macedonia in relation to the existing condition of the pipeline system, regional conditions, the development plans of the Republic of Macedonia, the trends of development of the gas system in Southeast Europe and the development plans of neighbouring countries.

6. UPSTREAM OIL MARKET

6.1 Market overview

Macedonia does not have any oil and gas deposits. The Republic of Macedonia imports all of its needs of oil and oil products. There has been an increase in consumption since 2004 as well as in the import of the crude oil in comparison to the oil products. Most oil products are used as final energy sources, mostly in the traffic sector. There is one crude oil refinery in Skopje. Oil is transported via the 212 km Thessalonica-Skopje pipeline. The refinery has a total capacity of 2.5 million tons annually and produces heavy oil (mazut), unleaded gasoline, diesel fuel, heating fuel and liquefied petroleum gas ("LPG"). Annual oil production ranges from approximately 1-1.2 million tons, depending on domestic demand. Refined crude oil is also available for export, mainly to the southern parts of Serbia and Kosovo.

OKTA AD Skopje refinery has a nominal refining capacity of 2.5 million tons per annum. The refinery is supplied with crude oil through the Thessaloniki-Skopje pipeline which has been in operation since July 2002. OKTA's production is mostly gasoline, diesels and fuel oils; LPG is also produced but in small quantities. Demand for products for which OKTA's production does not suffice is met with imports from the Thessaloniki refinery.

The Energy Law stipulates that energy activities related to the oil market are non-regulated activities, i.e. none of the energy activities involving the transmission, storage and/or trade with crude oil and oil derivatives is regarded as an energy activity by means of which the public service is provided.

Entities performing energy activities related to:

- (a) crude oil processing and oil derivatives production;
- (b) biofuels production;
- (c) production of fuels for transport by blending fossil fuels and biofuels;
- (d) transport of crude oil or oil derivatives through oil pipelines or product pipelines;
- (e) storage of crude oil, oil derivatives, biofuels and fuels for transport;
- (f) trading in crude oil, oil derivatives, fuels for transport and biofuels are obliged to use and maintain the facilities, devices and plants intended for performance of energy activities, pursuant to the technical regulations and standards and other regulations on reliable and safe operation and environmental protection.

Under the Energy Law any entity performing crude oil and/or oil derivatives transport through the oil pipeline and/or product pipeline activity must adopt rules governing the operation of the oil pipeline or product pipeline and publish them on its website.

A wholesale trader in fuels shall purchase crude oil, oil derivatives, biofuels and/or fuels for transport from the producers, trade with other wholesale traders in fuels and supply the retail traders in fuels and consumers. A wholesale trader in fuels should own or have the right to use the storage premises for crude oil, oil derivatives, biofuels and/or fuels for transport. It is further obliged to hold operational reserves in oil derivatives and fuels for transport at all times in a quantity sufficient to cover at least a five-day average volume of trade, calculated on the basis of actual trade in each oil derivative separately for the previous year.

A wholesale trader in crude oil, oil derivatives and fuels for transport can fill and distribute pressure vessels with LPG for single or multiple use provided it has already constructed or obtained the right to use the LPG filling facilities which fulfil the stipulated requirements and standards related to construction, maintenance and safe operation.

Consumers can also purchase oil derivatives and fuels for transport from abroad, provided that the oil derivatives or fuels for transport are used for own consumption and this activity shall not require a licence on wholesale trade in crude oil, oil derivatives, biofuels or fuels for transport.

With the provisions regulating the crude oil market, oil derivatives and transport fuels conditions for the activity transport of crude oil and oil derivatives, provided that the entity performing this activity should adopt certain rules, as well as storage places.

6.2 Regulatory overview

The government shall set the annual share of biofuels to be achieved in the total fuels for transport quantities in the Republic of Macedonia with the EU Directive on renewable sources. Upon a proposal by the Ministry of Economy, the Government shall adopt an Act on Liquid Fuels Quality, which shall contain in particular:

- (a) the type of liquid fuels that can be marketed, as well as their characteristics;
- (b) the manner of determining the liquid fuel quality;
- (c) the manner and procedure on monitoring the liquid fuel quality;
- (d) the rights and obligations of the crude oil, oil derivatives and fuels for transport market participants;
- (e) the rights and obligations of market participants and state authorities in the transitional period required for the replacement of reserves of blends of fossil fuels and biofuels for transport.

By means of price-setting regulation and methodology for oil derivatives and transport fuels, the ERC shall stipulate the manner of setting, approving and control or refinery and retail prices for petrol, diesel fuels, light fuel oil and heavy oil (mazut), as well as the retail prices for blends of fossil fuels and biofuels for transport, under which the maximum refinery and retail prices for oil derivatives and the maximum retail prices for blends of fossil fuels and biofuels are set.

A decision on the maximum refinery and retail prices for oil derivatives shall be adopted by the ERC, upon a request for setting the maximum refinery prices for oil derivatives submitted by the company for crude oil processing and oil derivatives production.

SLOVENIA

1. INTRODUCTION TO THE ENERGY MARKET

In the past, the Slovenian energy policy has been tightly connected with the operation of coal mines. However, in recent decades there have been trends towards a reduction of necessary primary fossil fuels and the increased use of renewable energy (in particular hydroelectric power) and intensive introduction of gas as a fuel. Although Slovenia's dependency on the import of energy has slightly decreased over the last few years due to production of energy from renewable sources, Slovenia is still highly dependent on the import of the energy with an annual import of energy generating products to the value of approximately EUR 2 billion. Thus, the events on the international energy markets have had a direct impact on the local energy market. Heated discussions are currently evolving around the Block 6 of the Thermal Power Plant in Šoštanj, while the construction of second nuclear block in Krško is still in the preparatory phase.

In addition, the Third Legislative Package has been transposed into Slovenian legislation by adoption of the new Energy Act which entered into force on 22 March 2014 and has significantly amended the legal regulation of the energy sector. It follows the principles of protection of the customers, competitiveness, transparency, non-discrimination and independency of the regulator and has introduced the regulation of the energy sector in a more systematic and transparent way. A significant number (113) of new implementing acts (rules, regulations and similar) are envisaged to be adopted in the near future.

2. ELECTRICITY

2.1 Market overview

Slovenia has opted for the complete liberalisation of the electricity market. Hence, the activities of electricity production and supply

are carried out freely, meaning that the market players may freely negotiate prices and quantity of supplied electricity. The end consumers may freely choose and change their electricity suppliers and producers may freely choose and change the supplier which supplies the electricity they have generated, to the end consumers. The organisation of the market, as well as the activities of the transmission system operator and the activities of the distribution system operator are carried out as a mandatory national public service. The key market players in Slovenia are Elektro – Slovenija, d.o.o. ("ELES, d.o.o.") – transmission system operator, SODO, d.o.o. – distribution system operator, Borzen, d.o.o. – electricity market organizer, several distribution network operators (such as Elektro Ljubljana d.d., Elektro Primorska d.d., Elektro Maribor d.d., Elektro Celje d.d. and Elektro Gorenjska d.d.) and several electricity suppliers (such as Elektro Maribor Energija Plus d.o.o., Elektro Gorenjska Prodaja d.o.o., E 3 d.o.o., Elektro Celje Energija d.o.o., GEN-I d.o.o., Petrol d.d., Petrol Energetika d.o.o., Elektro Energija d.o.o.). Most of them are directly or indirectly state-controlled.

The first pillar of the Slovenian wholesale electricity market comprises the holding company Slovenske elektrarne, d.o.o., which operates the Drava Hydroelectric Power Plant, the Soča Hydroelectric Power Plant, the Lower Sava Hydroelectric Power Plant, the Šoštanj Thermoelectric Power Plant, and the Trbovlje Thermoelectric Power Plant. The second energy pillar is the group GEN energija, d. o. o., operating Sava Hydroelectric Power Plant, Brestanica Thermoelectric Power Plant and Krško Nuclear Power plant.

The competition on the market is promoted, among others, by the Competition Protection Agency which has already announced some ground-breaking decisions in relation to the energy sector. It should also be noted that the current generation of the electricity barely meets the requirements of the Slovenian market. For the purpose of meeting these requirements, in 2011 the Slovenian and Italian electricity markets were merged for the purposes of allocating cross-border capacity. Cross-border interconnectors also exist with Austria and Croatia.

2.2 Regulatory overview

In the past – on the basis of the previously valid Energy Act – Slovenia's energy strategy was provided by the Resolution on the National Energy Programme (Official Gazette RS no. 57/2004). However, the new Energy Act no longer envisages adoption of the Resolution on the National Energy Programme, and has replaced it with the Energy Concept of Slovenia. The Energy Concept of Slovenia is the basic development document, representing the national energy programme and shall be adopted by the resolution of the National Assembly upon the proposal of the Government. It shall contain projections of secure, sustainable and competitive energy supply for the next 20 years and shall set the indicative framework for the energy supply for the next 40 years. In addition to the Energy Concept of Slovenia which shall determine the energy programme on the national level, the new Energy Act envisages also adoption of local energy concepts, which will have to be in line with the Energy Concept of Slovenia and shall determine the concept of development of the local community (or several communities) in the field of energy use and energy supply.

Other than the above documents, relating to Slovenia's long-term energy strategy, the basic legislative framework for the energy field is the new Energy Act (Official Gazette of Republic of Slovenia No. 17/2014) and implementing regulations that were adopted still on the basis of previously valid Energy Act (Official Gazette RS no. 79/1999, as amended) and shall continue to apply until adopting and implementing of new regulations on the basis of the new Energy Act. In addition, the Environment Protection Act (Official Gazette of Republic of Slovenia No. 41/2004, as amended), Construction Act (Official Gazette of Republic of Slovenia No. 110/2002, as amended) and Placement of Spatial Arrangements of National Interest in Physical Space Act (Official Gazette of Republic of Slovenia No. 80/2010) also apply.

The new Energy Act systematically regulates the electricity sector by determining the electricity-related activities falling within the scope of regulation, i.e. electricity production, electricity supply, activities of system operator, activities of distribution operator and activities of the electricity market operator. The new Energy Act abandoned the system of licensing; it is no longer necessary to obtain a licence for carrying out electricity-related activities.

The electricity sector is (in addition to natural gas and, to a certain extent, district heating) regulated and supervised by the Energy Agency of the Republic of Slovenia ("Energy Agency"). The new

Energy Act has substantially increased the competences of the Energy Agency, which is, inter alia, competent for (i) issuing of general acts relating to the network charge and the tariff for the system use; (ii) adopting of general rules and setting out the general conditions (if they have not been adopted by the operator of the energy related activity); (iii) deciding on disputes arising from the access to network, network charges and other matters as determined by the new Energy Act; (iv) supervision of the compliance of the operators of the energy related activities with the new Energy Act and implementing legislation; (v) monitoring the functioning of markets on the field of regulated and market energy activities; (vi) gathering information, reported to the Energy Agency by the energy market participants; and (vii) establishing and maintaining a register of electricity market participants, within the scope as determined by the new Energy Act.

On the other hand, the Directorate for Energy, operating within the competent ministry (currently the Ministry of Infrastructure and Spatial Planning), inter alia, supervises the operations of the public utilities services in the field of electricity (as well as natural gas and district heating) and plans the extent of concessions issued and energy permits (applicable to the construction and operation of energy facilities) by way of maintaining the corresponding register. The Sector for Efficient Energy Use and Renewable Energy Sources carries out several tasks (such as preparing the national legislation and the calls for tenders for co-financing of investment projects) relating to renewable sources of energy and mining field.

2.3 Generation

Pursuant to the new Energy Act an energy permit is required for the construction of energy generation facilities, provided that the effective rated electricity capacity exceeds 1MW and that it is connected to the public network. The energy permit is issued by the ministry competent for energy (currently the Ministry of Infrastructure and Spatial Planning) and determines: i) location and area; ii) facility type and type of electricity generating source; iii) manner and conditions for carrying out the energy activity in the respective facility; iv) conditions concerning the facility after termination of its operating; v) conditions in relation to the use of public goods or public infrastructure; and vi) obligations of the energy permit holder in relation to submission of data to the competent Ministry. The energy permit must be also obtained for each reconstruction of the facility.

If the scope of the electricity generation capacities does not guarantee the secure electricity supply, and if the secure electricity

supply cannot be guaranteed by way of energy efficiency measures, the ministry competent for energy (or the electricity market operator on its behalf) may organise a call for tenders for new generation facilities or for the implementation of the energy efficiency measures. The call for tenders shall be published in the Official Gazette of the Republic of Slovenia and in the Official Journal of the European Union, whereby the deadline for the submission of bids may not be less than 6 months. The bidder may – instead of a new production capacity – also offer to supply the electricity from existing production capacities, if the long-term outcome, identical security of the supply and the environmental suitability of the electricity generation are ensured.

The predominant share of generation in Slovenia is carried out in conventional power plants, such as thermo-electric power plants, hydro-electric power plants and the nuclear power plant which present almost 95% of the generation. The following companies operating in large facilities with a capacity of over 10MW are active in the electricity-production market: Drava Hydroelectric Power Plants, Sava Hydroelectric Power Plants, Lower Sava Hydroelectric Power Plants, Soča Hydroelectric Power Plants, Krško Nuclear Power Plant, Šoštanj Thermoelectric Power Plant, Trbovlje Thermoelectric Power Plant, Ljubljana Combined Heat-and-Power Plant and Brestanica Thermoelectric Power Plant.

Apart from production in large power plants, the Slovenian electricity system also includes some distributed production, mainly in small hydro-electric power plants and industrial facilities for the co-generation of heat and electricity. In recent years, the number of small solar power plants has increased significantly, mainly due to lower prices of photovoltaic models, relatively favourable purchase prices and operating support for electricity produced from small solar power plants. Also the number of the facilities, producing electricity from other renewable sources (biomass, landfill gas), has increased.

2.4 Trading and supply of electricity

The Slovenian electricity market is completely liberalised, fully opened and divided into the wholesale market and the retail market. The activity of the electricity market operator is carried out as a national public service obligation; in 2001 Borzen assumed the role of the electricity market operator and still operates the Slovenian electricity market.

The new Energy Act contains detailed provisions regulating the electricity market. The electricity market is hierarchically regulated

into a balance scheme, in which the relationships between the balance scheme members are uniformly determined by the agreements on balance sheet membership. The market operator includes in the balance scheme the market participants which fulfil the prescribed conditions, by entry into a balancing agreement or into a compensation agreement, whereby as a rule (certain exemptions apply for public utility service providers) each individual natural person or legal entity may be included as the balance scheme member only by one balancing agreement or by one compensation agreement. Transactions among the balance sheet members may either be based on the quantity of supplied electricity during a relevant time frame, determined for each accounting interval (closed contracts) or determine the balancing affiliation of delivery points (open contracts).

Closed contracts may be entered into only between two balance scheme members, except for closed contracts with the use of cross border transfer capacity, in case of which one of the parties is the balance scheme member and the other party is a foreign market participant. Open contracts may be entered into only between a balance scheme member and a legal entity or natural person, entitled to enter into an open contract for a delivery point in Slovenia, which is the object of the contract. In the case of open contracts and closed contracts with the use of cross border transfer capacity, the same legal entity or natural person may act on both sides. The market players trade in the electricity market in the following way:

- (i) the producer: sells in its own name on the basis of an open contract;
- (ii) the end user: buys in its own name on the basis of an open contract;
- (iii) the supplier to the system users: sells to end users or buys from the producers on the basis of an open contract; and (iv) the trader: sells and buys electricity on the basis of a closed contract. An individual natural person or a legal entity may simultaneously trade with electricity in the different roles described above. The market operator may prohibit or limit inclusion into the balance scheme due to reciprocity. It may decide that the right to be included in the balance scheme shall not be granted to a legal entity residing in a state where not all the customers have the right of free choice of the supplier. Such a supplier may be prohibited from supplying to customers in Slovenia which would not have the right of free choice of supplier in the state of the respective supplier's residence.

All concluded closed contracts, necessary for energy supply within the entire territory of the Republic of Slovenia, including closed contracts with the use of cross border transfer capacity, have to be (quantitatively and forwardly) recorded by the market operator, at least once daily for the following day. On the basis of obtained data, the market operator calculates the market plan of the balance scheme members, which is the basis for the balance sheet calculation. A part of the electricity market is the mandatory balancing market, the aim of which is to settle electricity system imbalances in a transparent and economically efficient manner. The producers and the consumers are obliged to participate in the balancing market with respect to the technical parameters of their facilities and other relevant characteristics and circumstances.

Several eco groups have also been established. They enjoy a special status in the balance scheme since their purpose is the settlement of differences between announced and realised production and the sale of electricity gathered from participants who are entitled to guaranteed price. BSP South Pool Energy Exchange offers a trading platform for intra-day trading on the Slovenian market and future markets (one day in advance) on the Slovenian and Serbian market. Intra-day trading is performed 24 hours per day by placing anonymous bids for standardized and other products through online application. Future trading is performed through auction for standardized hourly products in several phases: (i) trading phase; (ii) stagnation phase; (iii) after-trading phase; and (iv) inactive phase.

Cross-border trading with electricity includes exports from Slovenia, imports to Slovenia, and transit through the territory of the Republic of Slovenia. A network user wishing to be involved in cross-border trading with electricity has to obtain the appropriate access to cross-border transmission paths. For the cross-border trading EU legislation applies. The market operator monitors the events of restrictive practices which may prevent or restrict the large business customers simultaneous entering into agreements with more than one supplier, and informs the Energy Agency and the Competition Protection Agency of its findings .

2.5 Transmission and grid access

The activity of the transmission system operator is a national public utility service obligation which is carried out by a legal entity or natural person on the basis of concession, granted by the State. The concession is granted for the entire territory of the Republic of Slovenia for a maximum period of fifty years and is not payable.

The concession operator must fulfil the following conditions: i) is the owner of a transmission system; ii) is certified for the system operator (the certificate is issued by the Energy Agency); and iii) has been appointed for the system operator. The concession is granted in the procedure of call for tenders or in another competitive procedure, except in the case the concession is granted to an entirely (100%) state-owned entity, provided that it does not carry out market energy activities. The function of transmission system operator is currently carried out by ELES, d.o.o. The activity of transmission system operator is financed through payments of network tariffs.

Another important recent development is the ownership unbundling of the supply and production and transmission systems. A person exercising the ownership right over the transmission system shall carry out the activities of the transmission system operator. As a rule persons other than the transmission system operator may not own the transmission system, in which the activity of the respective transmission system operator is performed.

Moreover, the same legal entity or natural person may not: (i) exercise direct or indirect control over a company, carrying out the activity of production or supply and at the same time exercise direct or indirect control over the transmission system operator or the transmission system or exercise any right with respect to them; or (ii) exercise direct or indirect control over the transmission system operator or the transmission system and at the same time exercise direct or indirect control over a company carrying out the activity of production or supply or exercise any right with respect to it.

Access to the Slovenian grid is regulated by means of a regulated third party access and is legally and in practice available to all network users. The system users pay the expenses of the system on the basis of previously published tariff items. An application for network access has to be submitted to the transmission network operator or to the distribution networks operators which decide about the application by issuance of the consent to connection. The consent to connection is valid for two years, meaning that all conditions have to be met and the connection has to be made within this deadline. The consent to connection determines the scope of right to system use by determining the maximum connecting power or other operating restrictions. Under certain conditions (which are explicitly set out by the new Energy Act) the consent to connection is transferable. Prior to the connection to the system the system user and the network operator have to enter into an agreement on the system use.

The access to the grid to a potential system user may be refused due to lack of capacities or if the requested connection would disable the performance of activities of the transmission system operator or of the distribution system as a public service obligation. If the request for connection is rejected due to the lack of capacities, the system operator has to extend the system, provided that this would be economical or that the requesting person is willing to pay the costs of extension. The disputes arising from third party access to the grid are decided by the Energy Agency in the administrative procedure. This principle applies to the whole Slovenian transmission and distribution network, with the exception of those parts where this decision is controlled by other regulations, i.e. the cross-border transmission paths on which regular or occasional overloading can occur.

In addition to other payments, the system users are periodically paying network fees for individual connection, i.e. transmission network fee, distribution network fee, connection power fee and the acquired excessive reactive energy fee. The network fees are set by the Energy Agency in form of tariffs. The network fees are intended for payment of services of the transmission system operator and of the distribution system operators that they are obliged to perform on the basis of the new Energy Act (i.e for the coverage of the expenses incurred by the system operator with respect to maintenance, management and development of the (transmission or distribution) system and for other systematic services, the purpose of which is balancing of system power and regulation of voltage).

2.6 Forthcoming developments

As mentioned above, the new Energy Act entered into force in March 2014; therefore, it is expected that several implementing regulations (regulating individual energy related fields in more detail) shall be adopted shortly.

3. RENEWABLE ENERGY

3.1 Market overview

Slovenia generates approximately 30% of consumed energy from renewable sources and is on a good way to attain the long-term targets, set out under the Renewable Energy Directive in relation to the generation and consumption of the energy from renewable sources. In particular, Slovenia relies heavily on hydroelectric

power plants for the production of electricity (25% of all the production of electricity). Other significant renewable energy sources include small solar power plants (the scope of which was substantially increasing in the past, it has, however, slightly fallen in the last few years) and the wood biomass, which represent the current major trend in relation to the renewables, in particular with respect to heating. Wind power is staying behind due to administrative barriers and several unsuccessful attempts of such projects in the past. Also with respect to geothermal energy there is – due to high costs of the exploration and uncertainty of its outcome and thus lack of potential investors on this area – still a lot of room for improvements.

Several tasks in relation to renewables (such as preparing the national legislation and the calls for tenders for co-financing of investment projects) are carried out by the Directorate for Energy, Sector for Efficient Energy Use and Renewable Energy Sources, organized within the Ministry of Infrastructure and Spatial Planning.

3.2 Support schemes

The first support scheme was adopted already in the year 2001 on the basis of previously valid Energy Act. When becoming a Member of the European Union in 2004, Slovenia notified the “Program for recovery of stranded costs in electricity generation plants in the Republic of Slovenia”, which included the support scheme for renewable energy. In April 2007 the European Commission adopted its decision no. 2007/580/EC (Case no. C 7/2005) declaring the aid granted to qualified producers using renewable sources of primary energy for compatible with the common market.

In June 2009, after adoption of amendments of the (previously valid) Energy Act, which provided a legal basis for generation of energy from renewable sources, Slovenia notified the amended support scheme “Support for production of electricity from renewable energy sources and in co-generation installations”, which was declared compatible with the common market in October 2009. Based on that several modifications to the support schemes, existing at that time, were implemented.

According to the new Energy Act the support scheme are intended for generating facilities on renewable energy sources, not exceeding 10 MW of nominal electric power (50 MW in case of facilities, using wind energy) and for production facilities with high efficiency cogeneration not exceeding 20 MW of nominal electric

power, that have been chosen on the basis of a public call of the Energy Agency. The supports may be exercised as i) guaranteed purchase of generated electricity, supplied in the public electricity energy network at a price determined by the Government (provided that the nominal electric power of the generating facility is below 1 MW); or ii) as financial aid for current business (for all other producers). An individual support may be provided: i) for new high efficiency cogeneration facilities for 10 years; ii) for new facilities for renewable sources energy for 15 years and iii) for older facilities also for a shorter period of time that represents the difference between actual age of the facility and the above stated maximum period of support. The support may be granted only for the generated energy for which a valid origin certificate has been submitted.

The origin certificate is an electronic document, issued by the Energy Agency, which enables the producers and the suppliers to prove that the electricity has been generated in high efficiency cogeneration or from renewable sources as the case may be. The origin certificate may be transferred to another person. The origin certificate may only be obtained for the electricity, generated in a electricity generating facility, holding a valid declaration (issued by the Energy Agency for a definite period of time), provided that it is proven, that in the period to which the declaration refers, the respective facility was operating in line with the conditions and requirements set out for high efficiency cogeneration and for generation of electricity from renewable sources. The origin certificates are held electronically in the register of origin certificates on the producer's account.

In order to receive support, an owner or leaseholder producing or intending to produce electricity from renewable energy sources must first obtain from the Energy Agency the confirmation of the project and within maximum three years after the confirmation of the project (five years in case of more complex facilities) the declaration for the electricity generating facility (also issued by the Energy Agency), which represents the basis for issuance of the decision on granting of the support. The entitlement to the support is decided by the Energy Agency in the administrative proceedings.

After being granted a final decision for support, a producer shall enter into a contract for the provision of support with the Centre for Support at Borzen, the electricity-market operator, to whom the implementation of the support scheme has been entrusted.

The contract shall regulate all the issues regarding the mutual obligations of the contractual parties. The funds necessary for the implementation of the support scheme are obtained from (i) the compulsory contributions paid by each end user, (ii) contributions imposed on fossil fuels and liquefied gas, paid by each end user, (iii) sale of electricity purchased by the Centre for Support at the guaranteed price, (iv) State budget and (v) the Fund for Climate Changes. The Energy Agency ensures that the system is not misused by multiple sales of a certain amount of electricity as environmental-friendly electricity. The system is designed in such a way that it assigns added value to the electricity produced in an environmental-friendly way. It allows suppliers to acquire environmentally-friendly products in a transparent manner and consequently enables customers to choose electricity with regard to its source, or manner of production.

In Slovenia, in addition to the origin certificates, the Renewable Energy Certificate System certificates "RECS") and the European Energy Certificate System certificates ("EECS") are in place. The RECS are issued by the Energy Agency as an evidence that the amount of electricity specified on the certificate (1MW) has been generated from renewable sources. The RECS certificates may be traded, either together with the associated electricity or without it.

The RECS were gradually replaced by the origin certificates after implementation of the provisions of Directive 2001/77/EC of the European Parliament and of the Council on the promotion of electricity from renewable energy sources in the internal electricity market, to the legal system of the Member States. In order to facilitate the electricity transfer between different countries, a system of EECS, which provides similar requirements as for the RECS certificates, was adopted. However, a multiple issuing of origin certificates for the same electricity produced is prevented.

To enter the EECS the electricity producer or trader (as well as the director of the Energy Agency) has to sign the document – Standard Terms and Conditions, and thus accept the basic principles of the EECS operation and commit to pay the fees for the use of the scheme.

Important support is provided also through Eko Sklad (Eco Fund), a public fund which finances investments by granting loans under more favourable conditions in the area of environmental protection in accordance with the National Environmental

Protection Program. Such loans may be granted to legal entities or natural persons. Natural persons may be granted a loan for, amongst others, financing the use of energy from renewable sources, while legal entities may be financed for the facilities in which the energy from renewable sources shall be produced.

4. DISTRICT HEATING

4.1 Market overview

District heating includes the supply of heat or cooling from the distribution networks. In 2012 the service of heat distribution was carried out by 79 licence holders and networks were set up in 55 out of the 212 Slovenian municipalities, their total length being 733.6 kilometres. The system with a cooling power (with the length of the cooling distribution network of 0.6 kilometres) is carried out only in the Municipality of Velenje. With respect to the temperature regime, the networks are divided between warm-water or hot-water networks (97.7% of the total distribution networks) and steam networks (2.3% of the total distribution networks). The municipalities with the longest networks are Ljubljana (267.8 kilometres) and Velenje (158.7 kilometres).

4.2 Regulatory overview

District heating is regulated by the Energy Act and may be carried out as a local optional public service or - under certain conditions - as market distribution. The conditions and method of providing the local public service are determined by the local community, which has to inform the Energy Agency about its decision on performance of the district heating distribution as a public service. The district heating may be carried out also as market distribution after obtaining the consent of the local community. The activity of district heating distribution (as well as cessation of performance of this activity) has to be reported to the Energy Agency. With respect to heat supply, the Energy Agency: (i) issues general acts for exercising public powers relating to mandatory content of grid code and the methodology for formation of prices; (ii) approves the grid code, which has to be issued by the distributors, performing the district heating distribution as a public service and (iii) performs other tasks, prescribed by the law, such as analyzes the district heating prices and confirms the price lists for charging of additional expenses.

4.3 Generation

In the structure of primary energy sources used in heat production, coal has the largest (61%) share, followed by natural gas with 30.7% share. The share of wood biomass and other primary renewable sources of energy is 6.6%. The share of heating oil has fallen to 1.7% share.

4.4 Distribution

Distributors have several obligations, set out by the new Energy Act in the public interest. In this respect the distributors are obliged to take appropriate measures to assure a reliable supply of heating, as well as to assure a non-discriminatory treatment of all end users with respect to the conditions of system use. Moreover, the new Energy Act imposes on the distributors the obligation of emergency supply of end users in case of their difficult financial and social conditions.

The price of district heating is regulated. The regulation of the prices is carried out on the basis of the methodology prescribed by a general act issued by the Energy Agency. The basic price is determined on the basis of justified costs and is composed of a fixed and variable part. The justified costs are the indispensable costs of distribution, such as costs of energy generating products, energy, maintenance and operation costs, depreciation, and other justified costs. On the basis of the basic price (which has to be approved by the Energy Agency and may be opined by the local community prior to the issuance of the approval) the distributor may determine the objective, clear and non-discriminatory tariffs for individual end users, payable at least once annually.

The end users (in particular consumers) enjoy particular protection on the basis of the new Energy Act. Namely, it provides for the mandatory minimum content of supply agreements, its form (i.e. the supply agreement shall be concluded in writing or electronically) and special rules in relation to the use of general terms and conditions. The distributor must also provide the end users with information on dispute resolution, applicable prices and exercise of rights with respect to district heating. At least once annually the end consumers must be notified about the applicable price and consumption of energy and be provided with a comparison of the consumption in the same period during the previous year and a comparison of an individual end user with an average end user.

4.5 Forthcoming developments

As mentioned above, the new Energy Act entered into force in March 2014. It is, therefore, expected that several implementing regulations (regulating individual district heating related fields in more detail) shall be adopted shortly.

5. NATURAL GAS

5.1 Market overview

Slovenia has a negligible degree of natural gas production and almost entirely depends on the supply of natural gas from abroad. The gas is supplied to end users from 76 Slovenian municipalities in its gaseous state via transmission and distribution networks managed and operated by the system operators. The transmission and distribution companies were required to unbundle their commercial and regulated energy activities and, thus, help facilitate the natural gas market. The commercial activity of the distribution companies is the supply of natural gas and their regulated activity is the distribution of natural gas over the distribution networks.

The market players on the Slovenian natural gas market include traders and suppliers who deliver natural gas to customers. The key market players are Geoplin, d.o.o., the major supplier of natural gas, and its subsidiary Plinovodi d.o.o. – the transmission network operator. The distribution system operators are divided between different parts of Slovenia, some of the major ones are Energetika Ljubljana d.o.o., Plinarna Maribor d.o.o. and Adriaplin d.o.o.. The natural gas distribution is carried out as an optional municipal public utility service through a public company established by the municipality, on the basis of a concession agreement or through a public-private partnership.

5.2 Regulatory overview

Since the adoption of the new Energy Act, a licence is no longer required for performance of activities in relation to the supply, trading and transport of natural gas.

Energy-related activities relating to natural gas are supervised by the Energy Agency. Its main tasks and responsibilities with respect to natural gas are: (i) issuance of general acts with respect to the methodology for charging for the network charge, as well as other general acts, such as Prevention Action Plan and Emergency Plan, acts determining the manner of efficiency factor determination,

the mandatory content of grid code, the type of information that may be circulated to the market participants and similar; (ii) granting its consent to the grid codes (transmission and distribution), to the regulative frame and tariff items, to the prices for other services, not included in the network charges, to the connection of a natural gas distribution system to another distribution system, to the payments for virtual point services and similar and (iii) other tasks, such as appointing of the person, performing the activities of natural gas distribution system operator, imposing of measures in case of termination of performance of activities of the transmission system- or distribution system operator, supervision over vertical integration on distribution, deciding about the status of the closed distribution system, deciding on the construction of direct lines, deciding on necessary extension of the system, deciding (on the first or on the second instance) in certain disputes, as determined by the new Energy Act and preventing market manipulations and abuses of the market.

5.3 Exploration and production

Slovenia depends almost entirely on the import of gas, since it has virtually no gas resources, only about one percent. Most of the natural gas is supplied from Russia and Algeria, and certain amounts are supplied from neighbouring countries, such as Austria, Italy and Croatia.

Since natural gas is considered a mineral resource, the exploration of natural gas is regulated by the Mining Act (Official Gazette of the Republic of Slovenia No. 21/2010, as amended). The conditions for the exploration and exploitation of natural gas will be described in greater detail under section 6 (Upstream oil market).

5.4 Transmission and access to the system

Since January 2005, the activities of the transmission system operator have been carried out by Plinovodi d.o.o.. The respective operator operates a 1094 km long transmission network which forms a part of the European network. Due to the beneficial geographical position of Slovenia, the network is connected with networks in Italy, Austria and Croatia.

The activity of the transmission system operator is a national public utility service obligation. It is carried out by the transmission system operator on the basis of a concession obtained. The concession is granted by the Republic of Slovenia to the transmission system operator as the concessionaire for the entire territory of the Republic of Slovenia for a maximum period of 35

years. The concessionaire has to fulfil the following conditions: (i) it is the owner of a transmission system; (ii) it is certified for the transmission system operator (the certificate is issued by the Energy Agency) and (iii) has been appointed for the transmission system operator. In addition, the concession act, published in the Official Gazette of the Republic of Slovenia, shall determine the general, non-discriminatory and proportional conditions which have to be met by a legal entity or natural person for obtaining of the concession. The concession may be obtained by any natural person or legal entity, established in an EU Member State. The concession is granted on the basis of the applicant's request by the Government of the Republic of Slovenia without carrying out a call for tender or other competitive procedure, determined by the rules on public-private partnership. The activity of transmission system operator is financed through payments of network tariffs and other funds (e.g. auctions due to overload of cross-border lines).

The transmission system operator has to be certified. The certificate is granted by the Energy Agency upon the applicant's request, provided that the applicant fulfils unbundling (and other) conditions set out in the new Energy Act. The Energy Agency has to make a decision about the request within four months after submission of the complete application; otherwise a legal assumption of granted certificate applies. After finality of the decision on granting the certificate, upon the proposal of the Energy Agency, the Government appoints the applicant for the transmission system operator. The unbundling conditions are as follows: the person exercising ownership of the transmission system has to carry out the activities of the transmission system operator. As a rule, persons, other than the transmission system operator, may not own (partially or entirely) the transmission system, on which the activity of the respective transmission system operator is performed.

Moreover, the same legal entity or natural person shall not: (i) exercise direct or indirect control over a company which is performing the activities of production or supply and at the same time exercise direct or indirect control over the transmission system operator or transmission system or enforce any right with respect to them; or (ii) exercise direct or indirect control over the transmission system operator or transmission system and at the same time exercise direct or indirect control over a company which is performing the activities of production or supply or exercise any right with respect to it. In addition, the same person may not appoint the senior management in the company carrying out

operation of transmission system and at the same time exercise direct or indirect control over a company carrying out the activities of production or supply. Special regulation in relation to unbundling requirements applies in case if the respective legal entity, subject to the unbundling, is the Republic of Slovenia, another EU Member State, a local community or a body of any of these entities.

Access to the Slovenian network is regulated by means of regulated third party access and is legally and in practice available to all network users. The transmission system operator grants access to the transmission system by entering into agreements on transmission at the entry and exit points of the transmission system. The transmission system users may enter into a separate transfer agreement for one or several entry points or – as the case may be – into a separate transfer agreement for one or several exit points from the transmission system. The individual agreements entered into for the entry or exit points may be concluded for different transmission capacities and for different time-frames. The agreement on transmission at the exit points of the transmission system in the Republic of Slovenia, to which the end users are directly connected, is concluded by the end users or by the natural gas suppliers on behalf of the end users. It is considered that all transactions with natural gas – irrespective of their entry or exit point – are entered into at the virtual point, established by the transmission system operator.

The system users are obliged to pay the expenses for use of the natural gas system in the form of a network charge. The network charge is – within the regulative frame – determined by the system operator upon prior consent of the Energy Agency. The collected network charges are used for coverage of the expenses incurred by the system operator with respect to maintenance, management and development of the system.

The system operator may deny grid access to a potential user only in the event of insufficient capabilities or if the connection prevents the performance of public utility service obligations or due to serious economic and financial troubles of the companies in the field of gas economy in connection with “take it or pay it” contracts. Grounds must be given for the reasons for denial. If the access to the grid was denied due to insufficient capacities, the system operator is obliged to extend the system, provided that this would be economical or if the person in receipt of the denial is willing to bear the costs of such extension.

In addition, Regulation (EC) no. 715/2009 of the European Parliament and of the Council applies directly and determines fair rules with respect to access of the transmission networks concerning non-discriminatory conditions for access to transmission systems and facilities and storages of liquefied natural gas.

The activity of the distribution system operator is an optional local public utility service. The performance of the public utility service of distribution system operator may be guaranteed by the local community within its entire territory or a part thereof, in the manner set out by the legislation which governs public utility services and public-private partnership. The activities of the distribution system operator are financed from network charges and other revenue for the financing of public utility services.

The local community may grant the performance right of the optional local public utility service of the distribution system operator as an exclusive right for a period of a maximum of 35 years. If such an exclusive right is granted, as a rule, only the distribution system operator, to which such exclusive right was granted, is entitled to connect the end users to the distribution system in its area.

Distribution system operator activities may be carried out by a natural person or legal entity which (i) has the right to carry out the respective public utility service, (ii) is the owner of (or has on lease) the distribution system which may operate in compliance with regulations and (iii) was appointed for the distribution system operator. In the even the distribution system operator is a part of vertically integrated company, it has to be independent of other activities not related to the distribution, at least as regards its legal form, organisation and decision-making.

Distribution may also be carried out in closed distribution systems. In such a case the distribution is not carried out as a local public utility service. Closed systems are intended for natural gas distribution on geographically rounded industrial or commercial areas and are, as a rule, not intended for the supply of the consumers. The status of closed distribution system is granted by the Energy Agency, if i) due to particular technical and safety reasons the operations and production processes of end users of such system are integrated, and ii) if the network is distributing the natural gas in particular (at least 80% of the amount of annually consumed natural gas) to the owner of the system or its affiliated companies.

5.5 Trading and supply

According to the new Energy Act it is considered that – irrespective to the actual entry or exit point – all transactions with natural gas are effected at the virtual point and at the level of the calculation interval. In this respect the “virtual point” is a virtual point between the entry and exit points of the transmission system, at which it is considered that all transactions with the natural gas quantities in the transmission system between the market participants on the transmission system in the Republic of Slovenia have been entered into. This assumption applies irrespective of the provisions of individual natural gas supply agreements. Virtual point transaction may also be made in the absence of a transmission agreement, if an agreement on transmission at entry point and an agreement on transmission at exit point has been concluded for a quantity which is the subject of the respective transaction, for the calculation period(s) which the transaction relates to.

Gas economy Companies and final customers may carry out a transaction with natural gas quantities at the virtual point, provided that they have registered their participation at the virtual point with the transmission system operator and have reported the desired transaction pursuant to the rules on operation of the virtual point determined in the System operating instructions for natural gas transmission. The transmission system operator shall be obliged to verify the compliance of the envisaged transaction(s) of the gas economy companies or final customers in accordance with the rules on operation of the virtual point. If the transmission system operator determines that the chain of transactions of the gas economy companies or final customers is not completed or could not be reconciled, it rejects all reported transactions in such chain.

The virtual point shall be established by the transmission system operator and will enable the transmission system operator to monitor transactions of the market players (e.g. where the natural gas was purchased and to whom it was sold), as well as to monitor whether all natural gas transited to Slovenia was used in Slovenia. The virtual point has not yet been established for two reasons: i) the legal basis for its establishment was provided only by the entry into force of the new Energy Act (i.e. on 22 March 2014; and ii) the virtual point will be established on the basis of the new System operating instructions for natural gas transmission (which have not yet been adopted), whereby according to the transitory provisions of the new Energy Act, the transmission system operator has to adopt these instructions within two years since entry into force of the new Energy Act.

Until the adoption of the new implementing regulations on the basis of the new Energy Act, gas trading continues to be regulated by the Decree on Functioning of the Natural Gas Market (Official Gazette of the Republic of Slovenia, No. 95/2007). Although the respective decree was adopted on the basis of previous valid Energy Act, it continues to apply until adoption of new underlying legislation. Natural gas is traded on the organised, open or balancing markets while transfer capacity may be traded on the primary or secondary market.

The organised market is organised by the public utility service provider. The supplier and customer agree upon the quantity and price of natural gas supplied, the point of sale and obligation of ensuring the transfer capacity. On the open market participants may directly conclude agreements on the supply of natural gas and the supplier and customer may freely determine the price and quantity of the supplied natural gas. The balancing market is intended for trading with quantities of natural gas, necessary for the balance of differences between the committed quantity at one or more takeover points and committed quantity at one or more delivery points. The transfer capacities market is intended for acquiring the highest possible usage of transferred capacities of natural gas network.

The operation of the market is directed towards balancing the contractual and physical currents in the natural gas network. On the primary market, the transfer system operator sells the rights to transfer capacities to the end users connected to the transmission network and to the operators of the distribution systems.

Other participants may trade on the market on behalf of and at the account of the end user. The prices on the primary market are subject to regulation. On the secondary market, the participants with the rights of transfer capacities directly trade on the basis of bilateral contracts and the prices are freely determined by the conditions of the market.

As regards natural gas trading and supply agreements, a balance scheme is provided on the market. An individual legal entity or physical person may be included in the balance scheme only for one balance agreement (entered into with the transmission system operator) or compensation agreement (entered into with the carrier of the balancing group). The membership in the balance scheme is terminated with the termination of validity of these

agreements. The supplier and the system user enter into the agreement on natural gas supply. Open agreement with a system user may be entered into only by a supplier which is a balance scheme member.

The suppliers of natural gas form the balance groups with one or more participants as members. The holder of the balance group is the supplier. The group is created for the purpose of tracking discrepancies in the acceptance and delivery of the natural gas for all members within the group which forms one transfer capacity. The balance group must enter into a contract with the transmission system operator, while the holder is obliged to pay the outstanding payments to the operator.

The natural gas market is completely liberalised and open, meaning that every end user may freely choose the natural gas supplier, notwithstanding in which EU Member State the supplier is established. However, the supplier has to fulfil requirements concerning the balancing of discrepancies, as well as all other requirements envisaged by the new Energy Act. An end user may freely change supplier by submitting a request to the current supplier which has to undertake all the necessary steps to enable the end user to exercise the supply agreement with a new supplier within 21 days of its request. The supplier must periodically notify its users free of charge about the consumption of natural gas and thus enable the users to freely balance their own consumption.

Consumers are additionally protected by the provisions of the new Energy Act which determines the minimum content of the supply agreement (which must be concluded in writing or electronically). The consumer may terminate the supply agreement without being obliged to pay any contractual penalties, indemnity, compensation or any other payment deriving from termination, if the termination becomes valid after one year from the conclusion of the agreement. The consumer may in any case terminate the contract without a notice period when choosing another supplier. An integral part of the supply agreement are also the general terms and conditions which have to be fair, determined in advance, clear, understandable and may not include any non-contractual barriers for exercise of the consumers' rights (e.g. extensive documentation). The supplier is also prohibited to use unfair and misleading methods of natural gas sale and has to ensure clear information to the consumers. Any changes of general terms and conditions have to be notified to the consumers at least one month before their application.

The new Energy Act includes also new provisions relating to the reliability of natural gas supply. In this respect Slovenia is cooperating with other EU Member States. The tasks concerning the reliable supply have been vested to the Energy Agency which has already prepared proposals for the Prevention Action Plan and Emergency Plan, in compliance with Regulation (EU) No 994/2010 of the European Parliament and of the Council of 20 October 2010 concerning measures to safeguard security of gas supply and repealing Council Directive 2004/67/EC. One of the measures already envisaged by the Energy Act is gradual decrease and disconnection of end users from the network according to schedule as will be determined by the Emergency Plan.

5.6 Storage

There are no particular provisions relating to the storage of the natural gas. The new Energy Act nevertheless provides for the obligations of a storage system owner to appoint at least one operator of the storage system. The period for which the operator is appointed is set by the Energy Agency in its decision, whereby the Energy Agency takes into consideration the efficiency assessment and economic balance. The storage system operator must operate with safe, reliable and efficient transmission and storage facilities and may not discriminate between the end users.

5.7 Liquefied natural gas

The provisions of the new Energy Act concerning natural gas apply also to the activities of the LNG terminal operators. In addition, the Energy Act specifically provides for the obligations of a LNG system owner to appoint at least one operator of the LNG system. The period for which the operator is appointed is set by the Energy Agency in its decision, whereby the Energy Agency takes into consideration the efficiency assessment and economical balance. The LNG system operator must operate with safe, reliable and efficient facilities and may not discriminate between the end users. Discussions relating to the construction of an LNG terminal have begun and the constructions of LNG terminals in North Adriatic Sea have already been confirmed by the European Commission. However, it is not yet clear where the exact location of the terminal will be, since the agreement between Italy, Slovenia and Croatia has not yet been reached.

5.8 Forthcoming developments

As mentioned above, the new Energy Act entered into force in March 2014. It is, therefore, expected that several implementing regulations (regulating individual natural gas related fields in more

detail) shall be adopted shortly. With regard to gas trading, it is expected that a new decree, regulating the functioning of the natural gas market (replacing the currently valid Decree on Functioning of the Natural Gas Market; Official Gazette of the Republic of Slovenia, No. 95/2007) is likely to be adopted already before summer of 2014.

6. UPSTREAM OIL MARKET

6.1 Market overview

The exploitation of oil began in Slovenia in 1940 when oil stocks were discovered in the North-East part of the country (Petišovci pri Lendavi). They are the only stocks of oil to have been discovered and they have already been exhausted. An oil transmission network does not yet exist and Slovenia is, therefore, completely dependent on the import of oil. The main sources of oil are Algeria and Russia. Oil represents 40% of imported fossil fuels in the total supply of energy in Slovenia. The key market players in the Slovenian oil market are the suppliers of oil Petrol d.d. and OMV Slovenija d.o.o. The other suppliers of oil with a minor market share are also MOL Slovenija d.o.o. and AGIP Slovenija d.o.o..

6.2 Regulatory overview

Oil is considered a mineral resource and is regulated by the Mining Act (Official Gazette of Republic of Slovenia No. 61/2010, as amended). In addition also the new Energy Act regulates certain oil-related activities. The search for mineral resources (including oil) is free. However, exploration must not cause damage to third parties. Prior to the commencement of drilling a borehole depth of 30 m or more, it must be verified that the geological structure does not contain beds of coal or hydrocarbons and that borehole does not exceed 300 m.

Prior to the commencement of exploration in a defined exploration area, an exploration permit must be obtained under the conditions and in accordance with the procedure determined by the Mining Act. Prior to the exploitation of oil, an exploitation concession (which may be granted on the basis of previously obtained mining right for exploitation) must be obtained.

An exploration permit and mining right for exploitation may be granted to a legal entity or a natural person who complies with the following requirements: (i) has its registered seat in (or is a citizen of) a Member State of the EU or EEA, Swiss Confederation or OECD or (ii) has its registered seat in (or is a citizen of) a third country under the condition of reciprocity. Nonetheless, it is not possible to obtain a permit for the purpose of injection or storage of carbon dioxide. A

natural person or legal entity which requests an exploration permit or mining right for exploitation must also fulfil all its obligations arising from taxes and other public duties or with respect to previous mining activities. It may not be the subject of any insolvency proceedings and may not have been convicted in a final judgment of a criminal offence in relation to the exploration or exploitation of the mineral sources.

An exploration permit may only be issued on the basis of a previous call for tenders by the competent ministry (currently Ministry of Infrastructure and Spatial Planning). The call for tenders is deemed successful if at least one tenderer submits a bid. In such a case the exploration permit is issued ex officio. If several applicants have submitted their bids, the competent ministry carries out an auction, wherein the bidders submit competitive bids for the amount of compensation for exploration. An exploration permit shall be issued for no more than five years and may not be extended, unless in case of force majeure; in such a case the permit is extended for the duration of the force majeure.

The exploration may begin when the exploration permit becomes final. Prior to exploration, the explorer has to prepare an audited implementation plan for each of the exploration areas. The exploration activities must also be reported to the competent mining inspectorate, the Slovenian Geological Fund and any other body, stipulated by the exploration permit at least 15 days prior to the beginning of the exploration. Every six months during exploration, the explorer must submit a report to the competent ministry detailing exploration activities and the results achieved. Mineral resources may be used only for laboratory tests, technological experiments and in the amount allowed by the exploration permit. Any trade with mineral sources obtained during the exploration is prohibited.

An exploration permit may be revoked, if: (i) the exploration is carried out contrary to the conditions stipulated in the exploration permit; (ii) the prescribed measures for the sanitation of the land or insurance are not implemented; (iii) the exploration prevents or distorts exploration carried out by another explorer on the basis of an exploration permit; (iv) the exploration endangers future exploitation of the mineral sources; (v) a greater amount of mineral resources is used during explorations than envisaged by the exploration permit; (vi) the compensation for exploration has not been paid, even after written notification; or (vii) the exploration does not commence within the deadline determined by the exploration permit.

As a rule, a concession for the exploitation of mineral resources may be granted on the basis of a previously issued mining concession act and call for tenders. In certain limited cases, explicitly determined by the Mining Act, the concession for the exploitation of mineral resources may be granted without a previous call for tenders on the basis of previously issued mining concession act for a certain exploitation area.

Prior to the conclusion of the concession agreement, the holder of the mining right must present an audited mining implementation plan and, if he is not the owner of the respective land, enter into a legal transaction with the owner of the land with the intention of obtaining the right to enable the holder of the mining right to carry out mining activities. The concession agreement process commences with a proposal submitted to the Ministry of Infrastructure and Spatial Planning. Prior to entering into the agreement, the Ministry shall verify whether the mining plan contains all the required elements; has been prepared by an eligible person and audited in accordance with the applicable legislation; whether the exploitation area is in accordance with the concession act; and whether the applicant has the right to carry out the mining activities.

If all the requirements are fulfilled, the concession agreement is concluded for the period determined therein. In particular the concession agreement shall determine the manner of exploitation, description of exploitation area, duration of exploitation right, modality and conditions of concession payment and reservations for the sanitation, modality and conditions of the sanitation, conditions for the cessation and extension of the validity of the mining right, conditions for the transfer and inheritance of right, etc. When the concession agreement enters into force, the holder of the mining right must make a concession payment and reserved sanitation payment. The mining concession payment shall be paid in annual amounts not exceeding EUR 500 for each hectare of exploitation area and 30% of the average price for the produced unit of mineral source in the respective year, except in the event higher prices have been reached in the auction procedure. The amount of reserved payment for sanitation is determined by the mining project.

TURKEY

1. INTRODUCTION TO THE ENERGY MARKET

Due to its remarkable economic growth over the last decade, Turkey's energy demand has considerably increased. In order to meet this growing energy demand, Turkey's energy policy for the next ten years includes the following targets:

- increasing total installed power to 120,000 MW;
- increasing the share of renewable energy sources to 30%;
- establishing an energy exchange;
- commissioning at least two nuclear power plants; and
- minimizing its costs for importing petroleum and gas¹.

Turkey's targets show that energy demand and development of the energy market will not stop². Currently, Turkey's domestic resources meet approximately 28% of its total energy demand. Due to insufficient domestic energy generation, Turkey's primary objective is to strengthen its security of supply. Turkey is determined to diversify its energy supply routes and sources, by including nuclear energy in its generation bundle and increasing the share of renewable energy. Considering Turkey's targets for the next ten years and the substantial increase in energy demand³, it is clear that significant investment (more than double the total amount invested in the last decade) is required to meet energy demand by 2023.

2. ELECTRICITY

2.1 Market overview

The Turkish electricity market is one of the fastest growing electricity markets in the world, with an approximately 9% annual increase on average. In the electricity market, in addition to private companies, there are four active state-owned companies:

- (i) Elektrik Üretim Anonim Şirketi ("EÜAŞ"), the state generation entity;
- (ii) Türkiye Elektrik İletim Anonim Şirketi ("TEİAŞ"), the state transmission entity;
- (iii) Türkiye Elektrik Ticaret ve Taahhüt Anonim Şirketi ("TETAŞ"), the state trading entity; and
- (iv) Türkiye Elektrik Dağıtım Anonim Şirketi ("TEDAŞ"), the state distribution entity.

While the state generation entity, EÜAŞ, still has an important role in this market, the role of private entities is rapidly increasing through both privatizations as well as new facilities. TEİAŞ is a monopoly in electricity transmission. It conducts all of Turkey's transmission activities. Apart from transmission activities exclusively conducted by TEİAŞ, the market is fully accessible to private companies. The distribution network is divided into 21 regions, with a different distribution company in each. All of these companies have recently been privatized. TEDAŞ no longer operates any distribution company, but continues to own the distribution assets. The electricity distribution market has been completely privatized as of 2013. Meanwhile, power plants operated by EÜAŞ are still being privatized⁴.

The new Electricity Market Law⁵ (the "EML") introduces the electricity exchange, which is envisaged to be established at the end of 2014. A new company, EPİAŞ, will administer this electricity exchange. According to its draft articles of association, EPİAŞ' shareholding structure will be as follows:

- (i) 30% will be owned by TEİAŞ;
- (ii) 30% will be owned by the Istanbul Stock Exchange (the "ISE");
- (iii) 30% will be owned by private energy companies; and
- (iv) 10% will be owned by the ISE, provided that it will transfer this 10% to a strategic partner.

According to market studies, the creation of an electricity exchange market will create a whole new market of its own and attract foreign investors to Turkey, which will further increase international competition in the energy sector.

¹ Turkey's total yearly cost for importing crude oil and natural gas is currently approximately USD 56 billion.
² According to the International Energy Agency, energy consumption in Turkey is expected to double over the next decade, while electricity demand growth is expected to increase at an even faster pace.
³ Turkey's energy demand is estimated to grow by approximately 7% each year until 2023.
⁴ The final bids for the privatization of an additional four thermal power plants and five hydroelectric power plants are required to be submitted by April and May 2014.
⁵ Published in the Official Gazette dated 3 March 2001 and numbered 24335.

2.2. Regulatory overview

The Ministry of Energy and Natural Resources (the “**MENR**”) is ultimately responsible for preparing and implementing energy policies, plans and programmes in co-ordination with its affiliated institutions. The Energy Market Regulatory Authority (“**EMRA**”) is responsible for the regulation and supervision of the electricity market’s operation in a competitive environment. EMRA exercises its powers through the Energy Market Regulatory Board (the “**EMRA Board**”).

The main pieces of legislation are the EML¹ and the Electricity Market License Regulation².

2.3. Regulated electricity market activities

The following electricity market activities are regulated by the EML and the Electricity Market License Regulation:

- (i) generation;
- (ii) transmission;
- (iii) distribution;
- (iv) wholesale;
- (v) retail;
- (vi) trade;
- (vii) import; and
- (viii) export.

In order to conduct electricity market activities, companies must obtain separate licenses for each market activity. The new EML abolished certain licenses but also created new license types. The EML abolished the “auto-production license” system. Existing auto-producer licenses will be ex officio converted to generation licenses. EMRA Board Decree No. 4952-18 sets forth the general principles regarding termination of current auto-production licenses and issuance of generation licenses for the relevant entities³. Pursuant to these principles, the EMRA Board issued another Decree No. 4969, providing that as of 1 May 2014, 260 of 274 auto-production licenses will be terminated and generation licenses will be issued to the auto-production license holders⁴.

Due to their specific circumstances, separate procedures will be carried out for the remaining 14 auto-production licenses.

However, individuals or legal entities which :

- (i) generate electricity for their own needs; and

- (ii) have facilities or equipment that are not operating in parallel with the transmission and distribution network, are not required to obtain a license, as long as they remain disconnected to the transmission and distribution networks and do not conduct wholesale or retail activities.

As another innovation, the EML introduces a new type of license, the “supply license”, which combines wholesale and retail sale licenses. Existing wholesale and retail sale license holders will be ex officio granted a supply license without prejudice to their existing rights. Perhaps one of the most salient features of the new EML is the “preliminary license” mechanism for generation license applications. A preliminary license is issued for a specified term to those having submitted an application to EMRA to conduct electricity generation activities. The preliminary license’s purpose is to enable the applicant, during the application’s evaluation, to obtain the necessary permits, approvals and licenses, as well as to acquire ownership of or usufruct rights on the land where the generation facility is to be located.

More recently, in October 2013, EMRA introduced the Regulation on Generating Electricity without a License⁵ (the “**Unlicensed Generation Regulation**”). Under the Unlicensed Generation Regulation, generation facilities with an installed capacity of up to 1 MW based on renewable energy resources are exempt from the requirement to obtain a license. Moreover, if a company generates more electricity than it consumes, the surplus may be sold in the same distribution region within the scope of the RER Support Mechanism⁶.

2.4. Significant sector issues

Under the Electricity Market License Regulation, license holders engaged in more than one market activity and/or carrying out the same licensed activity in more than one facility or region, are required to keep separate accounts and records for each activity, facility or region. Retail companies engaged in both retail of electricity and retail services must keep separate accounts for retail and retail services, and must avoid cross-subsidies between these activities.

The shareholders of distribution utilities can own shares in newly established retail sales. However, as of 1 January 2016, distribution

utilities will not be able to purchase administrative and support services from companies under the control of their parent company. Furthermore, as of 1 January 2016, retail sales companies and distribution utilities will be required to use different physical premises and information system infrastructures.

The Electricity Market License Regulation does not impose any restriction with respect to the market shares of license holders. However, license holders must obtain EMRA’s consent in order to realize the following transactions:

- (i) transfer of 10% or more (5% or more in publicly-held companies) shares in license holding companies;
- (ii) any transaction, resulting in the change of control of a license-holding company; and
- (iii) any transaction resulting in the change of ownership or usage right on licensed facilities.

2.5. Trading including import and export

In addition to the EML and the Electricity Market License Regulation, regulations on electricity trading are set forth under the Regulation on Electricity Market Balancing and Settlement¹ (the “**Balancing and Settlement Regulation**”). The Balancing and Settlement Regulation sets forth the principles and procedures regarding the day-ahead market and real-time balancing of the active electricity demand and supply, as well as settlement of trade in these markets. The Market Financial Reconciliation Center (the “**MFRC**”) operates the day-ahead market, as well as the balancing market.

In Turkey, supply license holders (i.e. wholesale, export, import and retail sales) can conduct electricity trading activities. In order to participate in the electricity market, electricity traders must either conclude a bilateral electricity purchase agreement with another license holder or contribute to the organized markets themselves. Electricity is traded mostly through bilateral negotiated agreements on an over-the-counter basis. Agreements are not subject to EMRA’s approval and, thus, all commercial terms and conditions are freely negotiable. Electricity can also be traded on a day-ahead and real time basis.

The EML and the Electricity Market Import and Export Regulation¹ (the “**Import/Export Regulation**”) set forth the principles and procedures for electricity import and/or export

and the principles with regards to allocation and use of interconnection capacity for cross border trade in the electricity market. Under the Export/Import Regulation, subject to EMRA’s approval, wholesale and retail license holders can import or export electricity from or to countries that meet the international interconnection conditions.

2.6. Transmission, distribution and grid access

TEİAŞ conducts all transmission activities and is required to meet the demands of individuals and companies for connection to the transmission and/or distribution system and for system use. The Electricity Market License Regulation sets forth certain circumstances for the rejection of demands by individuals or legal entities for connection to the transmission and/or distribution systems operated by TEİAŞ or distribution license holders.

These circumstances are as follows:

- (i) the technical features of the network at the demanded connection point are insufficient as of the date that connection was requested;
- (ii) the standards set out in the grid and/or distribution regulations or other applicable legislation with respect to system connection have not been met in the project of the facility requesting connection;
- (iii) TEİAŞ and/or distribution license holders can demonstrate and justify that the intended connection and electricity transport arrangements constitute an obstacle to public service obligations;
- (iv) the values regarding technical issues such as voltage decrease, harmonic, electromagnetic levels, in the project of the facility requesting connection fail to meet the limits set out in the applicable legislation at the network entry and exit points and at the transmission and/or distribution levels; or
- (v) in the events that that the facility to be connected to the grid detracts from the quality of system electricity with regards to the standards envisaged in the related legislation.

If TEİAŞ and/or the distribution license holder cannot provide the necessary financing to upgrade the capacity of the system, an individual or company connected to the system may carry out² or finance a system expansion investment or a new investment

¹ The new Electricity Market Law entered into force in March 2013. Its objective is to address various new issues which have long been awaited in the electricity market, such as the “preliminary license” mechanism for generation license applications.

² Published in the Official Gazette dated 2 November 2013 and numbered 28809.

³ EMRA issued this decree on 3 April 2014.

⁴ EMRA issued this decree on 17 April 2014.

⁵ Published in the Official Gazette dated 2 October 2013 and numbered 28783.

⁶ See Section 3 for further information.

¹ Published in the Official Gazette dated 15 April 2009 and numbered 27200.

² In line with the technical standards specified in the applicable legislation.

to increase the capacity of the system. In cases where system connection and use of the system by generation companies are possible, the license holder and TEİAŞ and/or the distribution license holder must conclude connection and system usage agreements.

EMRA regulates the connection and use of system tariffs, including transmission and distribution tariffs. The terms and conditions regarding the applicable tariffs for connection to and use of the system are regulated under the following secondary legislation:

- Electricity Market Grid Regulation;¹
- Electricity Market Tariff Regulation;²
- Electricity Market Distribution Regulation;³ and
- Electricity Market Connection and Use of the System Regulation⁴.

License holders must prepare and submit their tariff proposals to EMRA by the end of October every year. EMRA must complete the examination and evaluation of these proposals before 31 December. The tariffs will be effective for the tariff period between 1 January and 31 December of the following year.

3. RENEWABLE ENERGY

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3.1. Market overview

In recent years, investments in electricity generation from renewable energy resources have significantly increased. In the first ten months of 2013, in terms of total capacity, 54.75% of energy investments were in renewable energy based facilities. One of Turkey’s targets is to increase the share of electricity generated from renewable energy sources to 30% by 2023.

3.2. Regulatory overview

The key primary legislative instruments regarding renewable energy are as follows:

- (i) the Electricity Market Law and the Electricity Market License Regulation;
- (ii) the Law on the Utilization of Renewable Energy Sources for the Purpose of Generating Electrical Energy⁵ (the “Renewable Energy Law” or “RER Law”);

- (iii) the Geothermal Resources and Natural Mineral Waters Law;⁶ and
- (iv) the Energy Efficiency Law ⁷.

In line with Turkey’s substantial potential and its renewable energy targets, Turkey introduced the following secondary legislation in 2013:

- (i) the Regulation Regarding Generating Electricity without a License;⁸
- (ii) the Regulation on Documentation and Support of Renewable Energy;⁹
- (iii) the Regulation on Technical Evaluation of Solar Energy Based License Applications;¹⁰
- (iv) the Contest Regulation on Pre-License Applications Regarding Generation Facility Based on Solar and Wind Energy;¹¹ and
- (v) the Regulation on Renewable Energy Resources For Electricity Generation.¹²

Additional requirements

Electricity generation based on renewable energy sources is subject to the same requirements as all electricity generation applicants. However, the following additional documents are needed when submitting an application to EMRA:

- (i) a wind power plant contribution agreement (Rüzgar Enerjisi Santrali Katkı Payı Anlaşması) for wind energy projects;
- (ii) land allocation for solar energy projects;
- (iii) a water utilization agreement for hydroelectric power plant projects; and
- (iv) a fuel supply agreement or right to use the energy source for facilities using wave, biomass, biogas (including waste gas) or geothermal power plant projects.

3.3. Governmental support for renewable energy

investments

Renewable energy resources support mechanism

The Renewable Energy Law established a renewable energy support mechanism (the “RER Support Mechanism”). The RER Support Mechanism was formed in order to support renewable energy investments. The support mechanism includes price, terms, procedures and principles regarding payments, from which

individuals generating energy based on renewable energy resources within the scope of the RER Law can benefit. Article 6 of the RER Law provides that the prices in Schedule I (see below) will be applicable for ten years for generation licenses subject to the RER Support Mechanism that are commissioned until 31 December 2020¹.

Schedule I

Facility Type	Applicable Price (USD cent/kWh)
Hydroelectric	7.3
Wind	7.3
Geothermal	10.5
Biomass	13.3
Solar power	13.3

Renewable energy facilities must obtain a RER certificate in order to benefit from the RER Support Mechanism. Under the Renewable Energy Law, EMRA issues RER certificates for legal entities holding generation licenses in order to identify and monitor the type of resource in trading of electricity generated from renewable energy resources in the domestic and international markets. RER certificates are granted for one year.

Incentive regime

The RER Law provides that, subject to a Council of Ministers’ decree, renewable energy facilities may benefit from certain tax incentives. Additionally, renewable energy facilities, related roads and transmission lines established in a forestry area or on Treasury land benefit from 85% discounts on land allocation, lease or utilization fees for ten years, starting from the date when construction starts, provided that the generation activity commences before 2020. Furthermore, upon the relevant ministry’s or the relevant regional protection committee’s approval, renewable energy facilities can be established in national parks, natural parks, natural monument and conservation zones, protected forests, wildlife protection areas and special environmental protection areas.

Under the RER Law, if the mechanical and/or electro-mechanical equipment used in the renewable energy generation facilities commissioned before 31 December 2020 are manufactured domestically, the prices in Schedule I will be added to the prices given in Schedule II (see below) for five years starting from the commissioning of the generation facility for electrical energy generated in such facilities and given to the distribution system. The Regulation on Domestic Manufacturing of Components used in

Renewable Energy Based Electricity Generation Facilities² regulates the principles and procedures regarding the definition, standards, certification and inspection of the scope of domestic manufacturing.

Schedule II

Facility Type	Domestic Production	Contribution (USD cent/kWh)
Hydroelectric	Turbine	1.3
	Generator and power electronics	1
Wind	Wing	0.8
	Generator and power electronics	1
	Turbine tower	0.6
	The mechanical equipment in rotor and nacelle groups	1.3
Photovoltaic solar	PV panel integration and solar structural mechanics production	0.8
	PV modules	1.3
	Cells forming the PV module	3.5
	Invertor	0.6
	Material focusing the solar rays onto the PV module	0.5
Intensified solar	Radiation collection tube	2.4
	Reflective surface plate	0.6
	Sun chasing system	0.6
	Mechanical accessories of the heat energy storage system	1.3
	Mechanical accessories of steam production system that collects the sun rays on the tower	2.4
Biomass	Stirling engine	1.3
	Panel integration and solar panel structural mechanics	0.6
	Fluid bed steam tank	0.8
	Liquid or gas fuel steam tank	0.4
	Gasification and gas cleaning group	0.6
	Steam or gas turbine	2.0
	Internal combustion engine or stirling engine	0.9
	Generator and power electronics	0.5
	Cogeneration system	0.4
	Steam injector or vacuum compressor	0.7
Geothermal	Steam or gas turbine	1.3
	Generator and power electronics	0.7

¹ Published in the Official Gazette dated 22 January 2013 and numbered 25001.

² Published in the Official Gazette dated 11 August 2002 and numbered 24843.

³ Published in the Official Gazette dated 2 January 2014 and numbered 28870.

⁴ Published in the Official Gazette dated 28 January 2014 and numbered 28896.

⁵ Published in the Official Gazette dated 18 May 2005 and numbered 25819.

⁶ Published in the Official Gazette dated 13 June 2007 and numbered 26551.

⁷ Published in the Official Gazette dated 2 May 2007 and numbered 26510.

⁸ Published in the Official Gazette dated 2 October 2013 and numbered 28783.

⁹ Published in the Official Gazette dated 1 October 2013 and numbered 28782.

¹⁰ Published in the Official Gazette dated 1 June 2013 and numbered 28664.

¹¹ Published in the Official Gazette dated 6 December 2013 and numbered 28843.

¹² Published in the Official Gazette dated 27 November 2013 and numbered 28834.

¹ Although the initial date set in the RER Law was 31 December 2015, a Council of Ministers’ Decree dated 18 November 2013 extended the incentive term until 31 December 2020.

² Published in the Official Gazette dated 19 June 2011 and numbered 27969.

4. PETROLEUM

4.1. Overview

Due to insufficient petroleum sources, Turkey is dependent on importation. It imports petroleum mainly from Iran, Russia, Iraq, Saudi Arabia and Kazakhstan.

While the MENR is the responsible ministry for the petroleum sector, EMRA is the regulatory authority for the downstream petroleum market. The Petroleum Market Law (the “PML”) and the Liquefied Petroleum Gas Market Law govern downstream petroleum market activities in Turkey, along with the Petroleum Market License Regulation¹.

In addition to private companies, the Turkish Petroleum Corporation (“TPAO”), a state-owned oil and natural gas company, is active in the downstream petroleum market. TPAO has four fundamental activities:

- (i) exploration, drilling, production and well completion (upstream);
- (ii) natural gas storage (downstream natural gas);
- (iii) participation in oil and gas pipeline projects (upstream); and
- (iv) oil trade, distribution and transportation (downstream petroleum).

4.2. Regulated petroleum market activities

Under the PML and the Petroleum Market License Regulation, in order to conduct downstream petroleum market activities, companies must obtain the requisite petroleum market license from EMRA. A separate license is required for each activity and each facility. The types of licenses are as follows:

- (i) refining;
- (ii) processing;
- (iii) lube oil production;
- (iv) storage;
- (v) transmission;
- (vi) eligible consumer;
- (vii) bunker delivery;
- (viii) distribution;
- (ix) transportation; and
- (x) dealership.

4.3. Significant sector issues

One of the fundamental sector issues in the downstream petroleum market is related to the distributors’ market shares in the Turkish petroleum market. A distributor’s market share cannot exceed 45% of the total domestic petroleum market. The PML imposes another market share restriction with regards to distributors and their dealers. A distributor’s sales via dealers under their ownership cannot exceed 15% of that distributor’s total domestic market share.

The Competition Board’s interventions are also important for distributors and their dealers. Through its communiqués, the Competition Board has imposed a restriction on the length of non-compete undertakings in vertical agreements. Non-compete undertakings stipulated for indefinite terms or terms exceeding five years can no longer be granted a block exemption from the prohibition of agreements, concerted practices or decisions that restrict competition in a specific market². As the agreements between petroleum distributors and their dealers are vertical agreements, this restriction also affects the downstream petroleum market. Pursuant to the Competition Board’s latest decisions, all personal or real rights such as loan contracts, equipment contracts, long term lease contracts and long term usufructs regarding dealership agreements, must be limited to five years.

Another significant sector issue concerns access to transmission and storage networks. Companies that have distribution or storage licenses cannot discriminate among third parties of equal status for access to transmission and storage networks. License holders having spare capacity in their facilities must meet the transmission and storage demands, on the condition that these demands meet certain conditions³.

5. NATURAL GAS

5.1. Market overview

Parallel to electricity consumption, natural gas consumption in Turkey is increasing. According to the MENR, natural gas demand is expected to increase with a growth rate of 2.9% until 2020. Due to insufficient natural gas sources, Turkey is dependent on gas

importation from Turkmenistan, Azerbaijan and Iran, in addition to LNG imports from Nigeria and Algeria¹.

Although the downstream natural gas market is open to private participation, the state-owned company, the Petroleum Pipeline Corporation (“BOTAŞ”), still holds a significant position in this sector. BOTAŞ was established in 1974 as a subsidiary of TPAO to transport Iraqi crude oil to the Ceyhan Marine Terminal (an upstream activity). However, BOTAŞ expanded its purpose to also conduct downstream natural gas activities, such as natural gas importation and trade, and has become a key player in the downstream natural gas market.

With the enactment of the Natural Gas Market Law (the “NGML”) in 2011, BOTAŞ lost its monopoly rights on natural gas imports, distribution and sales. However, BOTAŞ holds its key position, as it owns and operates the natural gas transmission network and still imports approximately 80% of the natural gas consumed in Turkey. After BOTAŞ’s natural gas agreement with Russia expired in 2011, four private companies concluded agreements with Russian Gazprom and obtained import licenses in order to import natural gas from Russia. These companies are:

- (i) Enerco;
- (ii) BosphorusGaz;
- (iii) Avrasya Gaz; and
- (iv) Shell Gaz.

Most of the state-owned distribution companies active in the downstream natural gas market have been privatized. The latest privatization was realized in 2013. Ankara’s natural gas distribution company, Başkent Doğalgaz Dağıtım A.Ş. was privatized after two failing attempts in 2008 and 2010. The only remaining significant state owned distribution company is İstanbul’s distribution company, İstanbul Gaz Dağıtım A.Ş. (İGDAŞ).

5.2. Regulatory overview

EMRA is the responsible authority for the regulation and supervision of the downstream natural gas market. The NGML governs downstream natural gas activities, which are regulated in more detail by the Natural Gas Market License Regulation². In 2013, an amendment law proposing substantive amendments to the Natural Gas Market Law (the “Draft Amendment Law”) was prepared. As of the date of this guide, Turkey has not enacted these amendments.

5.3. Regulated natural gas market activities

Under the NGML, in order to conduct natural gas market activities, a license must be obtained from EMRA. A separate license is required for each activity and each facility. The types of licenses are as follows:

- (i) import;
- (ii) transmission;
- (iii) storage;
- (iv) wholesale;
- (v) export;
- (vi) distribution within a city; and
- (vii) sale, distribution and transmission of compressed natural gas.

5.4. Significant sector issues

The NGML provides that market participants active in more than one market activity or one market activity in more than one facility, must keep separate accounts for each activity or facility. Cross-subsidizing between accounts is prohibited. Aside from this account separation, distribution licensees must maintain separate accounts for their natural gas sale and transportation activities.

The NGML imposes market share restrictions on companies other than natural gas producers, as well as on natural gas import companies. Under the NGML, companies cannot sell natural gas corresponding to more than 20% of the estimated national consumption and import companies cannot import natural gas corresponding to more than 20% of estimated national consumption. EMRA determines the estimated natural gas consumption.

The NGML imposes importation restriction on private companies. Under the NGML, import companies cannot conclude new natural gas purchase agreements (except for LNG) with countries with which BOTAŞ currently has agreements. The Draft Amendment Law will change this restriction and provides that companies can conclude natural gas sale and purchase agreements with these countries. However, the Draft Amendment Law adopts the condition that 50% of the volume that the company intends to import will be deducted from BOTAŞ’s current obligations.

EMRA Board Decree No. 725 (“Decree No. 725”) sets forth the procedures and principles for import license applications by companies planning to import natural gas from countries from which BOTAŞ does not already import gas. Under Decree No. 725,

¹ Published in the Official Gazette dated 17 June 2004 and numbered 25495.
² Where the non-compete undertaking may indirectly be renewed in a manner so that the total term exceeds five years, the non-compete undertaking will be considered “indefinite”.
³ The Petroleum Market License Regulation regulates these conditions.

¹ According to the Energy Minister, in 2012 Turkey and Algeria agreed on a 10 year, 4.4 billion m³/year extension to their existing LNG import agreement, which was set to expire in 2014.
² Published in the Official Gazette dated 7 September 2002 and numbered 24869.

BOTAŞ’s affirmative opinion is required on these import license applications. Accordingly, EMRA must obtain BOTAŞ’s opinion on whether or not such import activity will affect the performance of BOTAŞ’s obligations arising out of its existing contracts (in BOTAŞ’s natural gas importer capacity). Moreover, Decree No. 725 requires consultation with BOTAŞ (in its transmission system operator (TSO) capacity) on the technical suitability of such import through BOTAŞ’s transmission network. Under the Draft Amendment Law, MENR is required to adopt measures regarding natural gas supply security. The Draft Amendment Law also imposes additional duties and responsibilities on market players, such as requiring import companies to notify EMRA of their natural gas purchase agreements, and ensuring that transmission companies prepare a supply/demand equilibrium report to submit to EMRA.

Although the NGML required BOTAŞ to be unbundled starting from 2009, BOTAŞ has not been separated into different legal entities. The Draft Amendment Law also stipulates the unbundling of BOTAŞ and plans to divide BOTAŞ into three legal companies:

- (i) the first to conduct transmission activities;
- (ii) the second to operate LNG facilities and to conduct storage activities; and
- (iii) the third to perform other natural gas market activities.

5.5. Transmission, distribution and access to the system

Distribution or transmission licensees cannot discriminate among third parties of equal status for access to transmission and distribution networks. Licensees can only decline third party access requests based on certain specific grounds. These specific grounds are:

- (i) insufficient capacity;
- (ii) lack of capacity to fulfil existing obligations; and
- (iii) severe financial compensation obligations imposed on the companies holding these licenses by agreements.

If an applicant undertakes to cover the expenses to overcome the lack of capacity, access cannot be denied.

Third party access to the transmission network is regulated under the BOTAŞ Transmission Network Operation Principles¹ (the Network Code) and the Natural Gas Market Transmission Network

Operation Regulation². In order to access the network, the relevant company must conclude a connection agreement with BOTAŞ³. In addition, a standard transportation agreement must be concluded for gas transportation. Third party access to distribution networks is regulated under the Natural Gas Market Distribution and Customer Relations Regulation⁴. Distribution companies must connect all consumers within their region⁵. A connection agreement must be concluded, and the technical connection and service lines must be established.

Companies using the gas transmission system are charged connection tariffs. The parties can freely determine fees, on the condition that EMRA’s connection tariff principles are reflected in the relevant connection agreements. Except for LNG transportation (in respect of which parties can freely determine applicable tariffs), EMRA sets transmission tariffs, which include the payment of a transmission fee.

5.6. LNG and natural gas storage

The Regulation on the Procedures and Principles for the Use of LNG Storage Facilities⁶ regulates the establishment of LNG storage facilities in Turkey. There are currently two LNG facilities (operated by BOTAŞ and Ege Gaz) and four storage licenses in force obtained by TPAO, BOTAŞ, Toren Doğalgaz Depolama ve Madencilik and Gaz Depo ve Madencilik⁷. The latter four licenses were issued for natural gas storage in gas form below ground.

Under the NGML and the Natural Gas Market License Regulation, import license applicants must obtain commitment and guarantees from the storage license holders regarding their capacity to store 10% of the yearly imported natural gas in Turkey within five years. Similarly, wholesale license holders must adopt required storage related measures within five years starting from the issuance of their license. However, EMRA is authorized to extend this term, if the insufficiency of storage facilities continues.

Third party access

The third party access procedures for the two existing LNG terminals are separately stipulated under the guidelines approved by the Principles and Procedures Applicable to the Utilization of

BOTAŞ LNG Terminal and the Principles and Procedures Applicable to the Utilization of Ege Gaz LNG Terminal. Principally, except for the exclusive grounds mentioned under Section 5.5. for distribution and transmission networks, companies holding storage licenses must accept storage requests. However, as there are only four storage licenses in force (and the current storage capacity is insufficient), third party access is practically impossible. Due to this situation, EMRA does not strictly monitor the performance of storage related obligations and, in practice, does not impose penalties due to non-performance of storage related obligations.

5.7. Trading

In Turkey, natural gas trading is physical. BOTAŞ’s Network Operation Manual regulates natural gas trading. In addition, natural gas trading is regulated under the provisions set forth in each separate license. In Turkey, four types of license holders conduct gas trading:

- (i) production lease; ¹
- (ii) import license;
- (iii) export license; and
- (iv) wholesale license.

Private law contracts must be signed by suppliers and consumers for participating in natural gas trading. A natural gas sale agreement is the primary agreement executed within the scope of natural gas trading. Aside from a natural gas sale agreement, the parties must conclude the following agreements:

- (i) operation agreements;
- (ii) system connection agreements; and
- (iii) lease agreements.

6. UPSTREAM

6.1. Market overview

Thanks to its geopolitical position, Turkey is a critical country for petroleum and natural gas trade between the east and the west.

Being the bridge between energy-rich eastern countries and import-dependent western countries, Turkey is a natural transit country for the maritime and pipeline transportation of crude oil and natural gas. In addition to private companies, TPAO is the most active state-owned company in the upstream market².

6.2. Regulatory overview

While the new Turkish Petroleum Law³ (the “TPL”) governs upstream crude oil and natural gas activities⁴, the Law on Transit Passage through Petroleum Pipelines⁵ (the “Transit Law”) governs the transit passage of oil and gas. Turkey enacted the TPL in 2013 and abolished the former Petroleum Law⁶ (the “PL”) after nearly 60 years. In early 2014, the Turkish Petroleum Law Implementation Regulation⁷ was introduced. Unlike the downstream market, the General Directorate of Petroleum Affairs (the “GDPA”) is the regulatory authority responsible for the upstream market. EMRA does not have a role in this market.

6.3. Regulated upstream market activities

The TPL defines a “petroleum right” as any right arising from one of the following permits or licenses:

- (i) investigation permit;
- (ii) exploration license; and
- (iii) production lease.

Investigation permit

Under the TPL, field research is defined as the investigation of land from the ground or air by topographical, geological, geophysical, geo-chemical, and similar methods to gather data, in order to explore petroleum; and drilling, other than exploration drilling, in order to gather geologic information. An investigation permit must be obtained from the GDPA in order to conduct research within an area with determined boundaries. The GDPA concludes investigation permit applications within 60 days. The fact that there is already an investigation permit, exploration license or production lease for a part of the field for which the permit is requested, does not prevent the issuance of another investigation permit. An investigation permit holder must pay a one-time fixed amount per hectare.

¹ Published in the Official Gazette dated 22 August 2004 and numbered 25561.
² Published in the Official Gazette dated 26 October 2002 and numbered 24918.
³ BOTAŞ is the owner of the existing national transmission network.
⁴ Published in the Official Gazette dated 3 November 2002 and numbered 24925.

⁵ Distribution companies can sell their entire distribution networks prior to expiration of their distribution license by obtaining EMRA Board approval.
⁶ Published in the Official Gazette dated 16 May 2009 and numbered 27230.
⁷ The latter two obtained storage licenses in February 2014.

¹ The license holder can conduct petroleum trade. However, it cannot conduct natural gas trade without a wholesale license.
² Upon the enactment of the Turkish Petroleum Law, the Minister of Energy and Natural Resources reiterated the government’s intention to privatize TPAO through a public offering of its shares.

³ Published in the Official Gazette dated 11 June 2013 and numbered 28647.
⁴ Under the TPL, the definition of “petroleum” includes both crude oil and natural gas.
⁵ Published in the Official Gazette dated 29 June 2000 and numbered 24094.
⁶ Published in the Official Gazette dated 16 March 1954 and numbered 8659.
⁷ Published in the Official Gazette dated 22 January 2014 and numbered 28890.

Exploration license

As a petroleum right holder, companies holding exploration licenses can conduct exploration activities within the license field, conduct research activities around the license field, and produce petroleum by developing petroleum fields and apply for discovery. Turkey is divided into two petroleum districts, namely onshore and offshore districts, and there are general limitations regarding the maximum size of exploration areas. Unlike the former PL, the TPL does not require a fixed amount as the state right payment. However, it retains the 12.5% royalty amount.

The term for exploration licenses is five years for onshore licenses and eight years for offshore licenses. A two year extension for onshore and three year extension for offshore licenses may be granted twice. Consequently, the total term may not exceed nine years for onshore licenses and 14 years for offshore licenses. However, if petroleum is discovered at the end of the exploration license's term, an additional term of up to two years can be granted, to evaluate the commercial aspects of the petroleum discovery.

Production lease

In the event of a discovery during exploration, a production lease must be obtained from the GDPA in order to continue exploration and production and for the sale of production. Under the PML, companies holding a production lease may sell the crude oil it produces, without obtaining a separate license from EMRA. On the other hand, under the NGML, in order to sell the natural gas it produces, a company must first obtain a wholesale license from EMRA.

While the abolished PL imposed restrictions on the number and area of production leases, the TPL has abolished all of these restrictions. Both exploration license and production lease holders must pay a 12.5% royalty. The term of a production lease is 20 years and it can be extended twice by ten year terms. Consequently, just as under the PL, the total term of a production lease is 40 years. Exploration licenses, production leases and related petroleum rights, as well as their conditions and restrictions, are recorded in the Petroleum Registry. The transfer of rights arising from and on these licenses is also recorded in the Petroleum Registry, upon the GDPA's evaluation and approval. The GDPA must conclude transfer applications within 60 days.

6.4. Material changes by the Turkish Petroleum Law

Turkey is now divided into two petroleum districts in accordance with the TPL, namely onshore and offshore, whereas previously

there were 18 petroleum districts under the abolished PL. As another novelty, the TPL abolished the restriction on the number of licenses a company can obtain for a single petroleum district. Under the PL, the number of licenses a company could obtain for a single petroleum district was eight. More importantly, the TPL abolished the "national interest" concept. Based on this concept, TPAO had a statutory right to obtain exploration licenses on the state's behalf, and accordingly TPAO had an advantage for exploration license applications. TPAO no longer has this privilege.

6.5. International crude oil & gas pipelines

The transit passage of oil and gas through Turkey is generally governed by international agreements between Turkey and the relevant other countries. If there is an international agreement, then the Transit Law applies. Accordingly, the legal regime governing transit pipelines consists of (i) the Transit Law; (ii) the international agreement (generally an IGA); and (iii) the project agreements.

Aside from "transit" pipelines transiting through Turkey (e.g. the Baku – Tbilisi – Ceyhan (BTC) Pipeline and the contemplated Trans Anatolian Natural Gas Pipeline (TANAP)), there are non-transit pipelines, such as the Kirkuk – Yumurtalik Crude Oil Pipeline, which transport crude oil or natural gas to or from Turkey. Either a Council of Ministers' Decree (pursuant to the PL) or an intergovernmental agreement (IGA) signed specifically for that pipeline, applies as the legal regime governing the non-transit pipeline. Turkey currently has two international crude oil pipelines:

- (i) the BTC Crude Oil Pipeline, transporting crude oil from the Caspian Sea to Ceyhan, Adana (transit); and
- (ii) the Kirkuk – Yumurtalik Crude Oil Pipeline, transporting crude oil from Iraq to Adana (import).

In addition, Turkey has three international natural gas pipelines:

- (i) the Baku – Tbilisi – Erzurum (BTE) Natural Gas Pipeline, transporting natural gas from Azerbaijan's Shah Deniz gas field (Stage I) to Turkey (import);
- (ii) the Blue Stream Natural Gas Pipeline, transporting natural gas from Russia to Turkey through the Black Sea (import); and
- (iii) the Interconnector Turkey – Greece, transporting natural gas between Turkey and Greece (export).

The following envisaged projects will make Turkey a true oil and gas transport hub:

- (i) TANAP, to transport natural gas from Azerbaijan's Shah Deniz gas field (Stage II) to Europe, through Turkey;

- (ii) the Trans Adriatic Natural Gas Pipeline (TAP), to transport natural gas from Turkey to Southern Italy and further into Europe, through Greece and Albania;
- (iii) the South Stream Natural Gas Pipeline Project, to transport natural gas from Russia to Europe through Turkey's Black Sea territorial waters;
- (iv) the Trans Caspian Natural Gas Pipeline Project, to transport natural gas from Turkmenistan to Erzurum, Turkey and possibly to Europe;
- (v) the Mashreq – EU Natural Gas Pipeline Project, to transport natural gas from the Mashreq countries (Egypt, Jordan, Lebanon and Syria) to Iraq, Turkey and the EU;
- (vi) the Northern Region of Iraq – Turkey Crude Oil Pipeline Project, to transport crude oil from the Northern Region of Iraq to Turkey; and
- (vii) Iran – Germany Natural Gas Pipeline Project, to transport natural gas from Iran to Germany through Turkey.

7. NUCLEAR

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In Turkey, the Law on Construction and Operation of Nuclear Power Plants and the Sale of Energy Generated from those Plants ("Law No. 5710") and the Regulation on the Principles and Procedures for Competition and Contracts within the Framework of Law No. 5710 are the main pieces of legislation governing and regulating nuclear energy. As Turkey enacted these pieces of legislation for the establishment of the Akkuyu Nuclear Power Plant Project (the "Akkuyu NPP"), they only provide a general overview of the nuclear energy sector in Turkey.

Under the Rules on Licensing of Nuclear Facilities,¹ the Turkish Atomic Energy Authority ("TAEA") is designated as the responsible authority for the licensing of nuclear power plants. A nuclear power plant operator must obtain from TAEA the following:

- (i) site license;
- (ii) construction license; and
- (iii) operation license.

In addition, to generate electricity, the nuclear power plant operator must obtain an electricity generation license from EMRA. In addition to these principal pieces of legislation, IGAs and host-

government agreements (HGA) are concluded in order to establish a special legal regime for the contemplated nuclear power plant projects. Currently, there are two nuclear power plant projects in Turkey. The first project is the Akkuyu Nuclear Power Plant, which is to be built in the Mersin Province on the Mediterranean coast. On 12 May 2010, Russia and Turkey signed an IGA in Ankara and this IGA was enacted by a Council of Ministers' Decree dated 6 October 2010.

The second nuclear power plant is planned to be constructed in Sinop, in the Black Sea region. In April 2013, Japan's Mitsubishi Heavy Industries Ltd and France's Areva SA were chosen to build this power plant. On 30 October 2013, Japan and Turkey concluded a joint declaration in relation to this power plant. According to the press release, technical negotiations regarding the issues under the HGA have been concluded and feasibility studies have been initiated.



¹ Published in the Official Gazette dated 19 December 1983 and numbered 18256.





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