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Polish Offshore Act Regulatory framework

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Development of offshore wind energy in Poland



- As part of climate and energy targets included in the National Energy and Climate Plan for years 2021-2030 („NECP”), **Poland declares to achieve 21-23%* of RES share in gross final energy consumption by 2030. The RES share in electricity production is estimated at approx. 32% in 2030. In 2020, the RES share in gross final energy consumption was 16,10%, the RES share in electricity production – 16,24% **.**



- **One of the key directions of Poland's energy transition towards low and zero-emission sources, set out in the strategic Polish documents (NECP, Energy Policy of Poland until 2040 („PEP2040”), is the development of offshore wind energy. In 2019, this share amounted to 12,18%.**
- According to PEP2040, it is assumed that the installed capacity of offshore wind power plants will reach:
 - **approx. 5.9 GW in 2030,**
 - **up to approx. 11 GW in 2040.**

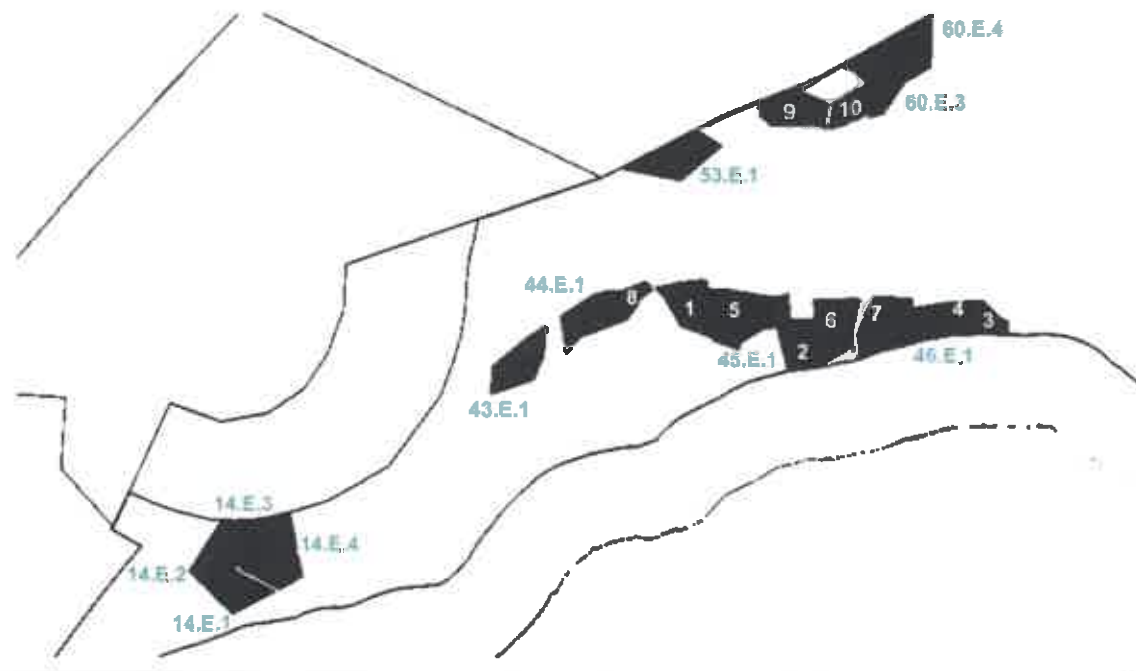


- In the Polish exclusive economic zone in the Baltic Sea, no offshore wind farm has been commissioned yet.
- **In 2012/2013, permits for construction and use of artificial islands, structures and devices in Polish maritime areas (the so-called „location permits” or „PSZW”) were issued for several locations in the Baltic Sea. In most of these locations, preparations for the construction of offshore wind farms are underway.**
- **It is expected that in the coming months, location permits will be issued for additional locations (according to the regulations, 11 additional locations are available).**

* Conditional target. The level of 23% will be possible to achieve if Poland is granted additional EU funds, including those allocated for a just transition.

** Source: based on the Central Statistical Office („GUS”) data

Situation map of issued and potential OWF permits in the Polish exclusive economic zone in the Baltic Sea



Issued concessions for offshore wind farms

1	Bałtyk II	Polenergia + Equinor	600 MW
2	Bałtyk III	Polenergia + Equinor	600 MW
3	B-Wind*	OceanWinds	200 MW
4	C-Wind*	OceanWinds	200 MW
5	Baltica 2	PGE + Orsted	1500 MW
6	Baltica 3	PGE + Orsted	1045 MW
7	Baltic Power	PKN ORLEN + NPI	1200 MW
8	Baltic II	RWE	350 MW
9	Bałtyk I	Polenergia + Equinor	1560 MW
10	Baltica 1	PGE + Orsted	900 MW

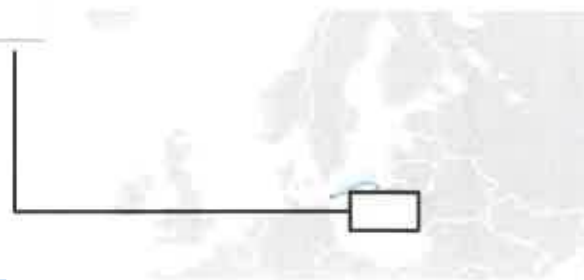
* It is planned to build 1 offshore wind farm covering both these areas

Potential of new permits in Poland

approx. 10 GW (first estimates)

Location permits (PSZW) Issued for the offshore wind farms (1-10)

Potential location permits of OWF, which can be obtained in the administrative procedure for obtaining a decision on location permits (PSZW) – (14.E.1, 14.E.2, 14.E.3, 14.E.4, 43.E.1, 44.E.1, 45.E.1, 46.E.1, 53.E.1, 60.E.3, 60.E.4) – 11 potential location



Offshore Act – key information

Background

- Despite the fact that the location permits were issued a few years ago, activities related to the implementation of offshore wind farm projects have been intensified in Poland in recent years.
- This situation resulted mainly from the lack of appropriate regulations and support systems taking into account the specifics of investments in offshore wind farms.

Objective of support scheme

- Due to the high capital intensity of investments in offshore wind farms (capital expenditure may reach the level of over EUR 2.2 billion / 1 GW of installed capacity) and the relatively high risk of their implementation, **properly designed regulations and support mechanism are necessary to stimulate the development of projects.** A stable legal and economic framework seems necessary to engage funds (both by investors and financing institutions).

Offshore support system in Poland

- Taking into account the above issues, as well as the strategic importance for the energy sector, dedicated regulations for the offshore sector have been developed and implemented in Poland.
- **The Act on the promotion of electricity generation in offshore wind farms dated 17 December 2020 (the „Offshore Act”)** was passed by the Sejm on 17 December 2020 and entered into force on 18 February 2021.
- **The Offshore Act specifies:**
 - schemes and instruments to support generation of electricity by offshore wind farms;
 - annual fee for offshore wind farms (previously – tax);
 - permitting issues - the rules and conditions for preparation and implementation of investment projects involving construction of offshore wind farms.
- The mechanism of the offshore wind energy support system is modeled on the main solutions included in the support system for other renewable energy sources (regulated in the Renewable Energy Sources Act („RES Act”)), adjusted to the specificity of the offshore wind energy sector (details on the following pages).

Phases of the support

Phases of the support system

- Status of projects
- Most of the offshore wind farm projects planned to be constructed in the Polish part of the Baltic Sea are at an early stage of development, however, the advancement of works varies depending on the project. At the stage of drafting the Offshore Act, some projects had only the initial location permit (PSZW) secured, while some were at a more advanced stage and had connection conditions or connection agreements and a few investors were in the process of obtaining (or obtained) **decisions on environmental conditions**.
- Considerations regarding the impact of the support system on the development of projects
- Due to the differences in the maturity of offshore wind projects and their low number, it has been only possible to ensure conditions for conducting a competitive auction in a few years. According to the Regulatory Impact Assessment prepared for the Offshore Act, the first auction could take place no earlier than in 2023.
 - Taking into account that obtaining financial support is crucial for such works as, e.g., contracting the components, postponing the support granting process until 2023, would slow down the implementation of the most advanced projects. It would also result in the accumulation of works for a significant number of projects at one time. Additionally, as planned offshore projects are the first of a kind in Poland, there is a need for intensive development of sector competences and experience in order to fully benefit from competitive process.
- Division into 2 phases
- As consequence of the above, the support system was divided into two phases. Phase descriptions are presented on the next page.

Phase I
Transition phase, support granted on the basis of an administrative decision of the President of Energy Regulatory Office

Phase II
Competitive auction system

Phases of the support

Phases of the support system cont'd






- In the first phase, the President of the Energy Regulatory Office ("President of ERO") grants the support in a non-competitive mechanism, by means of an administrative decision.
- Due to the non-competitive procedure for granting state aid, each decision on granting support will have to be approved by the European Commission.
- The support can be granted to investors whose projects are located within 8 areas indicated in the Appendix 1 to the Offshore Act. In practice, these areas match the ones in which most advanced projects are located - including Baltic Power's offshore wind project.
- Granting the state aid is based on a "first come – first served" rule.
- The support could be granted to offshore wind farms with a total installed capacity not exceeding 5.9 GW.
- The first phase is currently underway. The decisions of the President of ERO were issued by 30 June 2021. 7 projects received decisions on granting support.

- In the second phase the support will be granted on the basis of the competitive auction system (mechanism modelled into the current auction scheme for RES installations with adjustments to fit the particular needs of the offshore wind farms).
- All investors who wish to participate in the auction have to undergo prequalification process.
- At least 2 auctions are planned (in 2025 and 2027).
- The support could be granted to offshore wind farms with a total installed capacity not exceeding 2.5 GW in the 2025 auction and 2.5 GW in the 2027 auction.
- If the total installed capacity of the installations that won the auctions in 2025 is lower than the maximum capacity announced for the auction, the difference between these capacities is transferred to the auction in 2027. If in 2027 the difference between the capacity available at the auction and the capacity of the projects that won the auction exceeds 500 MW, the President of the ERO will conduct an auction for the remaining difference in 2028.

State aid schemes

State aid

-  The European Commission has to accept support schemes for renewable energy sources as permitted state aid. Therefore, the Offshore Act's entry into force required a prior notification to the European Commission and its approval. Such **EC approval was granted on 20th of May 2021 (SA.55940 2021/N)**.
-  Since support in the first phase will be awarded directly, in a non-competitive procedure, the President of the ERO individual decisions in this regard will have to be separately notified. In the second phase, due to the introduction of a competitive support granting mechanism, there is no such obligation.
-  Due to the above circumstances, the Offshore Act contains a standstill clause, suspending the ability to grant support until the Commission accepts the scheme and, in the case of the first phase, the issue of an individual decision to award aid.

Notification of the support (state aid)

EC notification

General rules

- The support for each individual participant of the first phase of the support scheme must be notified to the European Commission and accepted as being compatible with EU internal market.
- **Notifications of state aid are made by Member States, therefore, producers, as private parties, cannot make such notifications themselves. They will, however, be involved in the notification process on the Polish government's side.**

Notification process

- For the purposes of notification, detailed data on individual projects, including the financial model, will be provided to the European Commission. **The notification will take place after the projects have obtained the final decision on environmental conditions**, so that the submitted information, including financial models, is based on the most accurate data. **It is assumed that as part of the procedure, the European Commission will also verify the granted levels of support.**
- **So far, none of the offshore wind farm projects in Poland has received an individual decision of the European Commission, hence it is not known what level of support the European Commission deems justified.**

ERO re-evaluation



Following the decision of the European Commission, **the level of support will be subject to re-evaluation by the President of ERO**. The President of ERO will determine the level of support (**such level may not be higher than approved by the European Commission**). The President of ERO has 90 days to issue a decision and is under an obligation to use an external expert's opinion in order to determine the level of support which would guarantee a reasonable return on capital employed in the business activity.

- In the event that the President of ERO's decision indicates a strike price lower than the maximum price, the producer can resign from participation in the support scheme. A declaration of resignation has to be filed to the President of ERO within 3 months after the date of issuance of the President of ERO's re-evaluation decision.

Duration and volume of the support

Duration of the support



Producer is entitled to cover the negative balance for **25 years** since first energy generation.

- The support period for offshore wind farms is longer than in the case of other RES technologies in Poland (25 years compared to 15), which results from the large scale of offshore projects and significantly higher investment expenditures compared to other RES. Extending the support period ensures the predictability of revenues in a longer time perspective, and, consequently, reduces the risk for investors and provides better conditions for obtaining bank loans therefore reducing the necessary support levels. Moreover, the 25-year support period is equal to the average life cycle of offshore wind farms.
- The 25-year support period is counted from:
 - the first feeding of electricity into the grid from offshore wind farm or from its part (note: in case of the development of a wind farm in project phases, 25-year period is counted for entire wind farm from the first generation in the first project phase of the project);
 - the first day for which the producer applied for the negative balance coverage (variation possible if the grid operator fails to connect the offshore wind farm to the grid).

Amount of electricity covered by the support scheme



The amount of energy in MWh with respect to which the producer of electricity from an offshore wind farm has the right to apply for the negative balance coverage, is the product of **100,000 hours** and the **installed electric capacity of the offshore wind farm**.

- 100 000 production hours over 25 years corresponds to the average annual net capacity factor of 45,7%. The indicated value of the load factor should be assessed as high, taking into account the real conditions in the Polish part of the Baltic Sea and power losses, in particular in the case of wind farms operating in several nearby locations (generation losses resulting from impact of turbines on each other, the so-called „wake losses” / „shadow” may be then generated). The net capacity factor for the projects included in the first phase of the support system are estimated at 40,6 – 42,4%*.

* Source: European Commission: Study on Baltic offshore wind energy cooperation under BEMIP, ENER/C1/20180456, 2019.

Auction timeline and volume of the support

Auction timeline and volume of the support

- In accordance with the Offshore Act, auctions will be organized from 2025 onwards. The years in which the auctions will occur and the respective volume of support is shown in the table below.

2025	2.5 GW
2027	2.5 GW + installed capacity not distributed in the previous auction
2028	installed capacity not distributed in the previous auctions (if above 500 MW)
Subsequent years	as determined by the government in a resolution (issued by 30 April of a given year and applicable for the following calendar year)

Possibility to change the capacity covered by auctions



The Offshore Act theoretically guarantees that auctions will take place at least twice – in 2025 and 2027. However, the government has the power to reduce the auctioned volumes (by means of a resolution issued by the end of August of the preceding year at the latest) in order to ensure the safety of the National Power System, and could even reduce it to zero, effectively cancelling a given auction.

Potential capacity of projects



On the other hand, it should be noted that the maximum installed capacity of offshore wind farms in locations that can participate in auctions is estimated at even more than 10 GW* and this significantly exceeds 5 GW (i.e. the capacity assigned to the first 2 auctions). In the case of installations with a capacity exceeding those covered by the support system, it is difficult to assess whether investors will undertake the investment without the right to negative balance coverage. It is also difficult to assess whether it will be possible to connect all locations to the grid.

* Own initial estimate, based on basic information about locations

Certificate of admission to auction

Pre-qualification to auction

- Before the auctions, the producers **have to undergo a formal pre-qualification process**. Only those producers, who obtain a certificate of admission can participate in the auctions. The auctions are dedicated to producers who will generate electricity at a given installation for the first time only after the auction session ends.
- **Only applicants whose projects are located within areas indicated in appendices 1 or 2 to the Act may participate in auction.**
- An application for certificate of admission contains (in addition to the producer's identification data and address) the location and installed capacity of the offshore wind farm, however, no greater than the installed capacity resulting from the location permit (PSZW) for undertakings located within the exclusive economic zone.

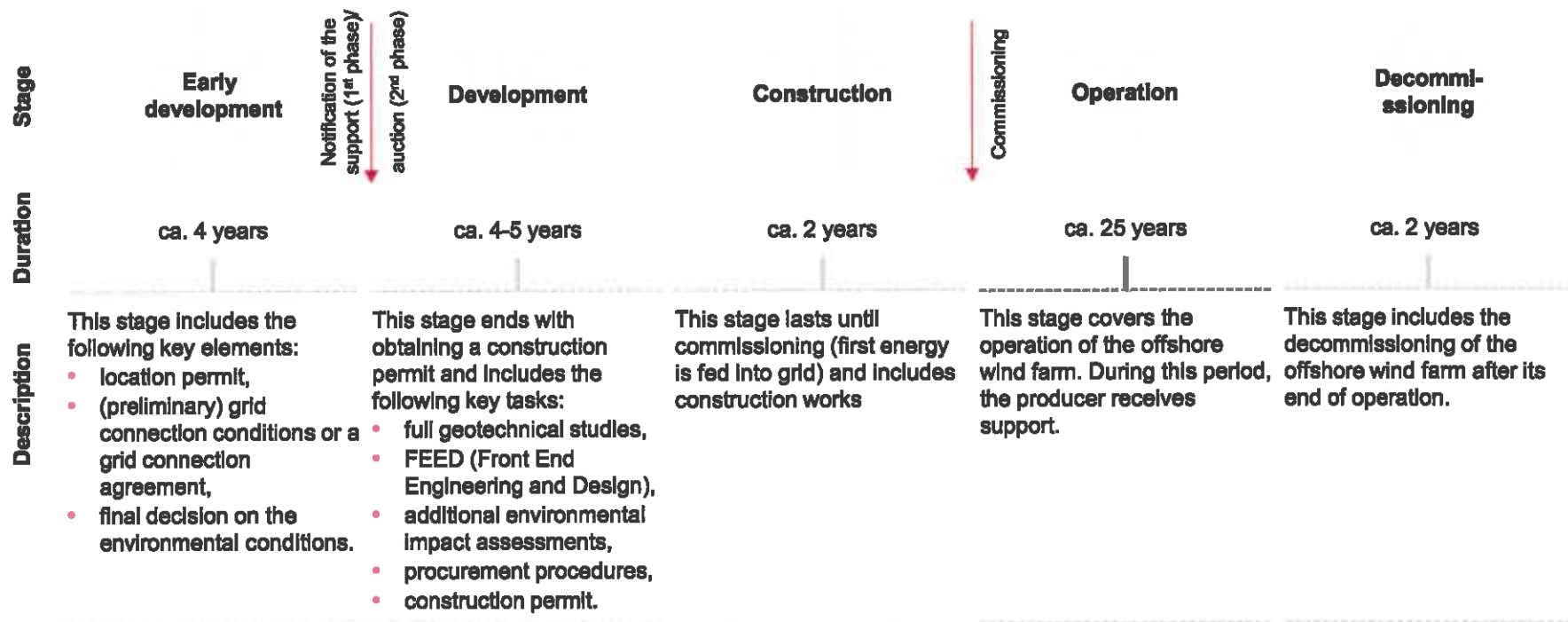
The producer must also attach originals or certified copies of the following:

- 1 preliminary grid connection conditions or a grid connection agreement;
 - 2 **a final decision on the environmental conditions for a given offshore wind farm;**
 - 3 legally binding (non-appealable) PSZW;
 - 4 technical and financial schedule of the construction of the offshore wind farm together with the set of equipment for evacuation of power from this installation up to the ownership demarcation point, ensuring that the offshore wind farm generates electricity and feeds electricity so generated into the grid within 7 years of the date of the auction session's closure;
 - 5 plan for the materials and services supply chain;
 - 6 a map confirming that the project is located within areas indicated in the appendices to the Act.
- In order to participate in an auction, producers must also provide security identical to that provided by first phase participants (a bank or insurance guarantee or a cash deposit).

Obligation to feed the first electricity to the grid within 7 years

Standard schedule for offshore wind project

- The producers commit to feed the first electricity into the grid within 7 years of obtaining the second decision of the President of ERO determining the level of support (for first phase participants) or winning the auction (for second phase participants).
- A simplified standard schedule for offshore wind project is presented below. **The period from obtaining the environmental decision to commissioning is approximately 6-7 years** (however, in practice, this period may differ for individual projects, depending on their specifics, external factors and the investor's approach).





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Thank You

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