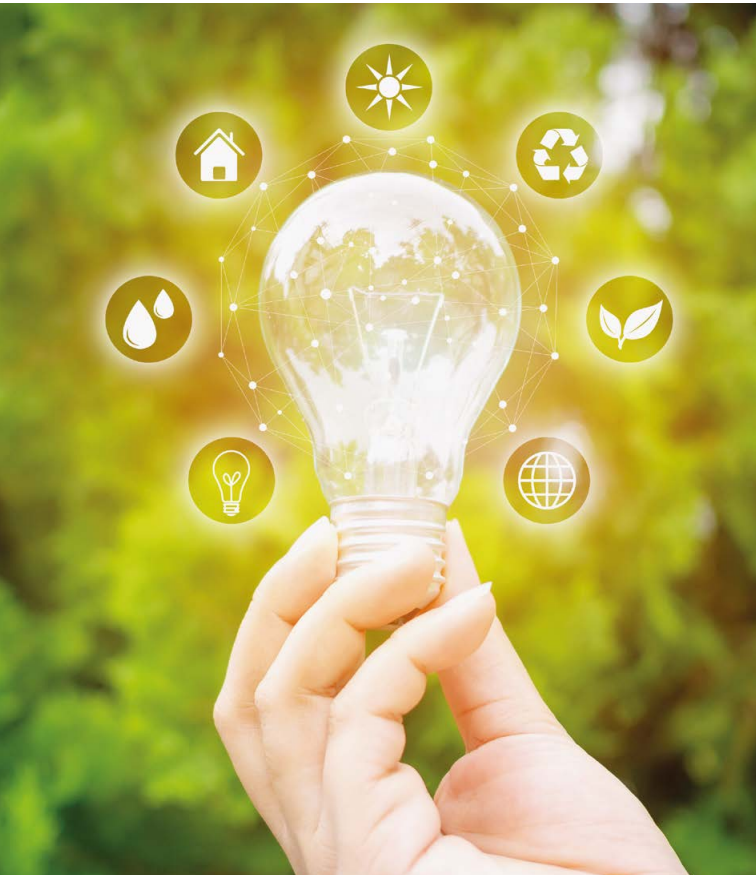
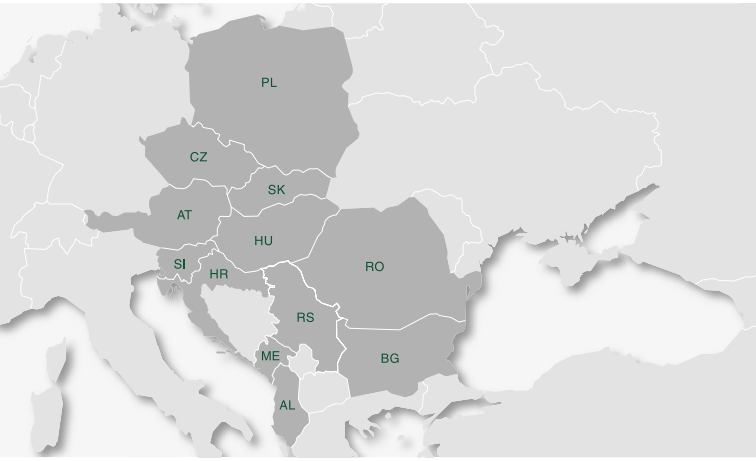
Renewable energy – Quo vadis?

Overview of the renewable energy market in Central and South Eastern Europe

Selected country reports



Albania | Austria | Bulgaria | Croatia | Czech Republic | Hungary
Montenegro | Poland | Romania | Serbia | Slovakia | Slovenia



12 Countries. 1 Company. The TPA Group.

Albania | Austria | Bulgaria | Croatia | Czech Republic | Hungary
Montenegro | Poland | Romania | Serbia | Slovakia | Slovenia

Foreword

Climate change represents a serious concern for the whole world. There is thus an urgent need for a vision that will lead to modern, prosperous and competitive climate action.
The adopted Directive (EU) 2018/2001 on the promotion of energy from renewable sources, came into force in December 2018. The Directive proposes a minimum of 32 % renewable energy in the EU, for the year 2030. In 2023, this goal can be further increased. It is also recommended that Member States establish joint projects and joint support schemes, exchange information and best practices, and inform citizens about the benefits of the cooperation mechanism.

The TPA country reports are an efficient business intelligence tool for investors and analysts in the renewable energy field. This brochure provides you with a clear overview of the most important markets for renewable energy in Central and South Eastern Europe: Austria, Bulgaria, Croatia, Czech Republic, Poland, Romania, Serbia and Slovakia.

The country reports, valid as of January 2019, contain the latest figures on renewable energy sources, i.e. wind, solar, hydro and biomass. In the light of various legislative changes introduced in recent years, this report provides an overview of the latest trends in the renewable energy sector, including the regulatory environment, financing sources and profitability, on the Central and South Eastern European market.

Claudia Stanciu-Stănciulescu

Karin Fuhrmann

Content

Austria

A. COUNTRY PROFILE

1. Overview and trends

Following EU Directive 2009/28/EC, the target should amount to a 34 % renewable energy quote by 2020 and reflects the Austrian pioneering role in this sector. In 2018, the Austrian government decided in their "#Mission 2030" that 100 % energy production should be from renewable energy.

The production in 2018 was structured as follows:

Wind energy sector:
- The installed capacity is currently 6,569MW
- In the last 3 years Austria has been installing 215 MW on average
- Over 50 % of the energy produced supplies households
- 4.3 Million Tons of CO2 being avoided annually

Photovoltaic energy sector:
- The installed capacity is currently around 1,300 MWp
- National Action Plan (''NAP'') values and target quotes 2020 are already reached
- Five out of nine federal states are offering funding

Water energy sector:
- Hydro power plants produce over 33 % of the electricity in Austria
- Highest capacity is gained from large hydro power plants
- Focus on small and medium-sized plants

2. Funding situation

The Eco Energy Act 2012 (''ÖSG 2012'') was in force from 2012 to 2018 and is currently being revised. It is expected that the funding will no longer be awarded by the state but rather on regional basis (by the federal states).

The so-called ''annual **entitlement support payments**" – had a total amount of EUR 47 million
by end of 2018:
- Funding for 2,291 MW wind power
- Funding for 666MW photovoltaic systems
- Funding for 430 MW Small hydro power plants
- Funding for 313 MW biomass systems
- Funding for 84 MW biogas systems
- The rest of funding was granted for waste gas and geothermal energy

Feed-in tariffs:
(more information under the bullet point Green Certificates)

Banks:
In 2019, banks are looking for opportunities to invest. Renewable energy projects are very likely to be supported in general, also because of their high acceptance from the population.

3. Permits and authorizations

In Austria a cross-national law between the federal states does not exist. Every single federal state has its own regulations, which makes the situation very complex. In general the following permits are necessary:

Building permit (suitability)
The application documents should include in general:

- A technical report
- Planning documents
- Information about the owner of the installation

Austrian regional planning (type of use)
Planning schemes are prepared by the regional and local authorities and generally allow the following usages:

- Building land
- Traffic area
- Open land

The **setting-up authorization** is not necessary in every single federal state and depends on the installed output.

To summarize: Austrian law is dependent on the respective federal state and each project has to be reviewed closely on a case-by-case basis. As a consequence, wind energy for example is concentrated in 5 federal states only.

4. Competitiveness

Due to the positive investment environment, Austria is a very competitive country in the renewable energy field. The regulatory framework provides investors with high investment and planning security. This has led to the continuing development of the renewable energy sector in Austria.

5. Grid connection

The grid connection is controlled by the independent regulator Austrian Power Grid ("APG"), which is the only transmission system operator in Austria. The overall power grid has 3 layers.
The Austrian transmission power grid system

- is almost 6,750 km long
- has over 12,000 power poles and
- transports approx. 45,000 GWh per year

Due to the increasing amount of alternative energy, also the Austrian transmissions system is more and more difficult to stabilize. In accordance with the "APG Masterplan 2030", the APG will enlarge their transmission system by 220km over the next years.

B. LEGAL FRAMEWORK

Real rights required

Under Austrian law, there are two main ways for investors to hold the specific rights required for a building permit:

- An ownership title to the land
- A right of superficies to the land (not registered in the land register)

Ownership right

The ownership right under Austrian law offers the owner an absolute right to:

- use
- build
- encumber and
- sell

Necessary regional permits, easements and other loads can restrict this right.

Superficies right

A right of superficies consists of:

- The right to have or to erect a building on, under or above the land owned by another person
- The ownership right to the building
- The right to use the land pertaining to the building

The Civil Code limits the duration of a right of superficies to a maximum of 99 years, with a prolongation option.

Conventional and statutory right of usage and easements

- During the permission-phase abutting owners have the right to raise objections against the project, if their right would be limited through it.
- The investor must hold rights of easement to the lands crossed by the access ways or by the cables.
- The right of way is incumbent upon the federal state and has to be reviewed closely on a case to case basis.

C. SUPPORT SCHEME / GREEN CERTIFICATES

Issues that might impede/delay the investment process

The following issues have to be taken into consideration when planning a renewable energy plant in order to avoid any delays or even cancellation of the project:

- No cross-national law exists
- Property rights have to be suitable for the project
- Instatement of ownership title; prohibitions on sale
- Necessary regional permits
- Normally an energy study is required (UVP)

Legal provisions

- Eco Energy Act 2012 ("ÖSG 2012") - support scheme (currently in revision)
- New legislation should be available by the end of 2019
- New funding scheme will be carried out by the federal states
- "Processing centre for renewable energy" ("OeMAG") - investment grant

Green certificates

Green Certificates do not exist in Austria. To support renewable energy power, fixed feed-in tariffs and investment grants have been used until 2018. The former regulations have contained:

- ÖSG 2012: fixed feed-in tariffs, which were guaranteed for a period of 13 years (biomass; 15 years)
- OeMAG: investment grants (can only be used instead of the feed-in tariffs) operate on a first come, first served principal.

Updates

The new Eco Energy legislation in Austria should be available until end of 2019.

D. ISSUES AND PROFITABILITY

Tax issues

For further information, please consult our brochure, "Investing in Austria".

Profitability

Any investment expenditure analysis must account for the preparation and design costs, incurred during the initial stage of a project (the first 1-4 years). Currently this expenditure ranges between EUR 55,000 up to as much as EUR 70,000 per MW of capacity of the designed wind farm (which represents about 2-4 % of the investment value). These costs include, but are not limited to:

- Developing technical design
- Drafting a feasibility study
- Erecting measuring masts and wind density measurements
- Performing a study on the impact of the wind farm on the natural environment and local community geological research
- Administrative proceedings

Due to the decentralization of power generation, other grid solutions are necessary. Smart grids can deal better with non-stable renewable energy sources and, as a result of the better connection, power will become cheaper. A successful energy transition is only possible with smart grids. Furthermore, customers have an important part to play. They should help to make the system more effective. First "renewable energy model regions" have been installed and act as role models.
The Austrian energy fund "KLI.EN" has started a funding programme to support the self-supply of industry and private households, by installing their own renewable energy systems.

Bulgaria

A. COUNTRY PROFILE

1. Overview and trends

Renewable energy sector development:
The targets for the production of energy from renewable energy sources by the year 2020 for all EU countries were set in EU Directive 2009/28/EC.
Percentage of renewable energy in the total gross consumption:
2017 - 19.1 %
2016 - 19.2 %
2015 - 19.1 %
2014 - 18.9 %

Installed capacity as of December 2016:
Wind energy - 699 MW,
Photo voltaic - 1 027 MW
Water - 3 327 MW
The total renewable energy capacity is around 40 % of the total capacity installed.

2. Funding situation

EEA Grants:
EU grants for EUR 115 million for the period 2014 - 2020 provided with support from Norway, Iceland and Liechtenstein. The thematic panel "Economy" consisted of projects from 2 programmes - Green Industry Innovation and Energy Efficiency and Renewable Energy Sources.

Banks are also an important source of financing for wind energy and corporate finance projects. Investment projects may be subject to grant financing by the European Bank for Reconstruction and Development and the European Investment Bank in collaboration with local banks.

3. Permits and authorizations

Building permits:
Obtaining a building permit for a power plant of over 30 kV working capacity generally includes drafting an investment project, drafting and coordinating a technical and an operative investment project and concluding a preliminary agreement for a grid connection.

Operating permission:
Constructions of first, second and third category are entered into exploitation on the basis of an operating permission, issued by the state bodies.

Licensing:
The production of electricity requires a licence issued in the name of the producer by the EWRC, unless the producer's power plant installed powers do not exceed 5 MW. The licence must be obtained prior to commencement of the production activity.

4. Competitiveness

Bulgaria is competitive in terms of its natural assets, as well as due to its favourable investment environment with still relatively low salary levels and a 10 % flat tax rate on profit.

5. Grid connection

Producers of renewable electric energy wishing to build an energy site for production or to enlarge an existing one submit an application to join the operator of the relevant electricity network in regions indicated by the grid operator. The application is subsequently to be approved by the EWRC.

Bulgaria

B. LEGAL FRAMEWORK

Real rights required

According to the Energy Act, anyone applying for a licence to produce electric energy must prove the presence of a real right over the power plant producing energy.

Ownership right

The ownership right under Bulgarian law includes a right to use, possess, encumber and sell the owned property without limitation in time. It is usually established by way of agreement executed in notarised form for validity purposes.

Superficies right

The right of superficies consists of the right to erect a building on land owned by another person; the ownership right to the building; and the right to use the land pertaining to the building.

Conventional and statutory right of usage and easements

Easements under the Energy Act arise for entities when building power facilities. They comprise of the right of passage of people and equipment; laying power lines, technical installations as well as corresponding security restrictions.

C. SUPPORT SCHEME / GREEN CERTIFICATES

Issues that might impede/delay the investment process

Starting an investment project requires the preliminary completion of thorough and professional research of the project's compliance with the local laws as well as of any other existing or possible claims. Examplary points regularly taken into consideration are: the existence of required ownership rights; clear property status; environmental status of the area; archeological and cultural status of the area; connectivity capacity of the corresponding grid operator.

Legal provisions

Bulgarian national legislation: Energy Act, Renewable Energy Sources Act, Spatial Planning Act, Environmental Protection Act, and subordinate legislation.

Green certificates

Green Certificates, as a trading instrument, have not yet been implemented in the Bulgarian energy market. The support scheme for the mandatory purchase of electricity produced by renewable energy sources (RES) is connected to the presence of monthly guarantees issued by the Sustainable Energy Development Agency (SEDA) per megawatt produced energy.

Updates

A recent amendment of the Energy Act (EA) imposes an additional financial obligation upon all electric energy producers. The obligation consists of a 5 %-monthly installment based on the producer's aggregate net income from electricity sales on a monthly basis. The purpose of the installment is to cover costs and losses of the National Electric Company and to pay compensation premium to energy producers with total installed electricity power 4 MW and over 4MW subject to requirements set out in the applicable legislation and after approval of the EWRC.

D. ISSUES AND PROFITABILITY

Tax issues

The general tax frame, as well as the special regulations which are applicable for the power production stated above, are fully applicable to electricity producers from renewable sources.

For further information please consult our "Investing in Bulgaria" brochure.

Profitability

Any investment expenditure analysis must account for the preparation and design costs incurred during the initial stage of a project (the first 1-4 years). Currently this expenditure ranges between EUR 55,000 up to as much as EUR 70,000 per MW of capacity of the designed wind farm (which represents about 2-4 % of the investment value). These costs include, but are not limited to:

- Developing the technical design;
- Drafting the feasibility study;
- Erecting measuring masts and wind density measurements;
- Performing a study on the impact of the wind farm on the natural environment and local community;
- Geological research;
- Administrative proceedings.

Advance grid connection fees are applicable:

- for Projects =< 5 MW, BGN 25 000 per MW;
- for Projects > 5 MW, BGN 50 000 per MW

The EA limits the purchase of electricity from renewable energy sources at a preferential price [only] for the quantities of electricity up to [not exceeding] the "net specific production of electricity", based upon which the preferential prices have been set in the corresponding decisions of EWRC.

Quantities for "net specific production of electricity" are set in resolutions of EWRC defining different thresholds for the different types of power plants.

Croatia

A. COUNTRY PROFILE

1. Overview and trends

Croatia has accepted commitments to apply European Directives in the field of renewable energy sources ("RES"), including EU Directive 2009/28/EC, setting the target for RES by the year 2020 to 20 %. Currently, the total installed RES capacity is more than 400 MW and is structured as follows:

- Wind power plants: 448.85 MW
- Solar power 52 MW
- Small hydro 34 MW
- Biomass: 170.08 MW

The Croatian National Energy Strategy 2009-2020 has three basic objectives:

- to increase the safety of energy supply
- to develop a competitive energy system and
- to ensure the development of a sustainable energy sector

These objectives are particularly important due to Croatia's heavy dependence on energy imports which results in the country's vulnerability to energy prices volatilities.

Targets:

- to decrease greenhouse gas emissions by 20 % by 2020 taking the emissions level of 1990 as a baseline
- to increase share of renewable energy by 20 % in annual gross energy consumption of the country by 2020
- to cover 10 % of energy consumption in all transport sectors with energy derived from renewable sources by 2020
- to decrease final energy consumption by 20 % by 2020

2. Funding situation

Renewable energy is mainly supported through a feed-in tariff (Art. 33 of Act on Renewable Energy Sources and High-Efficiency Cogeneration; RES Act).
Every producer who holds the status of "qualified producer" ("povlasteni proizvodac", Art. 20 RES Act), who has been selected as the lowest bidder in a public tender and who has signed a formal agreement with the Croatian Energy Market Operator HROTE (as defined in Art. 35 RES Act) has the right to the guaranteed purchase price. The Market Operator issues a call for tenders at least once a year, if quotas for the support of certain technologies of renewable energies are available (Art. 34 § 1 and 2 RES Act).
Tenders offer guaranteed purchase prices for electricity produced in RES installations with a capacity of up to 500 kW.

3. Permits and authorizations

The following are the main permits required for the construction and operation of a RES power plant:

- Energy permit;
- Construction permit;
- Use permit;
- Energy licence.

4. Competitiveness

The competitiveness of the Croatian energy system is quite satisfying due to the diverse energy structure of electricity generation and relatively high share of local natural gas generation. Energy market development, country openness, risk sharing in investments, development and technological improvement, promoting larger participation of local generation and services in building and exploitation of power generation plants represent mechanisms for retaining and increasing the competitive energy system.

5. Grid connection

The access of electricity from RES to the grid is regulated by the general legislation on energy and follows the principle of non-discrimination. Electricity from RES is subject to special provisions only in the case of wind power plants, which must meet special requirements and technical specifications during the connection process. The electricity transmission service within the Croatian power system is provided by the grid operator "HEP-OPS" to network users according to the agreements which they sign with the grid operator.

B. LEGAL FRAMEWORK

Real rights required

Under Croatian law, one of the legal preconditions for the issuance of a construction permit is that the applicant submits sufficient evidence that he has the appropriate title to the land on which the construction is supposed to take place. Such evidence includes ownership of the land and other rights to the land recognised by the law as a legal basis for issuance of the construction permit.

C. SUPPORT SCHEME / GREEN CERTIFICATES

Issues that might impede/delay the investment process

Some of the main issues that have to be taken into consideration when planning a renewable energy park in order to avoid any delays or even cancellation of the project:

- obtaining a necessary right over land;
- obtaining necessary permits;
- securing a grid connection;
- obtaining financing.

Ownership right

Croatian law recognises the following rights over land: ownership right (pravo vlasnistvo); mortgage (hipoteka); easement right (pravo sluznosti); land charge (pravo stvarnog tereta); and building right (pravo gradenja). These rights are in principle established by their registration in the land registry and have legal effect not only between contractual parties but also against all third parties.

Superficies right

Superficies is a limited in rem right. It consists in the exclusion of the principle that the owner of the land owns whatever building is erected on his property. The superficies right consists of:

- the right to have or to erect a building on, under or above the land owned by another person;
- the ownership right to the building;
- the right to use the land pertaining to the building

The superficies right allows for delimitation between the ownership of the land and the ownership of the building erected on, under or above the land owned by another person.

Conventional and statutory right of usage and easements

- If the power plant is to be constructed on agricultural land, this would require the conversion of the agricultural land into construction land.
- The investor must hold rights of easement to land crossed by access ways or by cables.
- During the permit phase, abutting owners have the right to raise objections against the project, if their rights would be limited by it.
- The investor must hold rights of easement to the lands crossed by access ways or by cables.

Legal provisions

The Act on Renewable Energy Sources and High-Efficiency Cogeneration was adopted in 2015. Since then it has been amended 4 times. The last amendment was in December 2018. It contains the legal framework for application of the support scheme in the form of feed-in tariffs and premium tariffs. Renewable energy generation is mainly supported via a feed-in tariff for certain producers ("qualified producers"). Additionally, the Croatian Bank for Development and Reconstruction (HBOR) and the Fund for Environmental Protection and Energy Efficiency operate a loan scheme for RES-E projects.

Green certificates

Guarantee of origin is issued to the RES producer and represents a generation of 1 MWh. Such guarantees are transferable. Guarantees of origin issued in other countries are also valid in Croatia under certain conditions. Feed-in tariffs are used. GO is issued either for electricity produced from renewable energy sources power plants or from high-efficient cogeneration plants. Eligible producers who participate in the feed-in system and who are entitled to subsidised prices are not eligible to participate in the guarantees of origin system.

Updates

Croatia installed 147 MW of wind power in 2017 and ended up as one of seven EU countries that had a record year in new wind energy installations. The largest local developer of wind power is "Adria Wind Power".

Major projects were realized in 2018. New turbines were installed and new investments are planned on Croatian wind farms, for example, the "Greda wind farm" and solar power plants like the solar power plant on the island of Krk.

Over 27 % of energy used in Croatia comes from renewable sources and that puts Croatia in fifth place in the EU.

D. ISSUES AND PROFITABILITY

Tax issues

For further information, please consult our "Investing in Croatia" brochure.

Profitability

Any investment expenditure analysis must account for the preparation, design costs and costs of obtaining the relevant permits/approvals for the project.

These costs include, but are not limited to:

- Developing the technical design;
- Drafting the feasibility study;
- Erecting measuring masts and wind density measurements;
- Performing a study on the impact of the wind farm on the natural environment and local community;
- Administrative proceedings for obtaining relevant permits/approvals.

Czech Republic

A. COUNTRY PROFILE

1. Overview and trends

EU Directive 2018/2001 imposes a 13 % renewable energy quota for the Czech Republic as a minimum. The National Action Plan (NAP) actualised to 2016 even suggests 15.3 % for the Czech Republic as a minimum proportion of its final energy consumption (10 % for the transport sector). In 2017, the production of electricity from renewables amounted to 9,618 GWh, 13.03 % of the brutto consumption. This level of output was stabilized in 2013 after the significant development in photovoltaic installations.
Installed capacity in key renewables source:

Photovoltaics:
- The installed capacity as of end of 2017: 2,069.5 MW
- The NAP aims for 2,375 MW in 2020
- In 2010, there was a significant increase in installed capacity (from 464.6 MW as of end 2009 to 1,959.1 MW as of end 2010), from this point any significant change occured.

Wind energy:
- The installed capacity as of end of 2017: 308.2 MW
- The NAP aims for 525 MW in 2020

Water energy*:
- The installed capacity as of end of 2017: 1,092.7 MW
- The NAP aims for 1,111 MW in 2020 (pumped storage power plants included)

(*) w/o pumped storage power plants of 1,171.5 MW

2. Funding situation

The support scheme is based on two alternative forms of support: (i) green bonuses and (ii) feed-in tariffs.
In 2017, 1,630 million EUR was distributed as support / subsidies for renewables (supported volume 8,225 GWh). Breakdown for type of sources is as follows:
- photovoltaic: 1,033 million EUR
- wind power: 50 million EUR
- hydro power: 97 million EUR
- biomass: 140 million EUR
- biogas, mine, landfill and sewer gas: 310 million EUR

Banks are willing to re-finance existing projects. Most of them are cautious towards photovoltaic due to the negative perception of the general public.
In 2019, it is expected that up to 1.5 billion EUR will be allocated to support promoted energy sources (based on production volume). Total amount will be slightly lower that in the last years.

3. Permits and authorizations

In the Czech Republic, the following permits and authorizations should usually be obtained in order to operate renewable energy sources in line

with the national legislation:

- Building permit
- Licence from the Energy Regulatory Office (www.eru.cz)
- Connection agreement to a distribution grid
- Specifics permits and authorizations dependent upon the type and size of an installation (e.g. authorization for use of surface water)

4. Competitiveness

In 2009/2010, generous subsidies and a decrease in the acquisition costs of photovoltaic panels at the same time led to an artificial development of photovoltaics. The resulting increase in the price of electricity for consumers and the increased risk of instability of the transmission system at that time had a negative impact on the perception and need of renewables by the general public. Renewables have been the subject of political debates constantly from that time. Several measures covering existing renewable projects have been introduced.
Tension escalated in 2013 when the Energy Regulatory Office with legal support stopped support payments for new energetic producers using renewable energy from 2014 onwards. This real fear led the owners of renewables installations and their creditors to become anxious as their expected profits would not materialise. At the end of December 2015, the Energy Regulatory Office published the new price decision which laid down the support payments also for those installations commisioned from 2006 to 2012. However, this was not provided for in the Energy Regulatory Office's price decision from November 2015. The new proposal of price decision for 2019 contains these support payments as well. However, new guideline of European Commission reduces support of renewable energy in Czech Republic in its recent form, and changes of whole support scheme are expected. This inconsistency has led to uncertainty amongst investors and made investment into renewables in Czech Republic considered to be unstable, unpredictable and nontransparent.

5. Grid connection

CEPS is the sole Czech transmission system operator. CEPS is reponsible for electricity transmission at the highest voltage level and for maintaining the balance between the production and consumption of electric power. The system is 5,728 kms long,

- thereof length of 400 kV power lines: 3,735 km
- thereof length of 220 kV power lines: 1,909 km
- thereof length of 110 kV power lines: 84 km

The amount of electricity transferred across the transmission system was 65,570 GWh in 2015.
The electricity transmission network is deemed to be strong and reliable thanks to its robust technological infrastructure. CEPS pursues an extensive investment plan to maintain grid stability and the realibility of supplies and 2.3 billion EUR are expected to be invested until 2025.

Czech Republic

B. LEGAL FRAMEWORK

Real rights required

The following legal documents govern the renewables in the Czech Republic principially:

- Act No. 165/2012 on supported energy sources and amending certain laws
- The Energy Regulatory Office's Price Decision
- National Action Plan for renewable energy

C. SUPPORT SCHEME / GREEN CERTIFICATES

The main regulatory body is the Energy Regulatory Office which is responsible for determining the scope and level of support for supported energy sources. The term "supported energy sources" is stated in Act No. 165/2012 on supported energy sources and amending certain laws.

There are two types of support available, namely green bonuses and purchase prices (feed-in tariffs), nevertheless green bonuses are prioritized.
In 2017 reported total support paid reached 43,154 mil. CZK (1,682 mil. EUR) and supported production volume reached 8,487 GWh:

- the reported volume breakdown is as follows: (i) green bonuses 7,094 GWh (83.6 % of total) and (ii) feed-in tariff 1,393 GWh (16.4 % of total);
- the support after settlement breakdown is as follows: (i) green bonuses 1,049 million EUR (62.3 % of total) and (ii) feed-in tariff 634 million EUR (37.7 % of total).

The Energy Regulatory Office determines green bonuses and the feed-in tariff seperately for each type of renewable energy source on a yearly basis with possible amendments during the period.

Support scheme above is to be changed in the near future, as says the proposal of amendment to the Act 165/2012 prepared in 11/2018. Main change is in introduction of the auction-based support for productions with energy capacity above 1MWh, and in the sole support for smaller productions in form of green bonunses. In the optimistic view the amendment should be effective from 7/2019.

Although commercial investments in the installation of new renewables peaked back in 2009/2010, households might apply for subsidies in the New Green Savings Programme of the Ministry of the Enviroment. The programme's objective is to support residential development with very low energy performance and the efficient use of energy sources. The programme is applicable to the end of 2021 and is to be funded by proceeds from the sale of emmission allowances (EUA and EUAA). Funds are partially intended for the efficient use of energy resources, i.e. photovoltaics, biomass-burning boiler, heat pump - to name but a few. Generally speaking, eligible applicants are limited to owners of family homes. The support is a fixed amount according to the type of new energy source/system acquired and limited to 50 % of the proven expenditure. In terms of photovoltaic systems for households, installed capacity should not exceed 10 kWp.

Ministry of Industry and Trade has its subsidies in form of Operational Programme for legal persons outside the city of Prague (OP PIK) for use of biomass, biogas and hydro power; and for public institutions in whole area of Czech Republic (OP ŽP) for use of photovoltaic rooftop and facade installations. These programmes are aimed to efficient energy management, development of renewable energy sources and support of production and distribution of renewable energy.

D. ISSUES AND PROFITABILITY

Tax issues

For further information please consult our brochure, "Investing in the Czech Republic"

Profitability

Feed-in tariffs are set by the Energy Regulatory Office such that the 15-year simple return on investment is guaranteed. In the case of green bonuses, the owner of a renewable project bears the higher market risk as he/she is responsible for finding a customer for the electricity generated and for setting the conditions of such supply. However, this higher risk tends to be associated with higher revenue and hence theoretically can shorten the pay-back period and lead to higher IRR.
As the proposal of an amendment of the Act 165/2012 is in the comment procedure, preparations to its introduction to the legislative framework of Czech Republic were already set. One part of the propsal contains controls applied for renewable energy producers after 10 years of operation in order to find out whether support received does not result in overcompensation of the one company's IRR. Range of IRR is diversified by type of used technology, IRR of fuel resp. non-fuel sourced technology should not exceed 10.8 %, resp. 8.4 %. Czech Ministry of Industry and Trade with cooperation with National energetic inspection started investigation in the area of overcompensation based on voluntary research. It is expected that next step in this research will be obligatory with support of the new act.
Nonetheless, the Czech Republic is often deemed by investors as an unstable and also unpredictable venue for their long term investment. Renewable sources are subject to negative scrutiny from regulators and politicians.

Poland

A. COUNTRY PROFILE

1. Overview and trends

For the last 3 years the Polish renewable energy market has been stagnating. The installed capacity to date is:

- **Wind onshore** - 5.900 MW
- **Photovoltaic** - 147 MW
- **Hydro** - 982 MW

Total capacity of RES sector reached 8.593 MW in 4Q2018.
The share of renewable energy in gross final energy consumption by the year 2020 should amount to 15 %. According to the Ministry of Energy Report, in 2017 the share of energy from renewable sources in the final gross energy consumption in Poland was 11 %. Forecasts suggest that the 15 % level will be reached in 2022.

2. Funding situation

There are the following **support systems**:

- Auction system (feed-in-premium)
- Tradable certificates of origin (green certificates)
- Feed-in tariffs (for water and biogas installations < 500kW)

As part of the 2030 goals, it is planned to introduce a support system in the form of aid mechanisms addressed to specific technologies - this solution is intended for sources that do not have competition on the market, as they are a new technology.
EU and Government funds - limited funding options for RES investments.
Bank financing - in general, higher requirements for RES projects due to regulatory instability over the last few years.
Corporate PPA - private power purchase agreements for the period of 10 to 15 years are gaining attention in Poland as reasonable alternative in light of limited accessibility of public support.

3. Permits and authorizations

Requirements depend on the type and size of the power plant. Basic requirements are:

- **Building permits (for RES and grid connection)**
- **Local Zoning Plan** - an act of local law which defines the purpose and the conditions of land development.
- **Decision on environmental conditions of the permission for realisation of the project**

4. Competitiveness

In 2015-2018, the attractiveness of the Polish market of renewable energy sources significantly decreased. This was mainly the result of the state policy in relation to regulations governing renewable energy from wind farms. In particular, the wind energy market struggled with the multiple increase

of the taxation level of windmills (changes introduced in 2017 that were reversed in mid 2018) and restrictions on their location at a distance of not less than 10 times its height from residential buildings or protected areas. In 2017, the microinstallation segment dominated the domestic market of renewable energy sources against the downturn in investment in larger RES installations since 2016. This is the consequence of providing large support for microenterprises. In 2019 slow recovery in the volume of onshore wind investments is expected. On the other hand, the Polish government has repositioned offshore wind energy in its long term generation mix strategy, as a result of which better regulatory conditions for the wind energy in the Polish economical zone of the Baltic sea may be anticipated.

5. Grid connection

The transmission grid, operated by PSE S.A., consists of 267 power lines of 14 695 km in length. Over 40 entities act as distribution system operators, of which the 5 biggest ones control 852 000 km of power lines and serve 17 million clients.

B. LEGAL FRAMEWORK

Real rights required

Under Polish law the legal title to the land must be obtained for all the infrastructure of the power plant. There are four ways to hold the legal title to the land:

- ownership right
- perpetual usufruct
- limited right in rem (usufruct, transmission easement),
- civil law contract (i.e. leasing, lease contract).

Ownership right

Ownership right ensures the right to:

- possess
- use
- dispose

within the limits set by the:

- law
- principles of community life
- the socio-economic purpose of the right.

Perpetual usufruct

A perpetual usufruct consists of:

- the right to use the real estate in the manner specified in the agreement, for example, the right to erect a building and other facilities, establishing manufacturing plant,
- disposal.

B. LEGAL FRAMEWORK

The duration of a perpetual usufruct is limited by the agreement to a maximum of 99 years.

Conventional and statutory right of usage and easements

Usage (usufruct) - a non-transferable limited real right which gives the user the right to use the real estate and collect profits from it
Easement - generally taking one of two main kinds:
- land easement
- transmission easement.

Civil law contract

Lease contract is the most frequently used form of obtaining the legal title to the real estate for the location of renewable energy power plants such as wind or photovoltaic power stations.

Issues that might impede/delay the investment process

Following issues have to be taken into consideration when planning a renewable energy park in order to avoid any delays or even cancellation of the project.
- potential changes of law (in particular regarding support system)
- potential difficulties associated with obtaining grid connection
- environmental requirements
- necessary permits

C. SUPPORT SCHEME / GREEN CERTIFICATES

Legal provisions / Support scheme

Act dated February 20, 2015, on Renewable Energy Sources (Journal of Laws of 2018, Item 2389, consolidated text) and further amendments that introduced auction system in 2016.

Green certificates / Auction system

All RES installations that started production of electricity before 1 July 2016 had the possibility of being granted green certificates for the next 15-year period.

The price of green certificates on the stock exchange is shaped in a market manner by the demand for certificates, their supply and the substitution fee. It is defined by law, and the President of the Energy Regulatory Office announces its amount annually. The system does not provide for a minimum price.

The Ministry of Energy is moving away from providing support in the form of green certificates for the RES auctions.

The auction system's most important features are:

- the offer includes the amount of energy the producer undertakes to deliver over a period of 15 years and the unit price of the energy produced,
- the price in the offer can not exceed the reference price for a given type of installation,
- -support is granted to projects that have declared the lowest unit price, until the volume limit determined by the President of the Energy Regulatory Office,
- for 15 years after completing the investment and introducing the energy for the first time, the producer will sell the agreed amount of energy and for the agreed price
- the price for auction winners will be awarded for a period of 15 years and indexed each year by CPI inflation.

Updates

1Q 2019 the Council of Ministers is to adopt the draft of another amendment to the Act on Renewable Energy Sources that will enable 2019 auctions.

D. ISSUES AND PROFITABILITY

Tax issues

For further information please use our "Investing in Poland" brochure.

Profitability

On average, operational costs of wind farms are relatively low (3-4 % of investment outlays annually). The amount of outlays depends on a kind of applied technology and the location of a power plant. Current outlays in the purchase and installation of turbines and construction works (including electrical works) amount to approximately PLN 6.0 million per MW. Total investment outlays reach PLN 7.5 million per MW. Investment outlays are mainly the costs of turbines, which constitute from 65 % to 75 % of the total value of preparing and erecting a farm on land (PLN 4.8 million per MW). Moreover, the investor bears, among others, the costs of construction works (PLN 1.2 million per MW), project preparation (PLN 0.3 million per MW), and connection to the grid (PLN 0.2 million per MW).

In June 2018 reference (maximum) auction price for onshore wind with a total installed electric power of more than 1 MW was set at PLN 350. According to the estimates of the Polish Wind Energy Association, in the auction conducted on 6 November 2018, the average price at which the producers agreed to generate energy from wind farms for a period of 15 years amounted to less than PLN 197 / MWh. The rates ranged from less than 158 PLN / MWh to a maximum of PLN 217 / MWh.

Average price of electricity (MWh) in the third quarter of 2018, quoted by the Energy Regulatory Office, reached PLN 208,83 per MWh. Average green certificate price on Polish Power Exchange as at December 2018 was PLN 153,07 per MWh.

Romania

A. COUNTRY PROFILE

1. Overview and trends

Renewable energy sector trends
Romania has a balanced mix of resources: biomass, hydropower, geothermal, wind, solar and photovoltaic. Despite its potential and the European Union's efforts to stress the importance of renewable energy, most recently by approving the Revised Renewable Energy EU Directive 2018/2001, the lack of predictability in the national legislative framework has led to a severe decrease in investments. In July 2018, the reported net generating capacity of the Romanian Energy System based on renewable sources was 4,357 MW (wind power, 2,976 MW; solar power, 1,260 MW; and biomass, 121 MW).

Mandatory quota of renewable energy for 2017: 8.3 % – according to Government Decision 1014/2016 to approve the mandatory annual quota of electricity generated from renewable energy sources under the green certificate promotion system in 2017

Target quota of renewable energy for 2020:
38 % – according to Law 220/2008 on the promotion system for energy generation from renewable sources ("Law 220")
The targets for the production of energy from renewable sources by 2020 for all EU countries were established through EU Directive 2009/28/EC. The quota for Romania was 24 %, a target which, according to data provided by the Romanian Energy Regulatory Authority ("ANRE"), was already achieved in 2014. The provisions of the Revised Renewable Energy EU Directive 2018/2001 include a binding energy efficiency target for the EU for 2030 of 32 %, with a clause for an upwards revision by 2023.

2. Funding situation

EU Financing
Investors looking to receive EU grants for new biomass, biogas or geothermal facilities must submit their applications by July 2019. They can receive grants worth up to 80 % of the investment costs, with a maximum value of EUR 15 million.

EEA Grants
EEA grants – financed by Norway, Iceland and Liechtenstein – are for use in investments (including modernisation investments) in small facilities used for the production of renewable energy. These grants can be worth up to EUR 2 million, depending on the type of project.

Banks
Romanian banks are currently reluctant to finance renewable energy projects in Romania on account of the unfavourable legal and tax environment.

3. Permits and authorizations

The construction of a renewable energy plant always requires a building permit, irrespective of the installed capacity. As a rule, the building permit will be issued by the local public administration; however, in specific cases the permit will be issued by the president of the county council with the consent of the mayor of the town or commune in question.
A building permit is issued within 30 days of submission of the complete documentation to the competent authority. The process for obtaining the complete documentation requires various other permits and approvals, depending on the location and specific technical documentation and the real rights over the project land.

A "setting-up authorisation", separate from the building permit, is required for energy projects with an installed capacity >1 MW and will be issued by the ANRE within 30 days of submission of the complete documentation. Where the installed capacity falls between 500 kW and 1 MW, this authorisation is not necessary, but ANRE must be provided with data about the investment project and with regular reports on the development status. For an installed capacity <500 kW, no such notification is necessary.

4. Competitiveness

Romania's main objectives in recent years have been to improve the competitiveness of the internal electricity market, to play an active role on both regional and EU energy markets, and to develop cross-border exchanges. Although the most recent records available, i.e. those for Jan-Sep 2018, show that Romania's internal energy consumption increased by 3.1% compared with 2017 with the level of production remaining constant, Romania continues to generate more energy than it consumes and is able to provide itself with entirely self-produced energy. Furthermore, export flows in 2017 showed an increase of 26% in relation to Serbia.

5. Grid connection

In 2018 a new power line was opened running between Resita in Southern Romania and Pancevo in Serbia, thereby connecting Southern and Central Europe and increasing the interconnection capacity between the two countries.

Also in 2018, the Romanian Government approved the expropriation procedures that will allow for the completion of the power line connecting Oradea in Romania to Békéscsaba in Hungary, a project aimed at strengthening national energy security.

Romania

B. LEGAL FRAMEWORK

Real rights required

A building permit is required to build any facility for the production of energy and will only be granted if a specific *in rem* right to the land on which the facility is to be erected has been demonstrated. The *in rem* right can be demonstrated either by means of an ownership title to the land or a superficies right to the land.

Ownership right

An ownership right affords the owner the absolute right to use, encumber and sell the owned real property without limitation in time, including the right to build on the property any building or other type of structure, whether permanent or temporary.

Superficies right

A superficies right consists of:

- the right to have or to erect a building on, under or above the land owned by another person
- the ownership right to the building
- the right to use the land pertaining to the building.

The duration of a superficies right is limited to a maximum of 99 years with an option to extend.

Conventional and statutory right of usage and easements

In order to access the energy plant during and after finalisation of the construction works or with respect to the path of electric cables crossing any third party property, the investor must hold rights of easement vis-à-vis the land in question.

Issues that may impede/delay the investment process

Issues to be taken into consideration: public property; restitution claims/ litigations affecting the land; instatement of ownership title; interdictions to sell the land; historical monument status; archaeological status; lack of urbanism certificate.

C. SUPPORT SCHEME / GREEN CERTIFICATES

Legal provisions

The renewable energy support scheme is mainly regulated by Law 220/2008 and developed through secondary legislation.

Green certificates

Up until the end of 2016, all new investments by renewable energy producers were eligible to receive green certificates, issued on a monthly basis, based on the type of renewable energy source used and the volume of electricity injected into the national electricity network. For these producers, green certificates will continue to be awarded for 7-15 years following the start of operations, with the exact period depending on the energy source used. Green certificates are traded at a price that varies within a range established by Government Decision. A minimum price is set in order to protect producers, and a maximum price in order to protect consumers.

As of January 2017, no new green certificates have been awarded to new renewable energy production units.

The mandatory quota system for GCs acquired by producers serves as a mechanism to promote and support the production of energy from renewable sources. The value of GCs represents an additional income source for producers in exchange for the "clean" energy they provide. The GCs temporarily postponed by Government Emergency Ordinance 57/2013 will be recoverable by producers as of 1 January 2018 in the case of hydro and wind power plants, and as of 1 January 2021 in the case of solar power plants. As of April 2017, the GCs are valid and tradable throughout the entire period of the support scheme, instead of the time-limited 12-month period as was previously the case.

D. ISSUES AND PROFITABILITY

Tax issues

At the end of 2018, the Romanian Government decided that a 2% tax would be levied on the turnover of energy companies, starting with their 2018 revenues. The levying of this tax was postponed indefinitely, however, pending public consultations and the approval of the calculation methodology. For further information on this issue, please consult our "Investing in Romania"brochure.

Profitability

The profitability of renewable projects is substantially affected by the GC system. The price of a GC mainly depends on the value of the substitution fee and the prevailing economic conditions, and ranges between EUR 29.40 and EUR 35 per GC. Market liquidity results from the obligation on companies selling electricity to end customers to purchase and redeem GCs in line with the prescribed minimum quotas for energy derived from renewable sources as part of total energy sales.

Downsides: lower quota for green certificate acquisitions, i.e. 0.346 GC/MWh as of January 2018.
Upsides: taxation on the date of the sale of GCs, instead of the award date, as of April 2017; GCs valid and tradable throughout the entire period of the support scheme.

Serbia

A. COUNTRY PROFILE

1. Overview and trends

- Being a party to the Energy Community Treaty, Serbia accepted the commitment to transpose European Directives in the field of renewable energy sources (the "**RES**"), including EU Directive 2009/28/EC, setting the target for RES to 27% by 2020. Such a goal is also strategically set in the National Action Plan for Use of Renewable Energy Resources, valid until 2020, and in the Strategy of Development of Energy of the Republic of Serbia until 2025 with projections until 2030 (the "**Strategy**").

- According to the Strategy, the potential of renewable energy in Serbia is substantial and is estimated at 5.6 Mtoe per year. The potential of biomass is largest and amounts to 3.4 Mtoe per year. Hydro potential amounts to 1.7 Mtoe per year, of which 0.8 Mtoe per year has already been exploited, while the potential of wind-based energy amounts to 0.1 Mtoe per year

Currently, the total reserved installed RES capacity is as follows:

- Wind: 500 MW;
- Photovoltaic: 8.8 MW;
- Small hydro: 91.4 MW;
- Biogas: 38.9 MW.

2. Funding situation

The support scheme in the form of feed-in tariffs for electricity producers from RES is recognised under the Energy Law adopted in 2014 (and amended in 2018). A decree setting out the applicable feed-in tariffs from the RES has been adopted by the Government of the Republic of Serbia and its validity has been extended until the end of 2019.

According to the information available in the public domain, The Ministry of Energy is working on the draft of the new Energy Law that should introduce an auction system. However, further details about the type of the auctions that will be introduced are not publicly available as the draft law has still not been provided for public discussion. It is expected that the new Energy Law will be adopted by the end of 2019.

Banks:
The Energy Law improved the Serbian energy sector's regulatory framework by removing a number of obstacles contained in the previous energy law and regulated in more detail issues which were of the utmost importance to the investors, such as the setting up of the grid connection infrastructure by the power producer, application of a single PPA from the moment the investor obtains the status of a preliminary privileged power producer, the possibility to extend the status of preliminary power producers, etc. Such amendments significantly increased the bankability of the RES projects and both foreign and domestic banks are regularly seen as financiers of such projects.

3. Permits and authorizations

The following are the main permits required for the construction and operation of a RES power plant:

- Energy permit;
- Construction permit;
- Use permit;
- Energy license.

4. Competitiveness

Due to changes in the legal framework which increased the bankability of the RES projects, investors have already filled the quota set for wind and solar. We understand from market sources that some of the existing investors are now considering selling their stakes partially or entirely in a number of such projects.

5. Grid connection

The grid connection is controlled by the TSO “Elektromreze Srbije”.
The transmission system comprises of approx. 9,765 km of power lines of 400 kV, 220 kV and 110 kV and transformer stations and is interconnected with all neighbouring countries.
There are plans to further modernise and enlarge the transmission system according to the plan for development by 2024.

B. LEGAL FRAMEWORK

Real rights required

Under Serbian law, one of the legal preconditions for the issuance of a construction permit is that the applicant submits sufficient evidence to show he has the appropriate title to the land on which the construction is supposed to take place. Such evidence includes ownership of the land and other rights to the land recognised by the law as a legal basis for issuance of the construction permit.

Ownership right

The ownership right under Serbian law offers the owner an absolute right to:

- use
- build
- encumber and
- sell

Necessary permits, easements and other encumbrances on land can restrict this right.

Other rights to the land

Other rights to the land recognised by the law as a legal basis for the issuance of the construction permit include easements over the land, leases or documents of consent issued by owners/users of the land.

Conventional and statutory right of usage and easements

In line with the latest amendments of the Law on Planning and Construction, the power plant may be constructed on agricultural or forest land, without a need to obtain an approval by the ministry in charge of agriculture prior to the commencement of construction.

C. SUPPORT SCHEME / GREEN CERTIFICATES

Issues that might impede/delay the investment process

Some of the main issues that have to be taken into consideration when planning a renewable energy park in order to avoid any delays or even cancellation of the project:

- obtaining the necessary right over the land;
- obtaining necessary permits;
- securing a grid connection;
- obtaining financing.

Legal provisions

The Serbian Energy Law contains the legal framework for the application of the support scheme in the form of feed-in tariffs. Specific regulatory framework is now set out in several decrees that were eventually adopted by the government – the decrees on the model for PPAs ("**Model PPA Decree**"), incentives relating to electricity production from renewable energy sources ("**Incentive Measures Decree**"), and on the requirements and procedure to acquire the status of a privileged power producer from renewable sources ("**PP Status Decree**").

Green certificates

A guarantee of origin is issued to the RES producer not holding a status of a (preliminary) privileged power producer and represents a generation of 1 MWh. Such guarantees are transferable. Guarantees of origin issued in other countries are also valid in Serbia, under certain conditions. On the other hand, for the RES producer holding a status of a privileged power producer, feed-in tariffs are used to support electricity production and are guaranteed for a period of 12 years..

Updates

Feed-in tariffs are annually adjusted each February per inflation in the Eurozone..

D. ISSUES AND PROFITABILITY

Tax issues

For further information, please consult our "Investing in Serbia" brochure.

Profitability

Any investment expenditure analysis must account for the preparation, design costs and costs of obtaining the relevant permits/approvals for the project. These costs include, but are not limited to:

- Developing the technical design;
- Drafting the feasibility study;
- Erecting measuring masts and wind density measurements;
- Performing a study on the impact of the wind farm on the natural environment and local community;
- Administrative proceedings for obtaining relevant permits/approvals.

Slovakia

A. COUNTRY PROFILE

1. Overview and trends

EU Directive 2009/28/EC imposes a 14 % renewable energy quota for Slovakia as a minimum. In 2018, the production of electricity from renewables amounted to 12 % (2017: 11.5 %) of the gross consumption.

In 2018, the overall production of electricity in Slovakia totalled 27 TWh, of which 55 % was produced by nuclear powerplants, 22 % by fossil powerplants, 15 % by hydro powerplants and 8 % by other renewable sources of electricity. 3.8TWh had to be imported to Slovakia, but this trend might be changed after new blocks of nuclear powerplant in Mochovce are completed and in full operations.

2. Funding situation

The support scheme in the form of feed-in tariffs for electricity producers from RES is recognized under the Energy Law adopted in 2014 and amended in 2017 for period 2017-2021, the amendment implements decrease of feed-in tariffs for photovoltaics by 5 % and for production from wind power by 30 %. However, absolute feeds volume still grows with increasing number of RES producers.

Banks
In order to attract further interest from banks to support the RES projects, it is important that the implementing legislation adopted pursuant to the Energy Law is seen as bankable.

3. Permits and authorizations

In Slovakia, the following permits and authorizations should usually be obtained in order to operate renewable energy sources in line with the national legislation:

- Building permit
- Licence from the Regulatory office for Network Industries (ww.urso.gov.sk)
- Connection agreement to a distribution grid
- Specific permits and authorization dependent upon the type and size of an installation

4. Competitiveness

In 2015, several investors in renewables were removed from a support scheme not allowing them access to the feed-in tariff system. Controversy arose as this step was taken retroactively via a new administrative obligation – a notification process – which some operators failed to fulfil. This abrupt change might have economically endangered some operators. Covenants of financing banks providing the necessary leverage to the projects could be broken and stricter loan conditions could be imposed for the coming years, ultimately changing the return for owner. Moreover, it might have led to a deterioration of the the position of sellers in renewable projects during the sale process. Due to the stable regulatory environment the only consequence could be a lower exit value. The development of new projects has likely been negatively affected as investors have lost confidence in the stability of the legal framework.

5. Grid connection

The transmission system operator in Slovakia is the Slovenska elektrizacna prenosova sustava, a.s. company (SEPS, www.sepsas.sk).
According to published 2017 data the transmission system lines is 3,044 km long:
thereof length of 400 kV power lines: 2,138 km
thereof length of 220 kV power lines: 826 km
thereof length of 110 kV power lines: 80 km

The transmission system has more than 7,300 towers. In 2017, a total of 31,975 GWh of electricity was transmitted through the system.

Slovakia

B. LEGAL FRAMEWORK

The following legal documents govern renewables in Slovakia principally: Act No. 309/2009 on support of renewable energy sources and high efficiency CHP and amending certain laws, the Act amendment effective 1 January 2019 enables electricity production for private purpose and introduces auctions which are expected, according to unofficial sources of information, to tender low electricity prices and to generate additional capacity of 200 MW from photovoltaic to existing 500 MW, out of which 43 MW was already confirmed for year 2019.
The Regulatory Office for Network Industries resolutions are setting conditions of the support scheme National Action Plan for renewable energy.

C. SUPPORT SCHEME / GREEN CERTIFICATES

Regional grid operators are obliged to prioritize renewable energy installations for connection to the grid. Mandatory off-take by a regional distribution system operator for "the electricity price on loss" (stable prices for 15 years). The price on loss represents the arithmetic mean of electricity prices for the purpose of covering losses of all regional distribution grid operators and is calculated on the basis of the schemes determined by the Slovak Regulation Office. Feed-in tariffs are set by the Regulatory Office for Network Industries.

D. ISSUES AND PROFITABILITY

Tax issues
For further information please consult our brochure, “Investing in Slovakia".
Profitability
In Slovakia, the profitability of the energy industry is 11.5 %, based on figures of the top 70 companies published in Trend Top Raking 2014. The trend is clearly towards biomass. Due to the Act No. 309/2009 small plants (< 10 kWp) are excluded from entrepreneurial activities.

TPA's integrated services for the energy industry

Adding value to energy projects
Regulated markets create a hermetic area, where the majority of free market economy solutions are inadequate. Our sector specific products rely on the extensive project experience of our experts, in-depth knowledge of the industry and regulatory issues.

Transactional Advisory and Valuation
- due diligence for Alternative Energy and Energy Efficiency projects
- sell-side and buy-side advisory
- transaction support
- financial and tax due diligence
- tax structuring and tax planning
- valuation of entities, brands and intangibles
- preparation of prospectus and memorandum
- debt restructuring
- purchase price allocation advisory
- financing

Business Advisory
- quick project review
- feasibility studies
- preparation of financial screenings and budgets
- financial analysis and project evaluation
- financial planning and optimization
- reviews of management processes
- impairment tests
- M&A advisory, obtaining investors and investment projects
- creation and implementation of financial strategies, verification and optimization of financing structure
- public offering (IPO) advisory
- post merger integration advisory
- performance improvement
- tax capital groups
- shared service centers

Outsourcing
- bookkeeping
- administration of earnings and personnel
- reporting & compliance with stock market standards

Investment Optimization
- tax planning of investment and modernization
- investment financing
- terminal investments realized with third parties
- application for national and/or EU funding

Competitiveness Improvement

- tax risk management
- optimization of post-transaction processes
- optimization of taxation of real estate (standalone units, technical buildings, objects in buildings, non-structural elements of buildings, mines and recultivated grounds)
- tax optimization of green certificate's trade
- transfer pricing and tax planning of intra-group transactions
- tax optimization of intangibles
- tax planning with respect to contracts with trade unions and benefits for employees
- design of motivation systems, individual systems for remunerating
- and awarding employers and management board members

Audit

- verifications and reviews of financial reports and consolidated financial statements
- conversion of financial statements from local GAAP to IFRS
- verification of merger plans, demerger plans and transformation plans
- reviews of accounting books with respect to arranged procedures

List of abbreviations

CHP	Combined heat and power
CPI	Consumer price index
EA	Energy act
EIB	European Investment Bank
GC	Green certificates
GO	Guarantees of origin
GWh	Gigawatt hour
kV	Kilovolt
kW	Kilowatt
kWp	Kilowatt peak
MW	Megawatt
MWh	Megawatt hours
MWp	Megawatt peak
NAP	National action plan
PPA	Power purchase agreements
PV	Photovoltaic
RES	Renewable energy sources
RES-E	Renewable energy sources - electricity

Notes

TPA Group

In tax advisory, auditing and advisory, not only the phrase “other countries, other customs” is valid but also other markets, other legislation, other languages and much more. Therefore, we await you on-site with high-quality consultancy, know-how and an understanding for your individual situation.

Because even if everything else is different, one aspect should remain the same: your corporate success.

The TPA Group is active in twelve countries in Central and South Eastern Europe: Albania, Austria, Bulgaria, Croatia, the Czech Republic, Hungary, Montenegro, Poland, Romania, Serbia, Slovakia and Slovenia.

All our offices and contact persons can be accessed at:
www.tpa-group.com

Imprint
Information as of January 2019 and subject to change. Without liability. The information given here is greatly simplified and is no substitute for professional advice. Responsible for the contents: TPA Steuerberatung GmbH, Praterstrasse 62-64, 1020 Vienna, FN 200423s HG Wien.
Editors: Claudia Stanciu-Stanciulescu, Karin Fuhrmann;
Tel.: +43 (1) 58835-0, Fax: ext. 500, E-Mail: service@tpa-group.com;
Design, cover artwork: TPA; www.tpa-group.at, www.tpa-group.com

greenprint*
carbon neutral printed

Order and profit from our free brochures at:
www.tpa-group.com/publications

Albania | Austria | Bulgaria | Croatia | Czech Republic | Hungary
Montenegro | Poland | Romania | Serbia | Slovakia | Slovenia

Tax
Audit
Advisory
Accounting

Albania
Ilir Binaj
Tel: +355 (4) 22 34 568
E-Mail: ilir.binaj@
tpa-group.al

Albania | Bulgaria |
Croatia | Serbia
Thomas Haneder
Tel: +43 (1) 58835-246
E-Mail: thomas.haneder@
tpa-group.at

Poland
Wojciech Sztuba
Tel: +48 (61) 63 00 500
E-Mail: wojciech.sztuba@
tpa-group.pl

Austria
Karin Fuhrmann
Tel: +43 (1) 58835-534
E-Mail: karin.fuhrmann@
tpa-group.at

Romania
Claudia Stanciu-Stanciulescu
Tel: +40 (21) 310 06 69
E-Mail: claudia.stanciu@
tpa-group.ro

Croatia
Bojan Huzanic
Tel: +385 (1) 646 17 80
E-Mail: bojan.huzanic@
tpa-group.hr

Serbia
Bojan Zepinic
Tel: +381 (11) 65 58 800
E-Mail: bojan.zepinic@
tpa-group.rs

Czech Republic
Jiri Hlavac
Tel: +420 (222) 826 211
E-Mail: jiri.hlavac@
tpa-group.cz

Slovakia
Ivan Paule
Tel: +421 (2) 57 351 124
E-Mail: ivan.paule@
tpa-group.sk

www.tpa-group.com

bakertilly
A Baker Tilly
Europe Alliance member