A large, low-angle photograph of a white wind turbine against a bright blue sky with some clouds. The turbine's blades are blurred, suggesting motion. The image is the background for the entire page.

# QUICK GUIDE TO THE POLISH AUCTION SYSTEM FOR RENEWABLES

Q&A GUIDE

August 29, 2019



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# INTRODUCTION

Dear Readers,

Wind energy is breaking new ground in Poland. After a few years of stagnation, there is well-grounded optimism for the dynamic development of onshore and offshore RES.

A 2.5 GW or an even larger wind auction is expected in 2019 (113.97 TWh), with possibly more to come in 2020. Bidders will compete by offering the lowest price over 15 years, and the auction winners will receive 6 to 7.5 billion EUR over this period. In terms of volume, this translates into 100% increase in comparison to 2018.

For solar energy, 11.445 TWh will be auctioned by the government in 2019. The third technology that has the largest volume auctioned in 2019 is jointly biogas, biomass and waste thermal treatment (including CHP) – 14.91 TWh.

The government is working on a separate piece of legislation concerning public support for the first offshore wind farms on the Polish Baltic Sea. However, concessions for offshore wind are already awarded and the industry is gearing up for the construction phase. Offshore wind will likely feature here sooner rather than later.

The auctions are bound to bring the country closer to meeting the renewables' share in electricity generation for the year 2030. The Polish renewable generation will finally get a much needed boost after the delays experienced on the EU 2020 path.

It is therefore our pleasure to present this guide on the auction system for renewables – a compendium of knowledge prepared by the Polish Wind Energy Association and one of the association's members – DWF Poland law firm.

We hope that you will find the guide useful.



**Janusz Gajowiecki**  
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# 1. THE CONDITION OF WIND ENERGY IN POLAND

**Wind energy constitutes an increasingly vital element of the Polish energy mix. Many indicate that its role in the coming decades will increase further. Full exploitation of the onshore and offshore wind potential will enable transformation of the energy system towards a low-emission economy.**

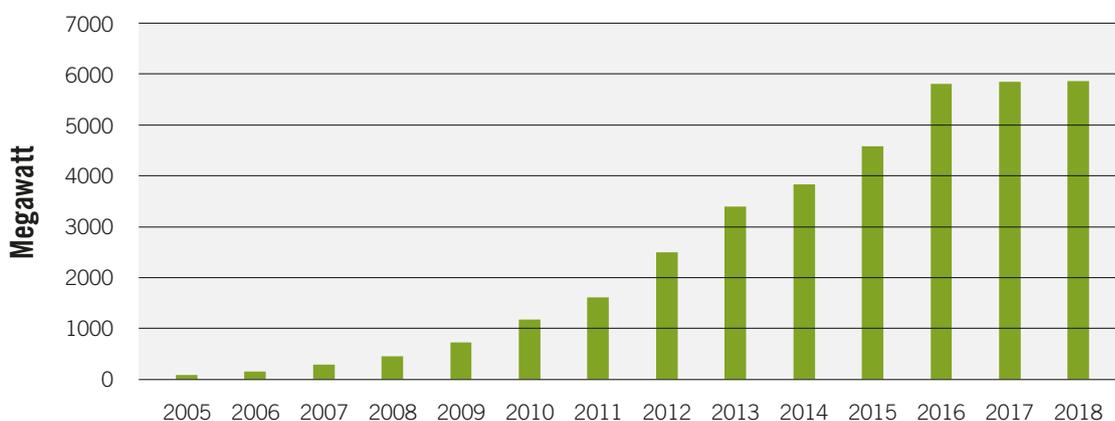
The National Power System in Poland, with total installed capacity exceeding 41 GW, is based primarily on coal-fired sources. The electricity sector is dominated by large baseload power plants and CHPs that use fossil fuels. In 2016 their total share in the NPS installed capacity reached 70.3%. However, the oldest power units will be decommissioned soon. In accordance with the cumulated decommissioning scenario presented by the transmission system

operator, it will be necessary to shut down more than 20 GW of generation sources by 2035. This is caused by their age and wear as well as the planned implementation of conclusions introducing the new BAT emissions standards.

The gaps in the system may be filled by renewable energy sources, whose dynamic growth started in 2005 with the introduction of a RES support scheme – the so-called green certificates scheme. Within the last 10+ years the renewable sector noted the highest installed capacity growth rates. At the end of December 2018 RES installed capacity amounted to 8,593.43 MW, of which 68.2% in wind, 11.4% in hydro, 15.8% in biomass, 2.7% in biogas and 1.7% in PV.

From 2005 to 2016 wind energy experienced the most dynamic growth rates among all RES in Poland, expanding almost 70-fold. The record breaking year was 2016, with 1225.38 MW of new capacity.

**Wind energy development in Poland**  
since the introduction of the support scheme



**Diagram No. 1**

Source: The Energy Regulatory Office  
<https://www.ure.gov.pl/pl/oze/potencjal-krajowy-oze/5753,Moc-zainstalowana-MW.html>



2016 was the last year when installations built under the green certificates scheme were commissioned. The introduction of the new, auction-based support scheme coincided with adverse changes to the regulatory environment of wind energy, which brought its dynamic growth to a halt. The introduced changes – the so-called 10 h principle and the increased tax base for wind turbines – actually precluded the construction of new projects. The situation of existing installations was additionally hindered by the oversupply of green certificates, which resulted in a radical decrease in their market prices, substantially hampering the investments' profitability.

In mid-2018, the industry partially succeeded in breaking the stalemate. The amendment to the RES Act restored the previous taxation rules and paved the way for holding substantial RES auctions for new installations. In the meantime, green certificate prices also increased, improving the financial standing of wind energy investments.

In accordance with the data published by the Energy Regulatory Office, at the end of 2018 wind farm installed capacity in Poland amounted to almost 5.9 GW, which corresponds to more than 14% of cumulated generation capacity in the National Power System. Electricity produced by the installations covered 7% of the national demand in 2018; in 2017, record-breaking in terms of wind energy output, the industry covered even more – 8% of the demand.

During the auction held at the end of 2018 investors obtained aid for the construction of a further 920 MW of wind capacity. The auction reflected a global trend, according to which onshore wind energy is currently the least expensive source of electricity – the average price of 1 MWh offered by investors has fallen below PLN 200.

In the face of increasing prices of electricity from conventional sources, whose production is subject to high CO2 emission allowance costs, as well as the threat of a failure in the achievement of the EU RES target, the Polish government announced that a subsequent auction will be held in the first half of 2019 to allocate aid for 2.5 GW of new wind capacity. The reference price has been specified at 285 PLN/MWh.

The Polish Ministry of Energy has hinted that it may withdraw from the 10 h principle, which should pave the way for the development of new wind projects. This is crucial in the context of growing interest in the use of long-term corporate power purchase agreements among industrial customers. The first of such agreements were concluded in Poland at the end of the last year. Representatives of the industry, looking for inexpensive, clean electricity sources and electricity producers seeking investment financing outside the support scheme alike are increasingly willing to use this formula.

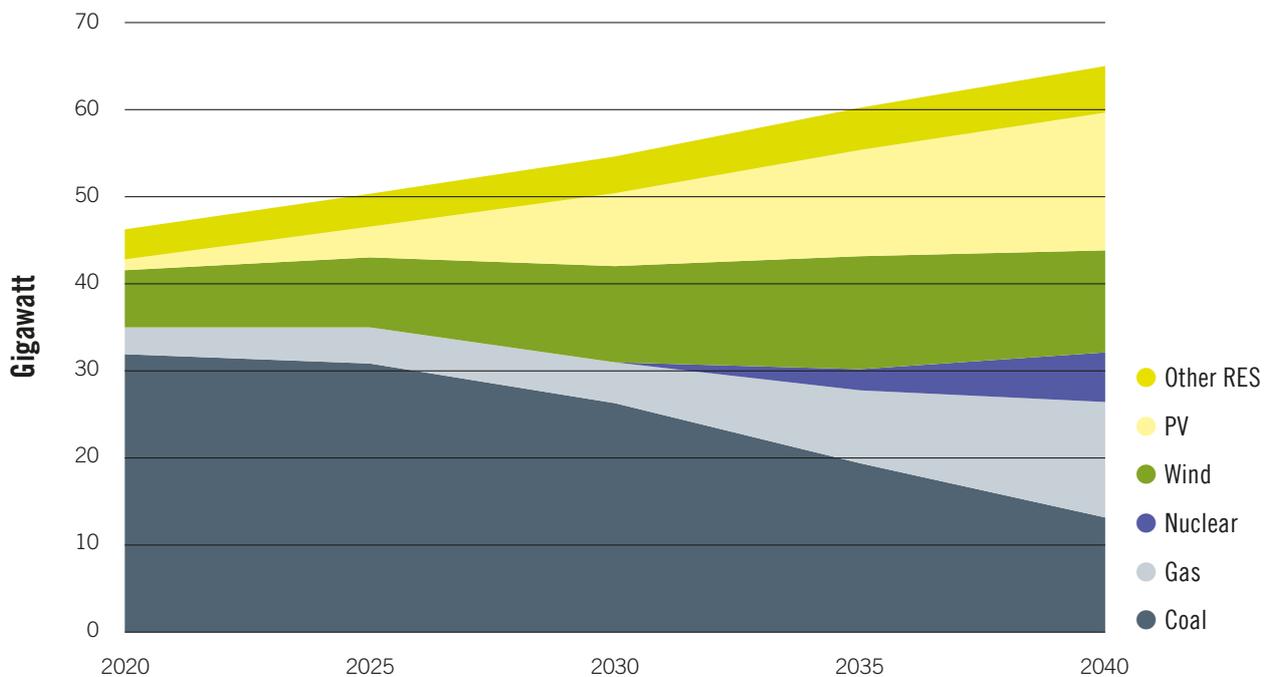
Wind farms in operation in Poland are only onshore installations. However, assumptions to the National Energy and Climate Plan filed by the Polish government with the European Commission at the beginning of 2019 demonstrate that up to 1 GW of offshore wind farms will be commissioned in the Polish part of the Baltic Sea by 2025, with offshore wind development gradually increasing to 5 GW by 2030 and 10 GW by 2040. Currently, works on the Spatial Development Plan for Polish Maritime Areas are pending. The plan will determine the extent to which the Baltic Sea offshore wind potential will be exploited. Experts estimate that the actual offshore potential in the Polish Exclusive Economic Zone substantially exceeds the governmental ambitions in that respect – it is estimated at 12–14 GW.



As of today, investors obtained interconnection conditions for offshore wind farm projects totaling almost 7.1 GW. The key factor now is the stability of the regulatory framework. The Polish government declared that a dedicated offshore wind act will be adopted in 2019 to create a legal framework for offshore investment implementation – in particular, it should define the support scheme. In this context, Ministry of Energy officials suggest a contract for difference.

The draft National Energy and Climate Plan (NECP) for Poland of 4 January 2019 follows the energy policy published about a month earlier. Both documents provide for ambitious decarbonisation measures after 2030, with less substantial reductions before 2030. Both rely on renewable energy and gas-fired capacity to close gaps left by the phasing-out of coal, but do not fully utilize the potential of wind (particularly onshore) while proposing a nuclear project to be commissioned in 2035 (which seems doubtful to many).

**NECP scenario: installed capacity by source\***  
Electricity mix – installed capacity



**Diagram No. 2**

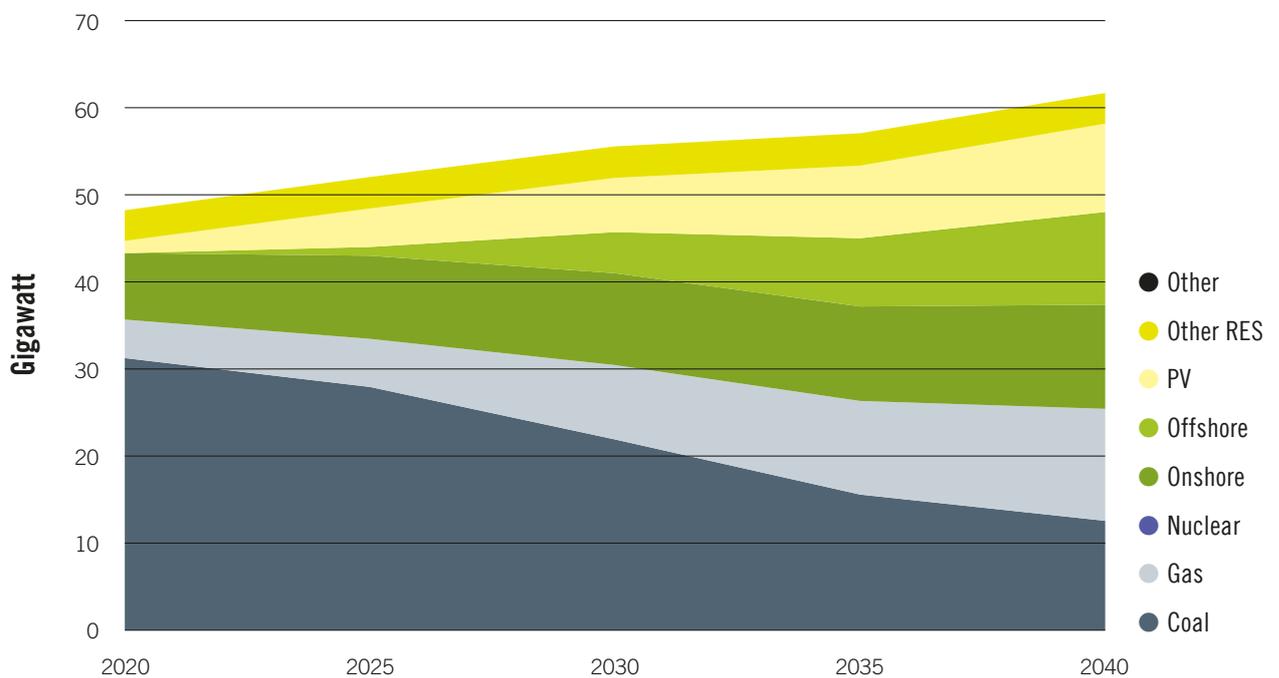
\* Onshore and offshore wind are not shown separately in the draft NECP.



PWEA believes the potential of wind – onshore & offshore – supported by gas-fired capacity is enough to meet more ambitious targets without the need to develop a (highly uncertain) nuclear project. The approach proposed by PWEA would allow

the country to: meet the demand for electricity, which is underestimated in the NECP; fulfil RES-related targets; reduce CO<sub>2</sub> emissions at a faster pace than it is planned by the Polish government; and contain the escalation of electricity costs.

**PWEA scenario: installed capacity by source\*\***  
Electricity mix – installed capacity



**Diagram No. 3**

\*\* Onshore and offshore wind is not included separately in the draft NECP. The division has been estimated by PWEA based on the draft energy policy published a month before the NECP.



## 2. WHAT IS THE VOLUME AND VALUE OF THE 2018 AUCTIONS?

The volume and value of electricity that will be contracted by the Polish government in 2019 are substantial. For the onshore wind and solar power technological basket (projects above 1 MW of installed capacity), the government has envisaged a volume of 113,970 TWhs for 15 years. The value of support is over 7.5 billion euro. The maximum price (i.e. reference price) that may be submitted in a bid for wind above 1 MW is PLN 285 per 1 MWh (ca. EUR 66), while for solar it is PLN 365 per 1 MWh

(ca. EUR 84). As wind is coupled with solar in one technological basket for projects above 1 MW, this makes wind highly competitive in an auction in the Polish climatic conditions.

The Polish government estimates that the figures should translate into at least 2.5 GW or more of new onshore wind capacity. Another technological basket, for projects up to 1 MW, is bound to be taken up by new solar installations, with ca. 500 MW contracted this year.

The significant volume is also envisaged for biogas, biomass and waste thermal treatment (including CHP) above 1 MW. In this basket ca. 166 MW will be contracted.

**2019 Auction**  
Effort versus result – by budget

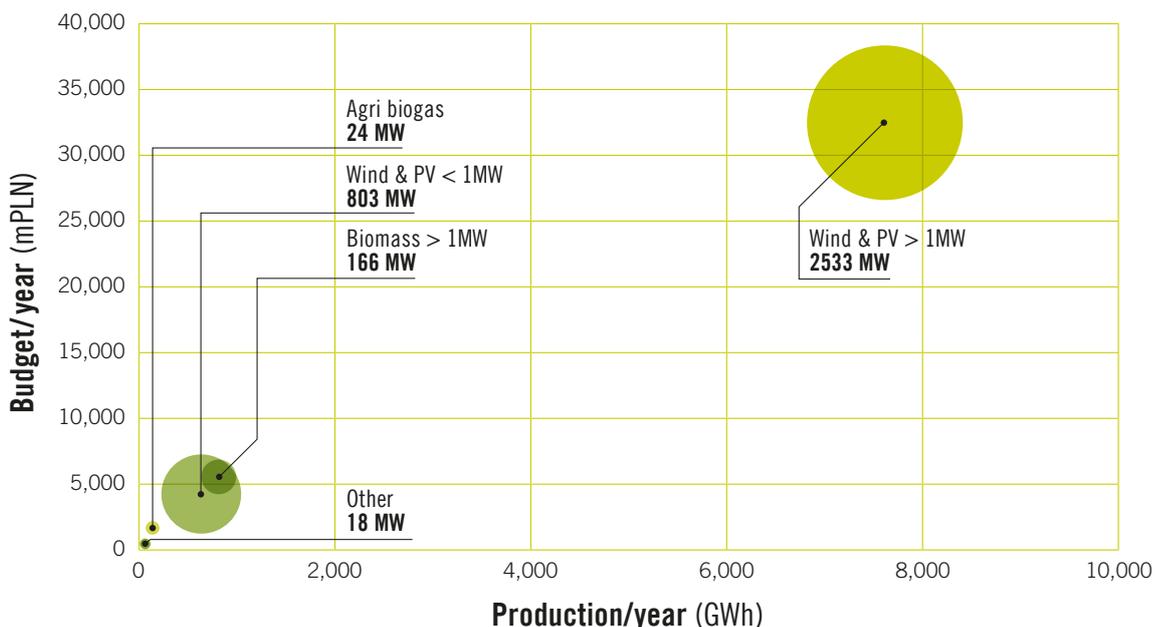


Diagram No. 4



### Auction budgets 2019 description for each RES technology and comparison to year 2018

Technology	Cap.	2019 budget			2018 budget		Change		Avg. 2019 (PLN/MWh)
		(MW)	(GWh)	(mPLN)	(GWh)	(mPLN)	(%vol.)	(%val.)	
Wind & PV	> 1 MW	2,533	113,970	32,577	45,000	15,750	+153%	+107%	286
Biomass	> 1 MW	166	14,910	5,578	57,699	24,929	-74%	-78%	374
Wind & PV	< 1 MW	803	11,445	4,214	16,065	6,243	-29%	-33%	368
Agri biogas		24	2,512	1,618	15,210	9,091	-83%	-82%	615
Other		18	734	356	33,861	14,675	-98%	-98%	485
Existing installations		470	39,947	24,380	38,872	16,946	+3%	+44%	610
<b>Total</b>		<b>4,013</b>	<b>183,518</b>	<b>68,723</b>	<b>206,707</b>	<b>87,635</b>	<b>113%</b>	<b>128%</b>	<b>374</b>

**Table No. 1**

Source: PWEA based on Ministry of Energy draft RES bill.

According to the Polish transmission system operator, there are ca. 3,000 MW of onshore wind projects that are ready-to-build and thus can participate in the forthcoming auction.

The figures in Diagram No. 4 show how much is likely going to be built, taking into account auction budgets.

## 3. WHEN WILL THE AUCTIONS TAKE PLACE?

The auctions for onshore wind, solar as well as biogas, biomass and waste thermal treatment (including CHP) should take place until the end of 2019. More wind (in particular, offshore) and solar auctions are expected in the following years.

## 4. HOW DOES A PROJECT QUALIFY FOR PARTICIPATION IN AN AUCTION?

Ready-to-build onshore wind, solar as well as biogas, biomass and waste thermal treatment (including CHP) projects can participate in an auction if they:

1. hold a certificate of admission to an auction, and
2. pay a deposit of PLN 60 (ca. EUR 14) per 1 kW, or provide an equivalent bank guarantee.

Obtaining a certificate of admission to an auction is preceded by a pre-qualification procedure carried out by the President of the Energy Regulatory Office. Investors need to evidence that they possess ready-to-build installations, i.e. that the following criteria are met:



1. interconnection conditions or an agreement is in place,
2. the project has a final and non-appealable building permit (valid for at least 6 months),
3. an installation scheme is provided,
4. a schedule of works and expenditures for the completion of construction is presented.

Once the prequalification criteria are fulfilled, a certificate of admission to an auction is issued within 30 days by the President of the Energy Regulatory Office. The certificate remains valid for 12 months from the date of issue.

## 5. HOW DOES WINNING AN AUCTION IMPACT GRID INTERCONNECTION?

Interconnection conditions or a concluded interconnection agreement is required for participation in an auction. Interconnection conditions are valid for 2 years from the day of their service upon an applicant. In this period they constitute a binding obligation on the part of a grid operator to conclude an interconnection agreement.

An interconnection agreement specifies a period for implementation of an interconnection and contains a deadline for first delivery of electricity produced by a renewables installation. This deadline cannot exceed 4 years from the date of execution of an interconnection agreement. Non-delivery of electricity within the deadline constitutes statutory grounds for termination of an interconnection agreement by a distribution/transmission system operator (under the

applicable provision termination cannot occur up to 30 June 2021).

The Polish RES Law, however, provides for a mechanism to extend the deadline for first delivery of electricity for projects which have won an auction. Grid operators are obliged to adjust the deadline in interconnection agreements for the winning projects to be in line with the deadlines from the auction (e.g. for onshore wind – 33 months from the auction closure date). Annexes to interconnection agreements will then be concluded so that the agreements do not expire before the deadline for commissioning of a project.

## 6. WHAT IS THE COURSE OF AN AUCTION AND WHO WINS?

The date of an auction is announced by the President of the Energy Regulatory Office at least 30 days in advance before the auction.

A bidder – prospective producer submits a bid which includes the volume of electricity in MWh and the price in PLN per 1 MWh, at which the bidder agrees to sell electricity on the basis of a quasi contract for difference. The support is awarded to the lowest bidders. The auction continues until the volume and value of electricity specified in an announcement of an auction is fully exhausted. When several bidders offer the same lowest selling price, and the volume of electricity declared to be produced exceeds the volume referred to in the announcement of the auction, the order of submitted bids is decisive. Winning producers' offers may not jointly exceed 100% of the value of electricity specified in the announcement of the auction and 80% of the volume of electricity covered by all bids.



This second cap is aimed at guaranteeing sufficiently competitive auctions (20% of bids always lose).

Within 21 days from an auction closure date, the President of the Energy Regulatory Office publicly announces, on its website, information about:

1. the results of the auction (i.e. the producers who won the auction, the minimum and maximum price at which electricity was sold in the auction, as well as the total volume of electricity sold and its value), or
2. invalidation of an auction, if that happens.

An auction may be invalidated only if all offers have been rejected or if it could not be carried out for technical reasons. If the results of an auction have already been published, the auction is settled and final.

## 7. WHAT IS THE PERIOD OF SUPPORT?

The period of support amounts to 15 years from the date of first sale of electricity, however not later than until 30 June 2039.



## 8. WHAT IS THE MECHANISM OF SUPPORT?

Industrial-size installations (above 0.5 MW) that have won an auction, sell the produced electricity on the electricity market at the market price, to a chosen offtaker, after which they may apply for additional payments to reach their auction price. This is done by way of an application to cover the “negative balance”. The monies are paid out by Zarządca Rozliczeń S.A., a state-owned corporation responsible for carrying out the settlements of the “negative balance”. Under the Polish RES Law, the “negative balance” is the difference between the net value of the sale of electricity in a given month (as calculated on the basis of a commodities exchange index) and the value of that electricity determined on the basis of the price contained in a producer’s offer that won an auction. Please also note that the latter is indexed annually to the inflation rate in Poland.

The volume of electricity subject to the settlement is determined on the basis of actual indications of measuring devices in a given month. A producer from an installation informs Zarządca Rozliczeń S.A., within 10 days after the end of the month, of:

1. the volumes and prices of electricity sold in the previous month,
2. data on the value of the electricity (prices published by the Polish Power Exchange – TGeBase index) and
3. the producer submits an application to cover the negative balance.



In consequence, the “negative balance” is the difference between the value of produced electricity calculated on the basis of the TGeBase index and the value of such electricity established pursuant to the price from a respective auction bid of an individual producer. Zarządca Rozliczeń S.A. is obliged to verify an application for covering the “negative balance” within 30 days and pay the producer in question the relevant funds, as per the example below.



Please note that in the example below the balance can also be positive, especially in case of a substantial increase of wholesale electricity prices. In such a scenario, the producer could be obliged to pay back the positive balance to Zarządca Rozliczeń S.A. Any positive balance is set off against any future negative balance on an “as-we-go” monthly basis. An outstanding positive balance is returned to Zarządca Rozliczeń S.A. in 6 equal monthly installments at the end of the 15-year support period.



There is no obligation to sell electricity produced by renewables through a commodities exchange.

## 9. WHAT ENERGY PRODUCING EQUIPMENT CAN BE INSTALLED?

An investor who won an auction is restricted in terms of generating devices that can be installed. The Polish RES law stipulates that devices used for generating and processing electricity must be new, and produced within certain dates proceeding the day of first production of electricity. This is detailed in the table below.

Category of renewable installation	Equipment not older than
Onshore wind	33 months
Photovoltaics	24 months
Offshore wind	72 months
Biomass	42 months

Table No. 2

## 10. WHAT ARE THE RESPONSIBILITIES OF AN INVESTOR WHO WON AN AUCTION?

The first obligation imposed on an investor is to produce electricity for the first time, while already holding a generation concession, within certain deadlines from the auction closure date. Failure to



timely meet this obligation results in an exclusion from the auction system and loss of the deposit. This is detailed in the table below.

Category of renewable installation	Deadline to produce electricity with a concession in place
Onshore wind	33 months from the auction closure date
Photovoltaics	24 months from the auction closure date
Offshore wind	72 months from the auction closure date
Biomass	42 months from the auction closure date

**Table No. 3**

The second obligation is to produce the volume of electricity declared in the offer. However, an option of one update of the offer following the auction, with respect to, in particular, the planned date of commencement of the period of use of the support system and the volume of electricity planned for sale in subsequent calendar years (the total volume will however need to remain constant). The volume is settled after the expiry of each 3 full calendar years in which support was granted, and after the lapse of the entire period of support. If an installation fails to produce at least 85% of the volume specified in a winning offer in a relevant settlement period, the producer is subject to a fine. The fine is calculated as 50% of the product of the auction price and the difference between the electricity that was supposed to have been produced, and the energy actually produced. However, the financial penalty will not apply if the required volume of electricity was not produced as a result of:

1. application of the generally binding law;
2. the need to ensure security of the grid;

3. a power system failure;
4. force majeure, e.g., natural disasters, war, acts of terrorism, riots;
5. the technical failure of an installation – violent, unpredictable and independent of the producer, damage or destruction of an installation or destruction of buildings or facilities essential for its operation.

## 11. HOW IS THE FINANCING OF THE AUCTION SYSTEM SECURED?

Funds in the auction system are required for the payment of the “negative balance” and the functioning of the entity covering the balance Zarządca Rozliczeń S.A. They are secured via a renewables fee. The renewables fee is collected by distribution system operators (“DSO”). DSOs collect the renewables fee predominantly from final off-takers interconnected directly to their grid, i.e. mainly households. Therefore, financing of the auction system is not influenced by the government budget.

The rules for calculating the renewables fee by DSOs are set forth in the respective statute. DSOs calculate it as a product of the renewables fee rate and the sum of electricity consumed. The renewables fee rate is published in the bulletin of the President of the Energy Regulatory Office until 30 November of each calendar year.





## 12. WHAT IS THE RISK OF THE STATE EVADING ITS RESPONSIBILITIES FOLLOWING AN AUCTION?

Although no written agreement is entered into between Zarządca Rozliczeń S.A. and the auction winner, the legal relationship between such a producer and the Polish state takes the form of a binding obligation, by statutory law. The elements of this obligation are construed on the basis of the Polish RES Law and documents published by the President of the Energy Regulatory Office – published auction results. In consequence, if Zarządca Rozliczeń S.A. fails to pay a due amount of money, a producer can enforce its rights in a common court. A producer can also be protected by bilateral investment treaties or the Energy Charter Treaty, providing for investment arbitration outside Poland, provided that the investment is adequately structured in advance.

## 13. IS IT POSSIBLE TO TRANSFER THE RIGHTS AND OBLIGATIONS ACQUIRED AT AN AUCTION?

Under the Polish RES Law, it is admissible to either acquire a project which won an auction or acquire shares in a company holding such a project. In the former case, it is necessary to apply to the President of the Energy Regulatory Office for consent. Granting of such consent is dependent on a statement by a buyer,

which should include a declaration by the buyer that electricity will be produced purely from renewables, in the installation related to the auction and that the buyer accepts the rights and obligations of a RES producer.

## 14. SUMMARY OF THE SELECTED 2018 AUCTIONS

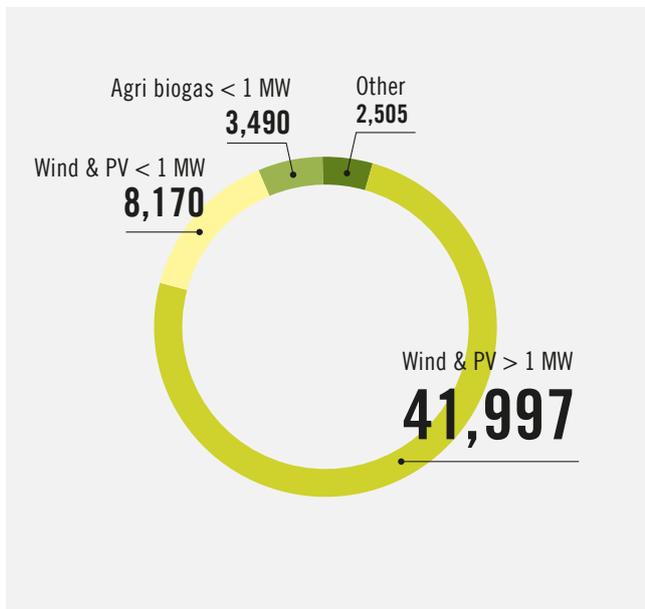
The last auction for wind and solar projects exceeding 1 MW was held on 5 November 2018 by the Polish Energy Regulatory Office. 31 wind projects were selected (i.e., no solar projects), with 41,996 TWh of electricity to be supported for the amount of 8.2 billion PLN (ca. 4 billion EUR). The prices in the auction ranged from 157.80 to 216.99 PLN/MWh, with an average of 196.17 PLN/MWh. The winners included the German Innogy, Portuguese EDP and Polish PGE EO.

In turn, PV dominated the 15 November 2018 auction for wind and solar projects up to 1 MW. 554 projects were selected, among them numerous projects of both major market participants as well as local developers. The prices in the auction ranged from 288.99 to 364.99 PLN/MWh.

In case of the auction basket for biogas, biomass and waste thermal treatment (including CHP) projects above 1 MW, the auction was held on 6 November 2018. More than 972,000 MWhs were contracted for more than 388 million PLN (ca. 92 million EUR). The price exceeded 400 PLN/MWh. Only one auction participant was successful – ENERIS Siemiatycze, thereby exact results were not provided. Below you will find results of the 2018 auction for new RES installations (PWEA based on the Energy Regulatory Office).



**Auction results**  
New installations (GWh)



**Equity share in the successful auction projects**  
by country, for onshore wind (PWEA)

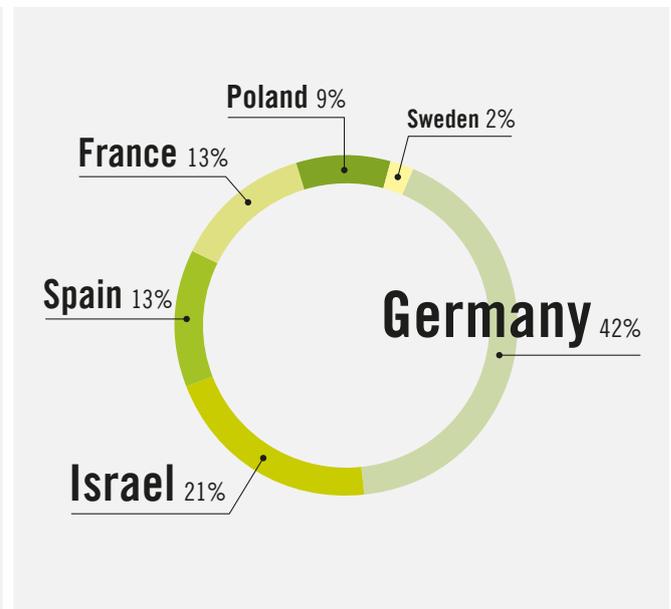


Diagram No. 5

**2018 RES auctions for biomass, biogas, existing RES installations**  
(PWEA based on EMA)

Absent	Budget		Execution	
	Value (MWh)	Value (PLN)	Value (MWh)	Value (PLN)
Biogas, biomass and waste thermal treatment (including CHP) – New < 1 MW	13,311,000	5,507,985,000	0	0
Biogas, biomass and waste thermal treatment (including CHP) – New > 1 MW	57,699,309	24,929,301,412	972,000	388,000,000
Existing installations (various)	38,871,930	16,946,217,105	0	0

Table No. 4

## 15. REFERENCE PRICES (MAXIMUM AUCTION PRICES) FOR DIFFERENT CATEGORIES OF RENEWABLES

No.	Type of renewables installation	Reference price (PLN/MWh)
1.	Installations with a capacity below 0.5 MW using only agricultural biogas	650
2.	Installations with a capacity below 0.5 MW using only agricultural biogas in high-efficiency cogeneration	700
3.	Installations with a capacity below 0.5 MW using only biogas obtained from landfills	560
4.	Installations with a capacity below 0.5 MW using only biogas obtained from landfills in high-efficiency cogeneration	620
5.	Installations with a capacity below 0.5 MW using only biogas obtained from sewage treatment plants	420
6.	Installations with a capacity below 0.5 MW using only biogas obtained from sewage treatment plants in high-efficiency cogeneration	480
7.	Installations with a capacity below 0.5 MW using only biogas other than obtained from agricultural biogas, landfills or sewage treatment plants	470
8.	Installations with a capacity below 0.5 MW using only biogas other than obtained from agricultural biogas, landfills or sewage treatment plants in high-efficiency cogeneration	530
9.	Installations with a capacity below 0.5 MW using only hydropower	550
10.	Installations with a capacity not below 0.5 MW and not exceeding 1 MW using only agricultural biogas	590
11.	Installations with a capacity not below 0.5 MW and not exceeding 1 MW using only agricultural biogas in high-efficiency cogeneration	670

No.	Type of renewables installation	Reference price (PLN/MWh)
12.	Large Installations (above 1 MW) using only agricultural biogas	570
13.	Large Installations (above 1 MW) using only agricultural biogas in high-efficiency cogeneration	640
14.	Installations with a capacity not below 0.5 MW using only biogas obtained from landfills	550
15.	Installations with a capacity not below 0.5 MW using only biogas obtained from landfills in high-efficiency cogeneration	610
16.	Installations with a capacity not below 0.5 MW using only biogas obtained from wastewater treatment plants	385
17.	Installations with a capacity not below 0.5 MW using only biogas obtained from wastewater treatment plants in high-efficiency cogeneration	445
18.	Installations with a capacity not below 0.5 MW using only biogas other than obtained from agricultural biogas landfills or sewage treatment plants	435
19.	Installations with a capacity not below 0.5 MW using only biogas other than obtained from agricultural biogas landfills or sewage treatment plants in high-efficiency cogeneration	495
20.	Dedicated biomass combustion installations or hybrid systems	435
21.	Thermal waste treatment installations or dedicated multi-fuel combustion installations	350
22.	Installations with a capacity not exceeding 50 MW in a dedicated biomass combustion installation or hybrid systems, in high-efficiency cogeneration	470
23.	Installations with a capacity higher than 50 MW in a dedicated biomass combustion installation or hybrid systems, in high-efficiency cogeneration	435
24.	Installations using only bio-liquids	475
25.	Installations with a capacity not exceeding 1 MW using only onshore wind energy	320
26.	Large Installations (capacity higher than 1 MW) using only onshore wind energy	285



No.	Type of renewables installation	Reference price (PLN/MWh)
27.	Installations with a capacity of not below 0.5 MW and not exceeding 1 MW using only hydropower	500
28.	Large Installations using only hydropower	480
29.	Installations using only geothermal energy	455
30.	Installations with a capacity not exceeding 1 MW using only solar energy	385
31.	Large Installations (capacity higher than 1 MW) using only solar energy	365
32.	Installations using only offshore wind energy	450
33.	Small hybrid installations	415
34.	Large hybrid installations	410

**Table No. 5**

*This guide is based on selected publicly available information and does not constitute legal advice.*

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The Polish Wind Energy Association (PWEA) is a non-governmental organization, established in 1999, to support and promote the development of wind energy in Poland. PWEA is an association of around 100 leading wind energy companies active on the Polish market: investors, developers, turbine and component manufacturers. PWEA groups key industry players from abroad, as well as Polish entrepreneurs, investors, producers and service providers across the entire onshore & offshore wind supply chain.

Main areas of PWEA activity are:

- participation in consultations of legislative regulations, strategies, policies and sectoral programs and taking action to implement new legal regulations fostering wind energy development in Poland;
- direct cooperation with the ministry in charge of economy, the environment as well as other ministries directly or indirectly related to energy and renewable energy sources;
- cooperation with European Union institutions;
- cooperation with Polish and European Parliament MPs;
- promotion of wind energy and knowledge about the technology;
- increasing social and political awareness concerning wind energy;
- participation in national and international industry conferences as an expert on wind energy in Poland.

PWEA is a member of the WindEurope and Polish Committee of World Energy Council.

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DWF is a global legal business, transforming legal services through our people for our clients. Like our clients, we recognise that the world is changing fast and the old rules no longer apply. That's why we're always finding agile ways to tackle new challenges together. But we don't simply claim to be different. We prove it through every detail of our work, across every level. We go beyond conventions and expectations.

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