

Renewable Energy 2021

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Contributing editor

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Lexology Getting The Deal Through is delighted to publish the fourth edition of *Renewable Energy*, which is available in print and online at www.lexology.com/gtdt.

Lexology Getting The Deal Through provides international expert analysis in key areas of law, practice and regulation for corporate counsel, cross-border legal practitioners, and company directors and officers.

Throughout this edition, and following the unique Lexology Getting The Deal Through format, the same key questions are answered by leading practitioners in each of the jurisdictions featured. Our coverage this year includes new chapters on Italy and Poland.

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Every effort has been made to cover all matters of concern to readers. However, specific legal advice should always be sought from experienced local advisers.

Lexology Getting The Deal Through gratefully acknowledges the efforts of all the contributors to this volume, who were chosen for their recognised expertise. We also extend special thanks to the contributing editor, John Dewar of Milbank LLP, for his continued assistance with this volume.



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MARKET FRAMEWORK

Government electricity participants

1 | Who are the principal government participants in the electricity sector? What roles do they perform in relation to renewable energy?

In Poland, the Council of Ministers approves energy policies proposed by the Minister for Climate. The regulatory authority in Poland is the Energy Regulatory Office (ERO) that is responsible for licensing enterprises in the electricity sector; tariff approval; and issuing and redeeming certificates of origin for electricity generated from renewable energy sources (RES).

The President of the ERO is a central body of state administration nominated on the basis of the Energy Law of 10 April 1997 (the Energy Act), whose general obligation is to monitor the functioning of the whole energy market (electricity and gas markets), and decides on the granting of licences and tariff approval for electricity. The President is also responsible for managing the auction systems (in the area of renewable energy and the capacity market).

There is one transmission system operator (TSO) – Polskie Sieci Elektroenergetyczne (PSE), which owns the high voltage electricity grid and is responsible for grid operations, power dispatching, and for the balancing market rules (which are determined in the Transmission Network Code) that regulate the balancing of the system. PSE is fully owned by the state treasury.

State-owned entities have been organised into four vertically integrated groups and are partially privatised; they are: Polska Grupa Energetyczna (PGE); Tauron Polska Energia; Enea and Energa. All of these companies engage in generation, distribution, trading and supply activities. The three largest (PGE, Tauron and Energa) vertically integrated electricity companies account for about two-thirds of the installed capacity and about 70 per cent of domestic electricity production. Pursuant to article 9d of the Energy Act, distribution system operators operating within vertically integrated undertakings are obliged to be independent in terms of legal and organisational form and decision-making capabilities.

Private electricity participants

2 | Who are the principal private participants in the electricity sector? What roles do they serve in relation to renewable energy?

The principal market participants are generators, traders and distributors. The Polish electricity market is dominated by state-controlled, vertically-integrated enterprises operating in the generation, trading and distribution segments (PGE, Tauron, Enea and Energa). PSE is the grid operator. Apart from these enterprises, the renewable energy market also includes many larger or smaller independent generators, both domestic (eg, Polenergia, Geo Renewables) and owned by international investors (eg, Acciona Energia, EDP Renewables, Engie, EDF

Renewables, Innogy Renewables). Infrastructure private equity funds have invested in certain wind or photovoltaic projects.

Definition of 'renewable energy'

3 | Is there any legal definition of what constitutes 'renewable energy' or 'clean power' (or their equivalents) in your jurisdiction?

The Renewable Energy Sources Act of 20 February 2015 (the RES Act) defines 'energy from renewable sources' as as a renewable, non-fossil source of energy including wind, solar, aerothermal, geothermal, hydrothermal, hydro, wave, sea-current, sea-tide, biomass, biogas, agricultural biogas and bio-liquid energy.

Framework

4 | What is the legal and regulatory framework applicable to developing, financing, operating and selling power and 'environmental attributes' from renewable energy projects?

Renewable energy in Poland is mainly regulated by the following legal acts (together with secondary legislation):

- the Energy Act provides the principles for shaping the energy policy, terms and conditions of energy supply and usage; energy enterprises operation (including the rules for power grid interconnection, appointment of grid operators and their obligations); and for granting concessions. The Energy Act specifies the competent authorities for matters of fuel and energy management (including the competences and tasks of the president of the ERO);
- the RES Act specifies the terms and conditions of operating in the business of generating energy from renewable sources; mechanisms and instruments supporting generation at RES installations (in particular, certificates of origin, auctions, feed-in tariffs (FIT) and feed-in premium (FIP) tariffs); principles of issuing guarantees of origin for electricity generated from RES; and the principles of international cooperation with regard to RES and joint investment projects; and
- the Wind Power Investments Act of 20 May 2016 (the Distance Act) sets out the conditions and procedures for locating, building and operating wind farms, as well as the requirements for locating wind farms in the vicinity of existing or planned housing estates. It requires all new onshore wind projects to be located at least 10 times blade tip height (typically about 2 kilometres) away from residential buildings and protected areas.

The following Acts apply in respect of developing and constructing renewable energy source projects:

- the Spatial Planning and Development Act of 27 March 2003;
- the Disclosure of Information on the Environment and its Protection, Participation of the Public in Environmental Protection

and Environmental Impact Assessments Act of 3 October 2008 (Environmental Act); and

- the Construction Law Act of 7 July 1994.

Stripping attributes

5 | Can environmental attributes be stripped and sold separately?

RES installations that started generating electricity before 1 July 2016 are eligible for the support system involving certificates of origin. Such certificates are issued by the president of the ERO. The entities supplying electricity directly to end users, among others, are obliged to submit certificates of origin to the president of the ERO in order for them to be redeemed or to pay a 'substitution fee'. The proprietary rights arising from the certificates of origin are transferrable and they are a tradable commodity. The rights to the certificates are traded on the Polish Power Exchange (TGE).

The president of the ERO also issues guarantees of origin for electricity generated from RES at RES installations. A guarantee of origin is a confirmation, for the end user, of the environmental value arising from avoiding greenhouse gas emissions and are proof that the amount of electricity stated therein and introduced to the grid or the transmission network has been generated from RES at RES installations. There are no proprietary rights attached to the guarantees of origin. Guarantees of origin can be traded separately from certificates of origin. A guarantee of origin is valid for 12 months after the generation of the respective RES electricity to which it relates at the RES installation detailed in the application. Guarantees of origin are granted to RES installations and are typically bought by enterprises wishing to boost their green image. Guarantees of origin are traded on the TGE.

Government incentives

6 | Does the government offer incentives to promote the development of renewable energy projects? In addition, has the government established policies that also promote renewable energy?

Certificate-based and auction-based support schemes

The main incentives available to RES installations are regulated in the RES Act. Depending on the date of the installation's commissioning, it may benefit from one of the following schemes:

Certificate-based scheme

This scheme is for installations commissioned by 1 July 2016, but not hydropower with more than 5MW capacity

In this system, producers receive a certificate of origin for every 1kWh of electricity fed into the grid. 'Green certificates' are granted to RES installations. These certificates can be traded on the TGE (including through 'off-session' transactions that are processed through the TGE), and therefore represent an additional revenue stream to the price obtained for selling the renewable electricity on the competitive market. Suppliers (who can receive corresponding certificates for renewable electricity procured from producers) are obliged to obtain and submit certificates to the ERO in respect of the relevant calendar year, equal to a certain percentage of their energy sold, or, as an alternative, pay a substitution fee for the missing certificates. The substitution fee operates as a market price cap on the value of the certificates.

Also, pursuant to the RES Act, electricity trading power companies are required by law to purchase electricity generated from RES installations with a total installed capacity of less than 500kW, at the average market price from the previous year as published by ERO.

Auction-based FIT/FIP system

In this system, auction baskets are separated according to three main features: technology, size (with separate auctions for small (less than 1MW capacity) and large (more than 1MW capacity) installations, and whether the installation is new (commissioned after 1 July 2016); or existing (commissioned before 1 July 2016) and intending to shift from the green certificate system to the auction system. Different technologies compete within special baskets with targeted volumes of electricity (MWh) and budget. Depending on the participating installation's MW capacity, those successful in the auction benefit from support as follows:

- for installations of less than 0.5MW capacity – a FIT for 15 years under which the installation will enter into a power purchase agreement with an 'obligated supplier' who purchases the entire electricity generated for the price agreed within the auction; or
- for installations of more than 0.5MW capacity – a sliding FIP, under which the electricity produced by the installation is sold on the market (either OTC or on the TGE), and operator of the installation is granted a statutory right to receive payments to equalise the negative balance (being the difference between the market price of the electricity and the guaranteed price granted in the auction) from an SPV owned by the State Treasury.

Auctions are held at least yearly, but not always for all baskets. The auctioneer is the ERO. The Minister of Climate publishes a maximum price, or 'reference price', at which electricity may be purchased in the auctions and determines the maximum volume for electricity to be procured. Only those successful in the action (who offer the lowest price of sale of energy generated in the renewable source) will be supported, as announced by the ERO president.

Installations commissioned before 1 July 2016 may choose to remain in the green certificate system for 15 years after the commencement of electricity production or migrate to FIP through participating in the new auctions organised specifically for existing installations. The total period of support available to the installation under either scheme may not exceed 15 years from first generation.

Capacity market support scheme

The capacity market Law of 8 December 2017 (the Capacity Market Act) established a capacity market support scheme to ensure the mid- and long-term security of power supply to final customers in a cost efficient, non-discriminatory and environmentally sustainable way (article 1 (2)). The introduction of the capacity market signalled a change in the architecture of the energy market from an energy-only market to a dual-commodity market, where not only the generated electricity but also the net available capacity (ie, readiness to deliver electricity to the grid) will be subject to buy-sell transactions.

The capacity market is open to all types of providers of generation capacity (technologies) – namely, demand side response (DSR) entities, domestic suppliers of existing and new capacity, storage, demand-response and foreign generation capacity from Poland's direct neighbouring countries. The system of remuneration for generation or demand reduction capacity is based on power auctions organised centrally by the TSO-PSE; capacity is contracted primarily at 'main auctions' covering subsequent calendar years, starting from 2021. Successful capacity suppliers in an auction enter into a capacity agreement between the TSO and the settlement operator (the State Treasury), under which the capacity supplier receives a fixed payment (in zloty/kW per year) in return for guaranteeing readiness to provide capacity to the system within a delivery period (a calendar year for main auctions or calendar quarters for subsequent auctions), and, following an eight-hour advance announcement from the TSO, deliver capacity during emergency periods in which there is a risk of an imbalance in supply. The capacity being delivered will be through either physical generation in the case of generating units and storage; or

reduction of electrical consumption from DSR units), dependent on the technology type of capacity market unit contracted. New build capacity market units can bid for 15-year contracts, and those whose emissions fall below 450g CO₂/kWh receive a two-year extension bonus (ie, a total of 17 years). Existing units can bid for one-year contracts.

The EU Commission has found the Polish capacity market to be compatible with the internal market in accordance with article 107(3)(c) of the Treaty on the Functioning of the European Union.

Preferential treatment of electricity from renewable energy sources

Preferential treatment of electricity from renewable energy sources is provided in the following manner:

- the Energy Act, article 7(8)) provides that for smaller installations (less than 5MW), grid connection fees are calculated based on 50 per cent decrease to the cost of connection; and
- pursuant to the Energy Act, renewable energy installations have priority access to the distribution and transmission grid.

7 | Are renewable energy policies and incentives generally established at the national level, or are they established by states or other political subdivisions?

Generally speaking, Polish energy policy is primarily determined by EU directives and requirements, particularly around building a common EU energy market and on climate change. Renewable energy incentives are established at governmental level and are Poland's contribution to the EU-wide renewable energy sources target in final energy consumption: the EU first set binding targets for sustainable power in its member states with its Renewable Energy Directive of 2009. The new Renewable Energy Directive 2018/2001/EU (RED II) specifies that at least 32 per cent of the EU's energy consumption would come from renewable energy by 2030. In addition, Poland participates in the EU system of reducing greenhouse gas emissions.

The Polish government provides support schemes for RES installations. It also continues to support coal-fired power plants, by means of the capacity market. The Draft Energy Policy of Poland until 2040 seeks to align with EU policies regarding climate change.

Purchasing mechanisms

8 | What mechanisms are available to facilitate the purchase of renewable power by private companies?

Most renewable energy projects in Poland participate in the certificate of origin-based and auction-based support schemes. Typically, RES installations sell renewable energy directly to trading companies (mostly utility offtakers) or on the TGE.

An increased interest in establishing direct contractual relations with RES energy installations through corporate power purchase agreements (CPPAs), especially with wind farms, has been observed recently. Given that corporations are under pressure to reduce their carbon footprint and often undertake to increase the use of renewable energy in their operations, purchasing green energy fits well with their corporate social responsibility policies and helps to build a positive brand image.

In practice, though, only several CPPAs have been concluded in Poland to date. These were mostly virtual CPPAs, which only provide for financial settlement of the energy sold (without physical supply) coupled with the sale of guarantees of origin.

The current regulations still pose a number of barriers to the development and popularisation of CPPAs including practical restrictions around building direct lines and obligations on the part of RES installations selling energy to end users to obtain and provide certificates of origin to the president of the ERO to redeem.

Legislative proposals

9 | Describe any notable pending or anticipated legislative proposals regarding renewable energy in your jurisdiction.

On 15 January 2020, the Ministry of State Assets published a draft Offshore Wind Act providing for a 25-year bilateral CFD support mechanism with a fixed price set by the government for offshore wind farms. The CFDs are to be awarded to more than 9GW by 2028 in two phases:

- The first phase (planned for 2020–2022) plans to award CFDs by way of an administrative decision, to projects at the most advanced stage of the investment process (ie, those that, among other criteria, have a connection decision with PSE). The first phase targets awarding CFDs to offshore windfarms for a cumulative capacity of 4.6GW.
- In the second phase, CFDs for a further 5GW capacity (which can be increased by any capacity that has not been awarded from the first phase) will be competitively auctioned across at least three auctions between 2023 and 2028.

The CFD support in the Offshore Wind Act is intended to cover the 'negative balance' being the difference between the market value of the electricity and its value arising from the individual decision issued by the Regulator (and, from 2023, from the auction bid). The draft Offshore Wind Act provides a limitation for the MWh quantity of electricity covered by the support scheme, which may not exceed a product of 100,000 hours; and installed capacity of the offshore wind farm or its part with reference to its generation licence (but not exceeding the capacity laid down in the auction bid or in the decision).

Currently, support for the offshore wind farm sector is regulated under the RES Act.

Poland's Baltic Sea has the capacity to generate 9–12GW of energy and the combined output of onshore and offshore wind turbines could provide as much as 27 per cent of Poland's energy by 2050.

There are ongoing political discussions to relax the distance limitations set out in the Distance Act and amend the RES Act to enable auctions to take place after 2021 (currently, the last auctions are expected to be held by 30 June 2021).

In addition, the Polish government has recently proposed new law with the aim to protect certain Polish companies, including those operating in the energy sector, against takeover by a non-EU buyers.

Drivers of change

10 | What are the biggest drivers of change in the renewable energy markets in your jurisdiction?

Owing to its vast coal reserves, Poland has traditionally relied on lignite and hard coal as its main source of electricity production, which accounts for around 75 per cent of electricity generated in Poland.

The coal sector has become increasingly uneconomic and production has been challenged by cheap imports and high extraction costs, prompting government subsidies. Between 1990 and 2016, the Polish government contributed nearly €53.5 billion directly to the coal-based energy sector and mining industry.

The increasing role of RES results from a need to: ensure energy security, reduce the country's CO₂ emissions, and diversify Poland's energy mix to contribute to the EU-wide RES target in final energy consumption. The EU Large Combustion Plants and Integrated Pollution Prevention and Control Directives (combined under the EU Industrial Emissions Directive 2010/75), as well as the EU Emissions Trading Scheme Directive 2003/87, all require a reduction in CO₂ emissions.

According to the Polish government's Draft Energy Policy of Poland until 2040 (which contains the main strategic objectives for the country's energy sector) (the Energy Policy) apart from nuclear power plants and

photovoltaics, offshore wind energy is to be a key component in the Polish energy transformation. The Energy Policy specifies that:

- the share of coal in electricity production is anticipated to drop to 60 per cent in 2030 (national deposits of coal will remain the key element of Poland's energy security and the foundation of its energy mix, but its share will decline to this level on account of an increase in energy consumption);
- the share of renewable energy sources in final electricity consumption will reach 21 per cent in 2030. Full exploitation of the potential of offshore wind in the Baltic Sea, along with photovoltaics, can provide up to 30GW (in total) by 2040; and
- rapid diversification and growth of installed capacity and energy production generation will lead to an estimated reduction by 30 per cent of CO2 emissions (compared with 1990 levels) in Poland's energy sector by 2030.

Disputes framework

- 11 | Describe the legal framework applicable to disputes between renewable power market participants, related to pricing or otherwise.

The president of the ERO settles disputes, inter alia, pertaining to:

- refusal to conclude a grid connection agreement (including regarding increasing the connection capacity);
- refusal to conclude electricity sale agreements;
- transfer and distribution services agreements;
- cases of unreasonably withholding power supplies;
- refusal to give priority to connecting a RES installation; and
- refusal to amend a RES installation connection agreement with regard to amending deadlines (for the RES Installation) to provide first supply to the power grid.

In the above matters, the president of the ERO may issue, on the request of one of the parties, a decision in which it will set forth the conditions for commencing or continuing electricity supplies until the final dispute resolution. Any decision of the president of the ERO may be appealed to the Competition and Consumer Protection Court.

Disputes between market participants resulting from their contracts are resolved by the competent common courts or, if the parties have so elected, by arbitration.

UTILITY-SCALE RENEWABLE PROJECTS

Project types and sizes

- 12 | Describe the primary types and sizes of existing and planned utility-scale renewable energy projects in your jurisdiction.

In 2019, 10.53 per cent of electricity in Poland was generated from renewable energy sources (RES). The percentage RES installed capacity of the national power system was about 21 per cent.

The installed capacity of renewable energy sources in 2019, broken down by source (based on the granted electricity generation concessions and registrations), was as follows: wind – 5917MW (65 per cent); biomass – 1493MW (16 per cent); water – 973 (11 per cent); photovoltaic cells – 477MW (5 per cent); and biogas – 245MW (3 per cent).

The size of onshore wind projects in Poland varies – from small (several MW) to medium and large (30–90MW and more). To date, the largest wind farm has a capacity of 120MW and there are plans to build farms of 132MW and about 219MW.

Solar PV has recently been the fastest-growing RES sector in Poland. Micro installations still prevail but an increasing number of solar PV farms participating through the RES auctions system are being connected to the power grid. Large solar PV farms (between 5

and 50MW) are also being developed with the view to enter the energy market outside of the support system.

Development issues

- 13 | What types of issues restrain the development of utility-scale renewable energy projects?

A substantial part of the Polish transmission infrastructure (comprising 220kV and 400kV lines) is ageing and in need of replacement particularly in northern Poland; the 220kV network is well developed and interconnected, whereas the 400kV network is relatively well developed only in the south of the country. In northern Poland, capacity limitations may lead to problems with securing grid connection, which is a significant barrier for introducing new units of more than 1000MW regardless of type. The development of offshore wind will significantly depend on the completion of work on strengthening the northern transmission; the one transmission system operator – Polskie Sieci Elektroenergetyczne (PSE) – is currently capable of connecting around 4GW of offshore wind power capacity to its power grid by 2026/2027 and aims to bring this up to 8GW in the longer term. Moreover, it is necessary to increase the capacity of connections on the North–South route. This is important because of the asymmetric distribution of the Polish Power System loads (the southern part of the country receives comparatively more energy than the northern part). The challenge for PSE is to adapt the grid to the new configuration of generation sources as the existing and typically less efficient generating plants must be decommissioned in line with EU regulations governing CO2 and other environmental restrictions.

The onshore wind farm distance limitations set out in the Distance Act have excluded about 99 per cent of territory of Poland for such installations.

HYDROPOWER

Primary types of project

- 14 | Describe the primary types of hydropower projects that are prevalent.

The technical potential of hydro energy in Poland is significant; using existing heaps (there are 16,005), it is possible to obtain 14.27PJ. Most Polish hydropower resources are concentrated in the area of the Vistula River, particularly its right-bank tributaries. The power of installations generating electricity from water turbines in Poland reaches 994MW (611MW excluding pump-storage objects) in 761 hydropower plants of which 746 facilities are small hydropower plants. In 2018, only 1.33 per cent of electricity production in Poland came from commercial hydro-electric power plants.

- 15 | What legal considerations are relevant for hydroelectric generation in your jurisdiction?

The development of hydropower has been hampered by too many legislative changes. The Renewable Energy Sources Act of 20 February 2015 (the RES Act) in Poland is amended often, along with other decrees concerning hydroenergetics. This has resulted in high investor caution towards building new hydroelectric installations. The RES Act changed the support for hydropower in Poland from a support scheme based on renewable energy certificates to an auction-based scheme that does not include hydropower plants with a capacity greater than 5MW. This new system provides for a funding period of 15 years.

DISTRIBUTED GENERATION

Prevalence

16 | Describe the prevalence of on-site, distributed generation projects.

To a large extent, the generation of electricity in Poland is centralised, although small-scale renewable energy sources (RES) distributed generation is expected to develop further. Distributed generation in Poland comprises two groups:

- individual or industrial RES energy prosumers – who generate energy to satisfy their own demand with micro-installations and supply excess to the energy system; and
- sustainable energy areas – being energy clusters (five neighbouring communes or a county) and energy cooperatives. The purpose of these is to utilise the local potential and create new economic development areas.

Types

17 | Describe the primary types of distributed generation projects that are common in your jurisdiction.

The preliminary distributed generation type in Poland is solar PV (by majority), biomass, biogas or geothermal energy.

Regulation

18 | Have any legislative or regulatory efforts been undertaken to promote the development of microgrids? What are the most significant legal obstacles to the development of microgrids?

The Renewable Energy Sources Act of 20 February 2015 (the RES Act) introduces regulation for 'energy clusters' and energy cooperatives tasked with, among other things, making a given area independent of the national grid.

An 'energy cluster' is a civil law agreement pertaining to generating, balancing electricity demand, distribution and trading within a specified distribution network, which is determined based on the interconnection location of the energy generators and recipients comprising the cluster. A cluster may comprise individuals, legal entities, scientific facilities, research centres and local government institutes. An energy cluster is represented by a coordinator. The grid operator, with which an energy cluster intends to cooperate, is obliged to conclude a distribution services agreement with the energy cluster coordinator.

An energy cooperative's nature of business is generating electricity, biogas or heat, at RES installations and balancing electricity, biogas or heat demand solely for its own needs or its members, interconnected to a territorially defined power, gas or heat distribution network.

Other considerations

19 | What additional legal considerations are relevant for distributed generation?

As providing further development conditions for distributed generation – RES prosumers, energy clusters, and energy cooperatives are plans announced by the government as part of RES development – one may anticipate the introduction of appropriate regulations facilitating the development of distributed generation.

ENERGY STORAGE

Framework

20 | What storage technologies are used and what legal framework is generally applicable to them?

The Renewable Energy Sources Act of 20 February 2015 (the RES Act) introduced a legal definition for electricity storage facility (article 2, point 17). Further electricity storage regulations have been introduced by the Capacity Market Act of 8 December 2017 and the Electromobility and Alternative Fuels Act of 11 January 2018 (the Electromobility Act), which, as of 22 February 2018, amended the provisions of the Energy Law of 10 April 1997 (the Energy Act) in the scope regarding energy storage. Further and more comprehensive regulations in respect of the energy storage are still expected to be adopted.

While pumped storage hydroelectricity is the dominant technology in Poland, some Polish distribution network operators already operate Li-Ion battery energy storage systems.

Pursuant to the Capacity Market Act, storage units can also participate in the capacity market support scheme.

The largest Polish battery storage project (the Bystra storage project) is being developed by Energa Group, Hitachi and Polskie Sieci Elektroenergetyczne and will house batteries in a 1,200 metres squared warehouse with a target capacity of 6MW (27MWh). The project is a component of a prototypical system optimising the safety of operation of electricity grids (also by optimising the management of wind energy generation) and is located in Bystra near Pruszcz Gdański, which is the location of a wind farm operated by Energa Wytwarzanie.

Development

21 | Are there any significant hurdles to the development of energy storage projects?

Despite a broad consensus of need to develop electricity storage – in particular in the context of network security, power quality and generation balancing from renewable energy installations, storage technology. Research and Innovation is recognised as essential to accelerate the clean energy transition and bring new promising technologies to the market.

FOREIGN INVESTMENT

Ownership restrictions

22 | May foreign investors invest in renewable energy projects? Are there restrictions on foreign ownership relevant to renewable energy projects?

In principle, there are currently no specific restrictions in respect of investments pursued by foreign investors in renewable energy sources (RES) projects in Poland.

There are, however, certain restrictions with regard to acquiring ownership or perpetual usufruct of real property in Poland, especially agricultural real property, by foreign investors (particularly nationals or entrepreneurs from countries that are not parties to the European Economic Area or Swiss Confederation agreements). Such restrictions also concern acquiring shares in companies that are the owner or the perpetual 'usufructuary' of such real property. In practice, though, such restrictions are of no material concern, because a great many RES projects use real property under long-term lease agreements and investments in such projects are not subject to the above-mentioned restrictions.

Equipment restrictions

23 | What restrictions are in place with respect to the import of foreign manufactured equipment?

Under the Energy Act (article 51(1)), the importation of equipment should serve to ensure reasonable and efficient fuel and energy consumption. Article 51(1) also requires compliance with requirements pertaining to construction, shock safety, fire safety, technical supervision, heritage protection and any other relevant provisions arising from the energy generation technology and fuel type.

Under the RES Act, within the auction system, RES electricity may be sold only if the equipment comprising the RES installation has been manufactured within 42 months directly preceding the date of first electricity generation at that installation. However, the RES Act specifies variable equipment manufacturing periods for different technology classes as set out below:

- solar power – within 24 months;
- onshore wind – within 33 months; and
- offshore wind – within 72 months.

PROJECTS

General government authorisation

24 | What government authorisations must investors or owners obtain prior to constructing or directly or indirectly transferring or acquiring a renewable energy project?

Investors or owners will generally require the following key authorisations prior to constructing a renewable energy installation:

- local zoning plan/location decision (pursuant to the Spatial Planning and Development Act of 27 March 2003);
- environmental permit to the extent required under the Environmental Act;
- a grid connection agreement with the distribution network operators (DSO) or Polskie Sieci Elektroenergetyczne (as transmission system operator (TSO)), as applicable (following the issuance of grid connection terms either by the DSO or TSO) (pursuant to the Energy Act);
- construction permit (pursuant to the Construction Law Act of 7 July 1994); and
- for offshore wind projects, a legally binding permit for the construction and use of man-made islands is required (required under the Maritime Areas Act of 21 March 1991).

Certain mergers or acquisitions are subject to notification to the president of the Office of Competition and Consumer Protection, which is the administrative authority responsible for supervising the competition on the Polish market and assessing the concentrations.

Offtake arrangements

25 | What type of offtake arrangements are available and typically used for utility-scale renewables projects?

Apart from trading on organised markets, such as the Polish Power Exchange, RES installations may also sell renewable energy directly to trading companies (mostly utility offtakers) through bilateral contracts.

Parties can freely determine the price and other contractual terms of these bilateral contracts pursuant to the Civil Law rule of freedom of contract. Corporate power purchase agreements are an example of emerging bilateral contracts in Poland. The European Federation of Energy Traders (EFET) has issued Guidance on CPPAs agreements relating to Poland (EFET – Guidance Notes <https://efet.org/Files/CPPA/POLAND/Guidance%20Notes%20for%20the%20Polish%20market.pdf>).

Procurement of offtaker agreements

26 | How are long-term power purchase agreements procured by the offtakers in your jurisdiction? Are they the subject of feed-in tariffs, the subject of multi-project competitive tenders, or are they typically developed through the submission of unsolicited tenders?

Most renewable energy projects in Poland participate in the certificate of origin-based and auction-based support schemes. Typically, RES installations sell renewable energy directly to trading companies (mostly utility off-takers) or on the TGE.

An increased interest in establishing direct contractual relations with RES energy installations through corporate power purchase agreements (CPPAs), especially with wind farms, has been observed recently. Given that corporations are under pressure to reduce their carbon footprint and often undertake to increase the use of renewable energy in their operations, purchasing green energy fits well with their corporate social responsibility policies and helps to build a positive brand image.

In practice, though, only several CPPAs have been concluded in Poland to date. These were mostly virtual CPPAs, which only provide for financial settlement of the energy sold (without physical supply) coupled with the sale of guarantees of origin.

The current regulations still pose a number of barriers to the development and popularisation of CPPAs including practical restrictions around building direct lines and obligations on the part of RES installations selling energy to end users to obtain and provide certificates of origin to the president of the ERO to redeem.

Operational authorisation

27 | What government authorisations are required to operate a renewable energy project and sell electricity from renewable energy projects?

The following key authorisations are normally required to operate a renewable energy project and sell associated electricity:

- occupancy permit (pursuant to the Construction Law Act of 7 July 1994); and
- a generation licence issued by the president of the Energy Regulatory Office (ERO) (which includes an entitlement to sell electricity), required under the Energy Act.

Decommissioning

28 | Are there legal requirements for the decommissioning of renewable energy projects? Must these requirements be funded by a sinking fund or through other credit enhancements during the operational phase of a renewable energy project?

The electricity generation concession, granted by the president of the ERO, sets out the terms and conditions for discontinuing the operations of an energy enterprise once the concession has lapsed or has been revoked.

Usually, the generator must, within 18 months prior to the lapse of the concession and discontinuing of operations, provide the president of the ERO with a technical, financial and environmental impact analysis report. The generator is obliged to effect the conclusions and recommendations arising from this report in a timely fashion.

Having discontinued the operations to which the concession had been granted, the generator will also be obliged to rectify the impact of its operations, particularly with regard to soil reclamation, proper lay of the land restoration and hazardous waste disposal.

Typically, within 18 months prior to the planned discontinuation of the operations to which the concession had been granted, the generator

will also have to draft and present to the president of ERO the action plan regarding the above, also stipulating the sources of financing.

The generator will not be obliged to fulfil these obligations if the assets earmarked for the operations have been transferred to another entity for further usage.

TRANSACTION STRUCTURES

Construction financing

29 | What are the primary structures for financing the construction of renewable energy projects in your jurisdiction?

In Poland, as in other EU member states, project finance is the common structure used for financing the construction of renewable energy sources (RES) projects.

Project finance is based on the assumption that the debt is entirely repaid from the funds generated by the project, without recourse or with limited recourse for the sponsors. Typically, the following types of security are used in project financing in Poland: pledges over assets of the special purpose vehicle (SPV); pledges over the SPV's shares; and assignment of key project agreements. Financial institutions also conclude direct agreements with key parties to the projects enabling step-in rights to assume the rights of the SPV and continuing the project in the event of a breach of, or default of, the facility agreement.

For large energy companies, sometimes balance sheet financing (corporate financing) is used, with full recourse. One of the types of balance sheet financing is bridge financing for the duration of the investment until it has been completed and delivered. Following the achievement of commercial operation, part of the project may be separated to the SPV and refinanced with a long-term loan granted directly to the SPV.

Both Polish and international banks are most often the source of financing. In Poland, international financial institutions are also active in the realm of RES project financing – for instance, the European Investment Bank and the European Bank for Reconstruction and Development.

Operational financing

30 | What are the primary structures for financing operating renewable energy projects in your jurisdiction?

Operational renewable energy projects are financed mainly from their revenues (eg, sale of electricity, sale of property rights under the certificates of origin). Sometimes, refinancing of the bank debt provided for the construction of the project occurs.

UPDATE AND TRENDS

Recent developments

31 | Describe any market trends with respect to development, financing or operation in the renewables sector or other pertinent matters.

It is expected that, in 2020, the auctions for the renewable energy sources (RES) will be held in the third quarter of the year. The reference prices already announced by the Minister of Climate for the small (1MW or less) and large (over 1MW) PV and onshore wind installations are slightly lower than the reference prices used in the auctions in 2019.

Recently, the PV sector has been growing very fast in Poland. Between 2016 and 2018, only small PV installations succeeded in the auctions. In 2019, first large-scale PV projects (over 1MW) also managed to win the auction. According to the proposed draft Energy Policy for



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Poland, until 2040, PV installations as well as offshore projects will be key in achieving the relevant RES targets.

The Distance Act adopted in 2016 virtually prevented the development of any new onshore wind projects. It is expected that current calls and proposals for amendments of the Distance Act will ultimately result in the relaxation of wind farms location restrictions and allow new wind project developments.

32 | Describe any notable pending or anticipated legislative proposals.

On 15 January 2020, the Ministry of State Assets published a draft Offshore Wind Act providing for a 25-year bilateral contract for difference support mechanism with a fixed price set by the government for offshore wind farms. Currently, support for the offshore wind farm sector is regulated under the Renewable Energy Sources Act of 20 February 2015 (the RES Act). Poland's Baltic Sea can generate 9–12GW of energy and the combined output of onshore and offshore wind turbines could provide as much as 27 per cent of Poland's energy by 2050.

There are ongoing political discussions to relax the distance limitations set out in the Distance Act and amend the RES Act to enable auctions to take place after 2021 (currently, the last auctions are expected to be held by 30 June 2021).

Also, the Polish government has recently proposed a new law to protect certain Polish companies, including those operating in the energy sector, against takeover by non-EU buyers.

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