Practical Law™

GLOBAL GUIDE 2016/17
ENERGY AND NATURAL RESOURCES

ACC Association of Corporate Counsel

Electricity regulation in Romania: overview

Delia Vasiliu and Vladimir Plugarescu
Pachiu & Associates

global.practicallaw.com/4-566-2907

OVERVIEW

Electricity market

1. What is the role of the electricity market in your jurisdiction?

The energy sector plays a central role in Romania's economy and policy. One of the main current priorities of the Romanian government is the preparation of the National Energy Strategy for the years 2016 to 2030, with an outlook to 2050, including the vision and strategy of the government on the development of the energy sector for the future, identifying vulnerable aspects of the industry and solutions to reach the country's objectives. The preliminary report is currently under public consultation and the final document is expected to be published by the end of September 2016.

The preliminary document drafted by the Energy Ministry provides seven core priorities of the energy policy:

- Maintaining a balanced and diversified energy mix.
- Decarbonisation of the energetic system through competitive market mechanisms.
- Increasing investments in the energy sector.
- Interconnection and integration in the regional energy markets.
- Protection of the vulnerable consumer and combating energy poverty.
- Improving the quality of the energy governance and the institutional and administrative capacity of the country in the energy sector.
- Turning Romania into a regional energy hub.

The progressive shift from a regulated to a liberalised electricity market started officially in 2000 and was fully completed 1 July 2007, when all consumers became eligible to change electricity supplier. Regarding the price de-regularisation process, for non-household consumers, price liberalisation was finalised on 1 January 2014, while for household consumers, the electricity prices will be fully liberalised stepwise by 31 December 2017.

During 2015, the most important problems facing investors on the Romanian energy market included the:

- Unpredictable, non-transparent and numerous changes in legislation (mostly referring to the renewable energy sources industry).
- Unstable electricity infrastructure.
- Low level of power consumption caused by the reduced consumption of the economic sector.

In 2015, the total amount of electricity traded on the centralised energy markets was of 71.7 terawatt-hours (TWh), representing 138.4% of domestic electricity consumption. The electricity traded on the centralised markets exceeds the national consumption, due to the selling and reselling transactions operated between traders.

Integration of the Romanian electricity market into the internal European market is Romania's strategic target. Starting 19 November 2014, the Romanian day ahead market is operating in a coupled regime with the markets in the Czech Republic, Slovakia and Hungary.

Recent trends

Energy strategy and policy. To prepare the National Energy Strategy for 2016 to 2030, the Energy Ministry performed a diagnostic analysis of the Romanian energy sector, called *The Analysis on the Romanian Energy Sector*, providing that the main strategic objectives of the national energy policy are aimed at ensuring a dynamic balance among three fundamental aspects:

- Energy security.
- Competitiveness of the internal energy markets and economic competitiveness.
- Ecological and climate sustainability.

The public consultation on the analysis ended in April 2016 and included active public debates between 200 experts in the Romanian energy sector, including:

- Government representatives.
- Members of the Romanian Parliament.
- Members of the academic institutions and of the regulatory authorities.
- Experts from private companies.

Renewable energy. To encourage the generation of renewable energy, Romania introduced a support scheme for the first time in 2004, which was substantially amended in 2008, with full applicability starting July 2011 (after approval from the EU), that generated almost EUR8 billion worth of investments in the renewable sector.

The support is based on a green certificate (GC) trading mechanism combined with a mandatory GCs acquisition quota. It consists of the right of renewable energy producers to receive GCs and to sell these to the suppliers of electricity to end consumers, where the suppliers must acquire a regulated share of GCs, according to the amount of electricity sold to end consumers. The GCs are traded separately from electricity, on regulated markets, at prices between the minimum and the maximum regulated prices. The cost of the GCs is supported exclusively by the end consumers. In 2016, the GCs' impact on the consumers' bills is estimated at RON43 per megawatt-hour (MWh) (around EUR9.5 per MWh).

According to the support scheme approved in 2008, power plants commissioned and qualified (that is, accredited) for the support mechanism before 31 December 2016, using energy generated from solar, wind, geothermal, biomass, bio-liquids, biogas, gas from waste, gas from wastewater treatment and energy produced in hydropower plants with an installed capacity of 10 megawatts (MW) or below, were allowed to receive a certain number of GCs, depending on the technology, for a period of ten or 15 years (depending if the technology was new or previously used on the territory of another EU member state). The number of GCs released for each MWh of electricity fed into the grid is as follows:

- Hydropower plants (installed capacity of less than 10MW):
  - new (for 15 years): 3 GCs;
  - refurbished (for ten years): 2 GCs; and
  - old (for seven years): 0.5 GC.
- Wind power plants:
  - new (for 15 years): 2 GCs (until 2017); and
  - re-used (for seven years): 1 GC (starting 2018).
- Solar power plants:
  - new (for 15 years): 6 GCs; and
  - re-used (for 7 years): 6 GCs.
- Geothermal: 2 GCs.
- Biomass: 2 GCs.
- Biogas: 2 GCs.

While almost 20% of the current energy production comes from renewable energy sources, the producers are dealing with a series of financial issues because of the changes brought to the initial form of the green certificates support mechanism.

One of the main changes was the reduction of the GCs number to be granted for renewable energy sources (RES) projects commissioned after 1 January 2014 and the postponement of the trading of GCs for projects commissioned before 1 January 2014 (with the possibility to be gradually recovered, starting April 2017 until December 2020, depending on the technology used). The following RES have been subject to these reductions:

- Hydropower plants (installed capacity of less than 10MW):
  - initial number of GCs per MWh (for projects commissioned/producer accredited before 1 January 2014): 3;
  - number of GCs issued per MWh (for projects commissioned/producer accredited after 1 January 2014): 2.3; and
  - number of postponed GCs per MWh (for projects commissioned/producer accredited before 1 January 2014): 1.
- Wind power plants:
  - initial number of GCs per MWh (for projects commissioned/producer accredited before 1 January 2014): 2 (until 2017)/1 (starting 2018);
  - number of GCs issued per MWh (for projects commissioned/producer accredited after 1 January 2014): 1.5 (until 2017)/0.75 (starting 2018); and
  - number of postponed GCs per MWh (for projects commissioned/producer accredited before 1 January 2014): 1.
- Solar power plants:
  - initial number of GCs per MWh (for projects commissioned/producer accredited before 1 January 2014): 6;
  - number of GCs issued per MWh (for projects commissioned/producer accredited after 1 January 2014): 3; and
  - number of postponed GCs per MWh (for projects commissioned/producer accredited before 1 January 2014): 2.

Over the last months, the Romanian renewable energy sector has been severely affected by the consequences of significant legislative changes implemented in recent years, for example:

- The GCs support scheme was changed, with a reduction in the number of GCs allocated to the producers of electricity from renewable energy sources (E-RES) from wind, solar and small hydro power plants for projects commissioned after 1 January 2014.
- A certain number of GCs for projects commissioned before 1 January 2014 have been suspended from trading, for example:
  - solar and micro-hydro technologies GCs are suspended between 1 July 2013 and 1 April 2017; and
  - wind technology GCs are suspended between 1 July 2013 and 1 January 2018.
- The validity period of the GCs has been reduced from 16 months to 12 months and the GCs acquisition quota has been reduced in the following manner:
  - from 15% to 11.1% for 2014;
  - from 16% to 11.9% for 2015; and
  - from 17% to 12.15% for 2016.
- A protectionist measure for large industrial energy consumers has been adopted, involving a partial exemption from the obligation to purchase a certain number of GCs (ranging from 40% up to 85% of the total number of GCs that an undertaking was required to acquire in order to meet its quota obligation).
- The requirements that all GCs are traded in a transparent, centralised and non-discriminatory manner, exclusively on the centralised markets, and that the tax on the obtained GCs is to be paid by the producers at the issuance date, no matter of the selling date of the GCs to the suppliers.

The changes in legislation have negatively affected the renewable energy industry. During 2015, the gross installed capacity in renewable power plants registered a minor increase of 2.9% compared to the previous year. Therefore, only 124MW have been installed in RES in 2015:

- 23.8MW in wind power plants.
- 80.4MW in photovoltaic power plants.
- 20.8MW in biomass.

At the end of 2015, renewable energy projects reached a total installed capacity of 11.080MW (5.130MW, excluding the capacity installed in large hydro power plants).

The capacity of renewable energy projects is the following:

- Wind farms connected to the grid: 3.129MW.
- Photovoltaic projects: 1.325MW.
- Biogas power plants and biomass energy projects: 120MW.

In February 2016, 110 bidders released 109 sale offers and only one purchase offer, with a total of just 81 GCs being traded on the GC market for a closing price of RON131.08 per GC (EUR29.1 per GC), the minimum regulated price for a GC. In January 2016, 107 participants launched 104 sale offers and three purchase offers, with 906 GCs traded at the same price as in January. The maximum regulated price is RON267.03 per GC (about EUR59.1 per GC).

According to OPCOM, the total number of GCs issued for E-RES delivered into the grid in 2015, until 9 February 2016, amounts to around 14.15 million GCs, while the number of GCs traded until 9 February 2016, from those issued for E-RES delivered into the grid in 2015, amounts to around 9.9 million GCs. Therefore, for GCs issued in 2015, there was an oversupply (that is, unsold GCs) of about 4.25 million. This oversupply may be reflected in future losses of local RES producers.

Important developments are expected by the end of 2016 regarding the:

- Implementation and applicability of a new state aid scheme aimed at supporting E-RES producers operating projects with installed capacities up to 500 killerwatts (kW), by a sort of "feed-in premium" tariff.
- Opening of the GCs support scheme to imports of E-RES coming from other member states. E-RES producers from other member states will be able to apply for subsidies based on GCs for the energy exported to Romania and producers in Romania will also benefit from the support schemes applicable in other member states when they export energy consumed in the respective member states. This will be applicable based on reciprocity agreements to be further concluded between Romania and other member states and in accordance with further implementation rules to be issued by the regulatory authority (currently no reciprocity agreements exist and no information is available on discussions with other member states).
- Construction of new electricity infrastructure projects aiming at developing new electricity transmission lines, in order to:
  - improve the integration of the E-RES;
  - relieve congestion; and
  - improve the cross-border exchange of electricity, with a focus on the interconnectivity with the neighbouring countries, Serbia and Bulgaria.

As Romania is a net electricity exporter (last year, Romania exported 8.2TWh), the new regulations and the new interconnections are expected to have a significant impact on the Romanian electricity market.

Regulatory structure

2. What is the regulatory framework for the electricity sector?

Regulatory framework

The principles of the Romanian electricity market are set out in the Electricity and Natural Gas Law No. 123/2012 (Electricity and Gas Law) and detailed in secondary legislation. Electricity-related activities are strictly regulated under the Electricity and Gas Law and are generally subject to a specific authorisation or licence issued by the Romanian Energy Regulatory Authority (*Autoritatea Națională de Reglementare în domeniul Energiei*) (ANRE).

The Electricity and Gas Law establishes the:

- General framework for electricity regulated activities, electricity licences and authorisations.
- Definition of the main concepts applicable in the electricity sector.
- Strategy and energy policy of the country.
- Main competencies of the authorities in this field.

Other important regulatory acts in the electricity sector are:

- Law No. 220/2008 (Renewable Energy Law) regarding the system for promoting production of energy from renewable energy sources.
- ANRE Order No. 60/2015 on the approval of the Regulation for the green certificates (GCs) market.
- ANRE Order No. 12/2015 on the approval of the Regulation for the issuance of licences and permits in the electricity sector.

The EU directives providing for the separation between companies involved in generation, transmission, distribution and supply/trading, have been transposed and implemented into the country's domestic legislation.

The transposition of the Third Energy Package into national legislation was achieved by the Electricity and Gas Law, which:

- Defined the concept of vulnerable consumer.
- Provided for increased transparency in the electricity market.
- Provided for the centralisation of transactions in the electricity sector.
- Provided for actions to lead to the interconnection of the internal market with neighbouring electricity markets.

The Electricity and Gas Law sets out the separation model used for the Romanian transmission and system operator (TSO). Romania has chosen the "independent system operator" (ISO) model for both the electricity and natural gas sectors, given the public ownership of the transmission networks. This model allows the certification of the TSO as complying with EU requirements while maintaining the current ownership regime over the networks, ensuring at the same time an effective separation between transmission, generation and supply interests.

Regulatory authorities

The key regulatory authorities in the electricity market in Romania include the:

- Ministry of Energy is replacing the former Ministry of Energy, Small Medium Enterprises and Business Environment and its responsibilities include:
  - managing the public assets in the energy sector;
  - elaborating of national energy policy and strategy and the implementation of government policy in the energy sector;
  - determining and defining the objectives of the energy sector and the best ways of achieving such objectives in the medium or long-term;
  - determining the energy policy for stimulating investment and development activities in the sector;
  - initiating legislative projects in the electricity sector;
  - supervising the application of and compliance with environmental protection measures; and
  - monitoring compliance with EU obligations and requirements.

- Romanian Energy Regulatory Authority (ANRE) is the Romanian energy regulatory authority, responsible for the regulation of the electricity and gas markets. It has broad regulatory powers, mainly in relation to:
  - issuing or approving regulations in the energy sector;
  - establishing the contracting framework in the energy sector, setting up prices and tariffs for captive consumers and for the natural monopoly segments of the market;
  - monitoring the electricity market and compliance with the existing regulations; and
  - authorising and licensing the companies acting in these sectors.
- National Environmental Protection Agency is a specialised authority of the public central administration, subordinated to the Ministry of Environment and has roles in the following areas:
  - strategic environmental planning and environmental factors monitoring;
  - permitting of activities which have an impact on the environment;
  - implementation of the environmental legislation and policies;
  - reporting to the European Environment Agency;
  - co-ordinating the implementation of environmental strategies and policies at national, regional and local level; and
  - permitting the activities having an impact on the environment and providing the compliance with the legal provisions.

See box, *The regulatory authorities*.

ELECTRICITY COMPANIES
Main companies

3. What are the main companies involved in electricity generation, transmission, distribution and supply?

The main participants in the electricity market are:

- The transmission and system operator (TSO): CNTEE Transelectrica SA.
- The Electricity and Green Certificates Markets Commercial Operator: OPCOM SA (owned by Transelectrica).
- The Metering Operator for the wholesale electricity market: OMEPA SA (owned by Transelectrica).
- The Telecommunication and IT Operator: TELETRANS (owned by Transelectrica).
- Eight main distribution companies (DSOs):
  - SC CEZ Distributie SA;
  - SC ENEL Distributie Banat SA;
  - SC ENEL Distributie Dobrogea SA;
  - SC E.ON Moldova Distributie SA;
  - SC ENEL Distributie Muntenia SA;
  - SC FDEE Electrica Distributie Muntenia Nord SA;
  - SC FDEE Electrica Distributie Transilvania Sud SA; and
  - SC FDEE Electrica Distributie Transilvania Nord SA.
- Hidroelectrica SA (a major state-owned hydropower producer).
- Nuclearelectrica SA (major state-owned nuclear power producer).
- Around 20 producers with thermal power plants (state-owned) and few municipal co-generation power plants producers.
- Private wind, solar and biomass power producers.
- About 190 independent suppliers and traders of electricity.

Generation

The main electricity generation companies in Romania are state-owned. These are the Cernavoda nuclear power plant operated by Nuclearelectrica, the hydropower plants operated by Hidroelectrica and around 20 thermal power plants using coal. In the private sector, OMV Petrom owns the biggest gas power plant with a capacity of 800MW and CEZ owns the biggest wind farms cluster with a total capacity of 600MW.

The electrical power generated in Romania in 2015 was 62.62TWh and the total amount of electricity fed into the grid was 58.53TWh.

The main resources in the generation of electrical power from primary sources are coal and hydrological resources, together having a contribution of 58.72% in the generation of electrical power, followed by the nuclear production with a contribution of 18.56%.

Transmission

The electricity transmission system in Romania and the interconnection system with the neighbouring countries is managed and operated by the National Company Transelectrica SA (TSO). Transelectrica is a company listed at the Bucharest Stock Exchange and the state owns 58.7% shares in the company. Transelectrica is member of the European Network of Transmission and System Operators for Electricity (ENTSO-E) and is responsible for the electricity transmission, system and market operation, grid and market infrastructure development, and ensuring the security of the Romanian power system. Romanian has an estimated import capacity of 2,000MW and an export capacity of 1,900MW.

Distribution

In Romania, the level of consumers connected to the electricity distribution system is relatively high (at national level, about 96%), but there are isolated areas, located at significant distances from cities that are still not electrified (about 30% of these are areas with about five to ten houses).

The electricity distribution service is ensured by eight independent Distribution System Operators (DSOs) having exclusive electricity distribution rights in specific regions of the country. Five of the eight DSOs are private companies, members of the utility groups of companies ENEL, E.ON and CEZ, which obtained concession rights over the distribution grid in a given region following the privatisation of the former state-owned companies. The other three DSOs are state-owned companies.

Supply

In Romania, the distribution system operators sell electricity to almost all captive end consumers in the region where they operate the distribution system.

There are around 90 electricity suppliers currently operating, while around 199 companies hold valid electricity supply and/or trading licences.

Unbundling requirements

The provisions of Directive 2003/54/EC on the common rules for the internal market in electricity (Electricity Directive) has been transposed into the Romanian legislation by the Energy Law 13/2007 and all electricity companies concerned have complied with the unbundling obligations.

Foreign ownership

4. Are there any restrictions concerning the foreign ownership of electricity companies or assets?

There are no legal restrictions on the foreign ownership of electricity companies in Romania. However, the existing transmission and distribution infrastructure is owned by the Romanian state.

Import of electricity

5. To what extent is electricity imported?

During 2014 and 2015, Romania recovered its traditional position as a net electricity exporter, given the excellent hydrological conditions and the production of electricity from wind. One of Romania's major objectives is to remain an exporter of electricity.

In 2015, Romania exported 10.50TWh electricity, the equivalent of 15% of the total national consumption, whereas electricity imports have only been 3.78TWh, representing 6% of the total consumption, according to the data regarding the electricity exchanges provided by the transmission and system operator (TSO). The main export destinations for the electricity produced in Romania were Hungary, Serbia and Bulgaria.

ELECTRICITY GENERATION AND RENEWABLE ENERGY

Sources of electricity generation

6. What are the main sources of electricity generation?

In 2015, the total average electricity generation was the following:

- Coal and gas: 40%.
- Hydro: 28%.
- Nuclear: 17%.
- Renewable energy sources: 15%.

Fossil fuels

Fossil fuels (lignite and coal) are important primary sources for electricity generation and are used in about 40% of the total electricity production in Romania.

Most of the thermo-energy generation power plants in Romania use lignite, with around 30% of the electricity generated in 2014 from lignite.

Nuclear fission

Nuclearelectrica is the only nuclear power plant operator in Romania, which is owned by the state. The only nuclear power plant is the Cernavoda nuclear power plant, using uranium and heavy water. It has two reactors (two separate production units) with a total installed capacity of 1,414MW (2 x 706,5MW). Cernavoda generates about 17% of the country's total electricity production, with an annual average production of 11TWh.

Renewable energy

About 28% of the total electricity is produced in hydropower plants, while other renewable energy sources produce an additional 15% of the total domestic production (including wind, solar, biomass, biogas and geothermal).

Romania produced 8.1TWh of electricity from renewable energy sources (RES) in 2015, 3% above the previous year. RES accounted for around 15% of the 51.74TWh used in 2015 and subsequently, Romania has met its objective as share of total renewable energy of 24% for 2018. Currently, Romania has reached 27%.

On 10 March 2016, a new record was reached by wind-produced electricity, registering its highest levels in Romanian history, reaching 2,700MWh. Wind gained the highest share of the electricity mix that day, at 33%, followed by hydro-power, nuclear and coal.

7. Are there any government policies, targets or incentives in place to encourage the use of renewable or low carbon energy?

Government policies/incentives

The Romanian Government encouraged the production of electricity from renewable energy sources by implementing a support scheme based on green certificates (GCs) trading combined with a mandatory GCs acquisition quota. The GCs support scheme benefits the producers of energy:

- Generated from solar, wind, geothermal, biomass, bio liquids, biogas, gas from waste, gas from wastewater treatment.
- Produced in hydropower plants with an installed capacity of 10MW or less.

For new equipment, the life span of the support scheme is applicable for 15 years (from the accreditation decision date), provided the power plants are commissioned and qualified for the support scheme until 31 December 2016.

The use of combined heat and power (co-generation) is encouraged by a support scheme for promoting high efficiency co-generation, which was applicable from 1 April 2011. The scheme provides for financial support granted to producers of heat and power that own or operate high efficiency co-generation power plants that reduce the consumption of fuel by at least 10% compared to a separate production of the heat and power. In the period January to December 2014 (the last reference year available), 37 producers have benefitted from this support. The scheme is supported by all consumers and suppliers/traders that export electricity. The total amount made available between 1 January 2014 and 31 December 2014 was around RON907 million (around EUR200 million).

Renewable energy targets

The Renewable Energy Law was enacted to support the production of electricity from renewable energy sources (E-RES) in response to Directive 2009/28/EC on the promotion of the use of energy from renewable sources (Renewable Energy Directive), which requires that a quota of 24% of Romania's final consumption of electricity must originate from RES by 2020. Additionally, the Romanian Energy Strategy for 2007 to 2020 provides that the share of electricity generated from RES in the country's aggregate final consumption must be at least 35% by 2015 and 38% by 2020.

According to the transmission and system operator (TSO), by adding the electricity produced in large hydropower plants with installed capacities over 10MW and measuring the level of the energy produced and consumed last year, it is arguable conclude that Romania has achieved and surpassed the target of 35% renewable energy within total consumption.

See box, *Renewable energy sources.*

8. What are the main obstacles to the development of renewable energy?

Following significant changes to the renewable energy support scheme that took place in 2013, investment in this sector become less attractive (*see Questions 1 and 7*). A main obstacle is the fact that the support scheme is applicable only to projects commissioned by the end of 2016. Legislative instability and the lack of transparency and predictability proved to be the main obstacles in the medium and long term.

From a development perspective, the recent changes in regulations applicable to renewable energy projects may be seen as obstacles imposed on the development of this sector. The obstacles mainly consist of the new regulated obligations for the electricity from renewable energy sources (E-RES) producers (for example, to pay an additional tariff for the reinforcement of the grid or to provide financial guarantees for commissioning the projects).

9. Are there any plans to build new nuclear power stations?

The authorities did not change the nuclear power policy following the Fukushima disaster.

On 9 November 2015, Nuclearelectrica and China General Nuclear Power Corp signed a memorandum of understanding for the development, construction and operation of two additional power generation units (units three and four) in the Cernavoda nuclear power plant, a project estimated at EUR6.45 billion. Also, the reactors of the nuclear power plant require modernisation and the investment needed ranges between EUR1.2 billion and EUR1.5 billion. According to the company's representatives, it is estimated that the modernisation of the first reactor will be completed by 2023.

Authorisation and operating requirements

10. What are the authorisation requirements to construct electricity generation plants?

To construct an electricity generation plant, the investor must obtain, in advance, the general authorisations required under Romanian law, as well as some sector-specific permits. There is no specific law governing the permitting regime as a whole and not a single authority (like a "one-stop shop") to authorise or supervise the entire permitting process of an electricity generation plant. For example, the procedure for the issuance of the set-up authorisation is governed by the Regulation for the issuance of licences and permits in the electricity sector, the issuance of the building permit (and other building related endorsements and urbanism plans) is governed by the Construction Law 50/1991, the issuance of the environmental permit is governed by Order 1798/2007 for the approval of the issuance procedure of environmental permits.

In general, all construction works can only be performed based on a building permit (BP) obtained by the beneficiary. The beneficiary must first secure a real right over the land where the construction will be erected that can be an ownership right, a *superficies* right, an easement right or a concession right over public owned land.

The first procedural step is for the beneficiary of the construction to obtain the urbanism certificate (UC), which includes a list of all endorsements and approvals that must be in place before submitting the application for the BP. The beneficiary must obtain the endorsements and approvals mentioned in the UC. Generally, these are issued by the environmental protection agency, the water management and land planning authorities. However, other authorities may be further involved in the initial endorsement process, depending on the nature of the intended electricity generation plant.

If the project could have an impact on the environment, an Environment Impact Assessment (EIA) procedure must be followed.

Depending on the type and location of the plant, further additional endorsements may be required from several different authorities, including the:

- Local and county authorities.
- Ministry of Defence.
- Romanian Intelligence Service.
- Aeronautical authority.
- Utility services providers that operate sites and/or equipment near the land where the plant will be erected.

In addition to the general authorisations, the construction of an electricity generation plant requires sector-specific permits and approvals, including:

- **A technical grid connection permit (ATR).** This is issued by the network operator (the TSO or the DSO, depending on the capacity of the project and the location of the available grid connection point), providing for the technical and economic conditions for the connection of the electricity generation unit to the grid.
- **An establishment (set-up) authorisation.** This is issued by the Romanian Energy Regulatory Authority (ANRE), allowing the establishment of a new electricity production unit (required for new electricity production units with an installed capacity higher than 1MW).

11. Are there any requirements to ensure new power stations are ready for carbon capture and storage (CCS) technology, or requiring a plant to retrofit CCS technology once this is ready?

There are currently no carbon capture and storage (CCS) requirements. The applicable legislation requires the use of best available techniques (BAT), without prescribing the use of any technique or specific technology.

For the operation of a fossil fuel power generation facility with a capacity exceeding 20 MW a greenhouse gas emission permit is required. The issuing authority of the permit is the national EPA (ANPM). To obtain the permit, the operator must draft the monitoring plan for the greenhouse gas emissions of the power plant, in accordance with the provisions of Regulation (EU) 601/2012 on the monitoring and reporting of greenhouse gas emissions (Monitoring and Reporting Regulation) and Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading within the Community (Emissions Trading Directive).

12. What are the authorisation and main ongoing requirements to operate electricity generation plants?

Some general authorisations must be obtained to operate electricity generation plants, for example, regarding health and safety and environmental protection. However, certain sector-specific licences and contracts are also required, including a:

- Licence for the commercial operation of the electricity production capacity, which is issued by the Romanian Energy Regulatory Authority (ANRE) and has a maximum validity period of 25 years.

- Transmission service agreement (to be signed with the TSO).

If the electricity production unit is qualified as a dispatchable unit, registration as a balancing responsible party is also required.

The operator of an electricity generation plant must also register on the electricity markets operated by OPCOM. The most relevant trading platforms are the day-ahead market and the centralised market for bilateral contracts, which are both part of the wholesale electricity market. Participation on these markets is allowed only after concluding participation agreements with OPCOM. If the electricity is obtained from renewable energy resources, the operator of the plant must obtain an accreditation decision from ANRE (in order to be able to obtain green certificates (GC) under the GC support scheme) and must be registered on the GCs market.

13. What requirements are there concerning connection of generation to the transmission grid?

The general principle under Romanian law is non-discriminatory access to the grid (that is, regulated third-party access with the right to connect to and use the transmission or the distribution networks, under the conditions provided by law). The grid operators have a legal obligation to allow access to the grid for any third party, subject to the third party observing all legal requirements.

The possibility and solution of connecting a power generation plant to the grid is based on a solution study that analyses the technically possible and economically feasible alternatives for the project to be connected to the grid. As a general principle, the grid operator must collaborate with the investors in order to find the most convenient connection solution, both from an economic and technical point of view.

Based on the grid connection solution chosen by the investor (if there are several options available) and on the necessary documentation provided by the investor, the grid operator will then issue the technical grid connection permit. Generally, a grid connection agreement is then concluded between the investor and the grid operator, covering the construction of the grid connection installation upstream the grid connection point, to be owned and operated by the grid operator.

The connection of generation power plants to the grid requires the observance of legal obligations and taking all necessary measures to minimise any risk related to the safety of the national power system, including:

- Observing the specific voltage approved in the grid connection permit obtained for the project (the voltage is determined on an individual basis for each project and the maximum voltage of the transmission grid is 400 killervolts (kV)).
- Not exceeding the approved output capacity of the plant.
- Using standard measurement equipment.

ELECTRICITY TRANSMISSION

Authorisation and operating requirements

14. What are the authorisation requirements to construct electricity transmission networks?

Similar to the construction of an electricity generation plant, the construction of electricity transmission networks is subject to obtaining the general authorisations mandatory under Romanian law and sector-specific licences and authorisations (*see Question 10*).

15. What are the authorisation and main ongoing requirements to operate electricity transmission networks?

The state-owned transmission and system operator (TSO), Transelectrica is the only operator authorised to provide electricity transmission services in Romania, while the transmission electricity infrastructure is public property of the Romanian state.

To operate an electricity transmission network, an electricity transmission licence must be granted by the Romanian Energy Regulatory Authority (ANRE), and an environmental authorisation for the transmission of electricity must be issued by the Environmental Protection Agency.

Transmission charges

16. How are the charges and conditions for the transmission of electricity regulated?

As the transmission of electricity is considered to be a state monopoly, the rates and conditions for the transmission of electricity are regulated by means of orders issued by the president of the Romanian Energy Regulatory Authority (ANRE).

Third parties must enter into an agreement with the transmission and system operator (TSO) to benefit from electricity transmission services. The framework agreement is approved by an ANRE order.

The rates for 2015, established by ANRE Order 93/2015, are:

- The average tariff for transmission of the electricity is about EUR4.5 per MWh.
- The average tariff for the extraction of electricity from the grid is about EUR4 per MWh.
- The tariff for system services is about EUR3 per MWh.

Export capacity is allocated by public auctions organised by Transelectrica together with the TSOs of the neighbouring countries. Auctions are organised for annual and monthly export electricity capacity allocation, as well as for intra-day and day-ahead electricity export capacity allocation.

To participate to the capacity allocation auctions, the bidders must hold an ANRE licence (this applies to Romanian undertakings), to provide the ETSO identification code (EIC) and to be registered as a balancing responsible party.

The charges for connecting a project to the transmission system are provided in the technical grid connection permit of each project and depend on several factors, including the:

- Location of the grid connection point, the cost of the grid connection installation.
- Capacity of the project.
- Need to perform upgrade works of the transmission grid in the area in order to integrate the new project and to be able to evacuate the power.

ELECTRICITY DISTRIBUTION

Authorisation and operating requirements

17. What are the authorisation requirements to construct electricity distribution systems?

The construction of electricity distribution networks is subject to obtaining the general authorisations mandatory under Romanian law (*see Question 10*). An Environmental Impact Assessment (EIA) procedure is required for the development of overhead power lines with a capacity exceeding 220kV and exceeding 15km in length. The EIA is required for the issuance of the environmental agreement. A water management endorsement (WME), issued by the competent authority (the National Administration "Romanian Waters"), is required for distribution networks crossing waters.

18. What are the authorisation and the main ongoing requirements to operate electricity distribution systems?

Electricity distribution services are deemed to be of public interest. Distribution of electricity is subject to licensing by the Romanian Energy Regulatory Authority (ANRE). The distribution service is provided by eight authorised DSOs and the electricity distribution companies have exclusive distribution rights within their region. Only one distribution licence is issued for each region.

Distribution charges

19. How are the charges and conditions for the distribution of electricity regulated?

The tariff for the distribution of electricity is determined in accordance with the methodology approved by order of the president of the Romanian Energy Regulatory Authority (ANRE).

ANRE calculates the distribution tariffs to be charged by each electricity distribution company. The distribution tariffs for the following year are published by ANRE by the end of the current year and are binding on each electricity distribution company.

The distribution tariffs are differentiated for each operator and for the year 2016 these range between EUR3/MWh for high voltage electricity distribution lines and EUR29/MWh for low voltage electricity distribution lines.

ELECTRICITY SUPPLY

Authorisation and operating requirements

20. What are the authorisation and the main ongoing requirements to supply electricity to end consumers?

Electricity supply activities require an electricity supply licence issued by the Romanian Energy Regulatory Authority (ANRE), which is valid for ten years.

Suppliers must ensure the supply of electricity at reasonable prices or at regulated prices, depending on the type of the end consumer. The pricing policy must be transparent and non-discriminatory. The supplier must ensure labelling of the electricity and must inform end-users about the structure, origin and environmental impact of the electricity supplied.

The supplier must offer customers more payment methods for the supplied energy.

Trading between generators and suppliers

21. How is electricity trading (between generators and suppliers) regulated?

Under the Electricity and Gas Law 2012, the trading of energy on the competitive market is performed in a transparent, public, centralised and non-discriminatory manner. To further ensure this and to enforce the provisions of Regulation (EU) 1227/2011 on wholesale energy market integrity and transparency (REMIT), Law 127/2014 for the amendment of the Electricity and Natural Gas Law has been recently enacted.

The sale of electricity between generators and suppliers can be performed by transactions that are agreed by means of bilateral contracts concluded following public auctions on the OPCOM operated market for bilateral contracts, on the day-ahead market (PZU), on the intra-day market (ID), on the balancing market (PE) or on the electricity market for large consumers (PMC).

By the enactment of Law 122/2015, as an exception from the provisions of Electricity and Natural Gas Law, producers of E-RES operating power plants with a capacity not exceeding 1MW or 2MW in case of high efficiency co-generation power plants have the opportunity to sell their electricity directly to suppliers of electricity to end-consumers by concluding direct negotiated power purchase agreements (outside the OPCOM markets).

Electricity price and conditions of sale

22. How is the price for electricity and conditions of sale regulated at the consumer and wholesale level?

Consumer

The Romanian electricity market has been fully liberalised. Electricity price deregulation was finalised for industrial consumers on 1 January 2014, while for household consumers the process extended until 1 January 2018. Therefore, the tariffs of sales of electricity to household consumers are still regulated by the Romanian Energy Regulatory Authority (ANRE). From 1 January 2014, the regulated tariffs apply only to household consumers who did not exercise their eligibility right.

The rates applicable to household consumers include a "component from the competitive market" (CCM component). This is determined based on the costs of acquisition of the electricity by the supplier from the liberalised market.

Last resort suppliers must include this component in the monthly invoice issued to the captive household consumers. The percentage of the component in the total value of the invoice is determined in accordance with the calendar for the elimination of regulated tariffs. The CCM component is approved by ANRE for each supplier.

Wholesale

The sale of electricity at the wholesale level is performed on the competitive markets, based on the principles of transparency, publicity, centralisation and non-discrimination (*see Question 21*). Therefore, prices for the electricity are the result of free competition.

According to the data published by OPCOM, on the wholesale markets, the average spot electricity price was about EUR36/MWh in 2015.

TAX ISSUES

23. What are the main tax issues arising on electricity generation, distribution, transmission and supply?

Companies active in the electricity sector are subject to the general 16% tax on profit and 20% VAT.

As of the beginning of 2014, a constructions tax, calculated by applying 1% to the gross accounting value of all buildings owned by companies which are not otherwise subject to building tax in Romania, including transformer stations or wind turbines, is applicable until the end of 2017.

Electricity is an excisable product. The value of the excise for 2016 is EUR0.55 per MWh for commercially used electricity and EUR1.1 per MWh for electricity used for non-commercial purposes.

REFORM

24. What reform proposals are there for the regulation of the electricity sector?

After the reforms to the renewable energy sector in 2013, no further reform proposals currently exist in relation to the electricity or the renewable energy sector.

While there are no relevant reform proposals currently under discussion, considering the suggestions of the European Commission in relation to measures Romania should take by the end of 2016, future developments may involve measures and reform proposals related to the:

- Promotion of more efficiency and competitiveness in the state-dominated conventional energy sector.
- Continuation of corporate governance reform within the state-owned companies in the energy sector.
- Continuation of the electricity prices deregulation.
- Improvement of energy efficiency and interconnection capacity.
- Further development of the renewable energy sector.

THE REGULATORY AUTHORITIES

Romanian Energy Regulatory Authority (Autoritatea Națională de Reglementare în domeniul Energiei) (ANRE)

Address. 3, Constantin Nacu St, Sector 2, 020995, Bucharest, Romania **T** +40 21 327 81 74; 40 21 327 81 00 **F** +40 21 312 43 65 **E** anre@anre.ro **W** www.anre.ro

Main responsibilities. Regulating the Romanian electricity and gas sectors; setting up prices and tariffs for captive consumers and for the natural monopoly segments of the markets; monitoring the electricity and gas markets and compliance with the regulations; authorising and licensing companies active in the energy sector.

Ministry of Energy

Address. 202E, Splaiul Independenței St, Sector 6, 060021, Bucharest, Romania; 152 Calea Victoriei St, Sector 1, 010096 Bucharest, Romania **T** +40 21 407 99 11 **F** +40 21 316 68 03 **E** office@energie.gov.ro **W** www.energie.gov.ro

Main responsibilities. Applying the government programme and strategy in the energy sector, representing the state and the government, at a national and international level in energy-related matters, monitoring the energy sector and the compliance with international treaties in the energy sector.

National Environmental Protection Agency

Address. 294 Splaiul Independentei, Building B, Sector 6, 060031 Bucharest **T** +40 21 207 11 01 **F** +40 21 207 11 03 **E** office@anpm.ro **W** www.anpm.ro/

Main responsibilities. Planning and monitoring strategic environmental factors, permitting of activities with impact on the environment, reporting to the European Environment Agency, co-ordinating the implementation of environmental strategies and policies at national, regional and local level, permitting the activities having an impact on the environment and providing the compliance with the legal provisions.

ONLINE RESOURCES

Romanian Energy Regulatory Authority (ANRE)

W www.anre.ro

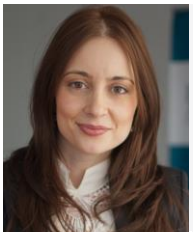
Description. This website is the official site of ANRE and all relevant pieces of legislation referred to in this article can be found on this website in Romanian. A few of these are also available in English. The information is all official and mostly up to date.

Romanian Transmission and System Operator (TSO)

W www.transelectrica.ro

Description. This website is maintained by the TSO and provides relevant updated data related to the GCs market, including the number of GCs issued, the prices and lists of beneficiaries. Important information relating to the status of the renewable energy market, lists of all electricity generating companies and related data are also available. Information is official and mostly up-to-date. The website is available in English.

Practical Law Contributor profiles



Delia Vasiliu, Partner

Pachiu & Associates
T +40 21 312 10 08
F +40 21 312 10 09
E delia.vasiliu@pachiu.com
W www.pachiu.com

Professional qualifications. Romania, Attorney, 2004

Areas of practice. Energy, renewable energy, electricity, energy trading, public procurement, infrastructure, natural resources including:

- Mergers and acquisitions in the energy and natural resources industries.
- PPPs in the energy sector.
- Renewable and conventional energy projects.
- Greenfield projects and acquisitions.
- Licensing and regulatory compliance for energy projects.
- Set-up, acquisition and licensing of companies active in the energy and natural resources industries (upstream and downstream sectors).
- Agreements specific to activities in the energy and natural resources industries.
- Energy sector project and corporate finance.
- Public procurement related to energy projects and energy infrastructure.

Non-professional qualifications. LLM, Transnational Oil, Gas and Energy Law, University of Derby; LLM International Commercial Law, Nicolae Titulescu University, 2006; Bachelor of Law, West University, 2004

Recent transactions

- Offering legal advice to investors acting on the Romanian energy market.
- Providing legal support needed in relation to the development of energy related projects.
- Monitoring and ensuring regulatory compliance of operations in the energy industry, commercial and regulatory agreements regarding energy related operations in compliance with the Romanian and European legislation.
- Advising clients during the entire process of planning, implementation and operation of energy projects in Romania.
- As co-ordinator of the energy department, Delia assists clients in matters related to the energy market, such as the performance of energy trading activities or legal assistance on regulatory aspects and applicable procedures.

Languages. English, German, Italian, Romanian

Professional associations/memberships. Member of the Bucharest Bar Association; Member of the Associated European Energy Consultants e.V. (AEEC) (Europe); Member of the American Chamber of Commerce in Romania - Environment and Energy Committee; Member of JCA International, founding member of EPG (Energy Policy Group-a Romanian energy think thank).

Publications

- *The International Comparative Legal Guide to: Oil & Gas Regulation 2016, Romanian Chapter, published by Global Legal Group (GLG), co-author, London, December 2015.*
- *PLC Thomson Reuters Energy Global Guide (Electricity Regulation), Romania Chapter, Practical Law Global, UK, 201.5*
- *Global Legal Insights: Energy 4th Edition - Romania chapter, Global Legal Group (GLG), co-author, London, 2015.*
- *The International Comparative Legal Guide to: Oil & Gas Regulation 2015, Romanian Chapter, published by Global Legal Group (GLG), co-author, London, December 2014.*
- *The International Comparative Legal Guide to: Oil & Gas Regulation 2014, Romanian Chapter, published by Global Legal Group (GLG), co-author, London, December 2013.*
- *The International Comparative Legal Guide to: Oil & Gas Regulation 2013, Romanian Chapter, published by Global Legal Group (GLG), co-author, London, December 2012.*
- *The International Comparative Legal Guide to: Gas Regulation 2012, Romanian Chapter, published by Global Legal Group (GLG), London, December 2011.*

Vladimir Plugarescu, Associate

Pachiu & Associates
T +40 21 312 10 08
F +40 21 312 10 09
E vladimir.plugarescu@pachiu.com
W www.pachiu.com

Professional qualifications. Romania, Attorney, 2014

Areas of practice. Renewable energy, electricity, energy trading

- Renewable and conventional energy projects.
- Regulatory and environmental law
- Licensing and regulatory compliance for energy projects
- Commercial contracts.
- Corporate operations and regulatory compliance.
- Set-up, acquisition and licensing of companies active in energy and natural resources industries (upstream and downstream).
- Due diligence procedures for land acquisitions.
- Negotiations and conclusion of sale and purchase agreements of real estate, lease of commercial premises and business transfer.
- Greenfield and brownfield projects.
- Energy sector project and corporate finance.

Non-professional qualifications. graduate of the Faculty of Law at the University of Bucharest, holds a LLM in International Business Law with the Tilburg University, the Netherlands and attended the Summer School on European Business Law at Dusseldorf University.

Languages. English, Romanian

Professional associations/memberships. Member of the Bucharest Bar Association; Member of the Associated European Energy Consultants e.V. (AEEC) (Europe); Member of the American Chamber of Commerce in Romania; Member of JCA International; Consulegis.

Publications

- *Practical Law (Thomson Reuters) Energy Global Guide (Regulation of conventional and unconventional onshore oil and gas extraction in Romania).*
- *Romania Chapter, Practical Law Global, UK, 2016-2017.*