Part III.8 - Supplementary Information Sheet for the notification of an evaluation plan

Member States must use this sheet for the notification of an evaluation plan pursuant to Art. 1(2)(a) of Regulation (EU) No 651/2014[1] and in the case of a notified aid scheme subject to an evaluation as provided in the relevant Commission guidelines.

Please refer to the Commission Staff Working Document "Common methodology for State aid evaluation"[2] for guidance on the drafting of an evaluation plan.

1. Identification of the aid scheme to be evaluated

(1) Title of the aid scheme:

Polish Offshore Wind Support Scheme

(2) Does the evaluation plan concern:

(a) ☐ a scheme subject to evaluation pursuant to Article 1(2)(a) of Regulation (EU) No 651/2014?

(b) ☒ **a scheme notified to the Commission pursuant to Article 108(3) TFEU?**

(3) Reference of the scheme (to be completed by the Commission):

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(4) Please list any existing *ex-ante* evaluations or impact assessments for the aid scheme and ex-post evaluations or studies conducted in the past on predecessors of the aid scheme or on similar schemes. For each of those studies, please provide the following information: (a) a brief description of the study's objectives, methodologies used, results and conclusions, and (b) specific challenges that the evaluations and studies might have faced from a methodological point of view, for example data availability that are relevant for the assessment of the current evaluation plan. If appropriate, please identify relevant areas or topics not covered by previous evaluation plans that should be the subject of the current evaluation. Please provide the summaries of such evaluations and studies in annex and, when available, the internet links to the documents concerned:

<u>Other schemes</u>

At this moment, there is a number of operating aid schemes in the energy sector in Poland:

- **SA.37345 (2015/NN) – Polish certificates of origin system to support renewables and reduction of burdens arising from the renewables certificate obligation for energy intensive users (https://ec.europa.eu/competition/state_aid/cases/261395/261395_1832252_**

[1] Commission Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty (OJ L 187, 26.6.2014, p. 1).

[2] SWD(2014)179 final of 28.5.2014.

133_2.pdf) – the scheme is closed for new beneficiaries now, however support will be paid out for years to come to those beneficiaries who were granted the right to support by mid-2016;

- SA.43697 (2015/N) – Polish support scheme for RES and relief for energy-intensive users (*Ustawa o odnawialnych źródłach energii – aukcyjny system wsparcia OZE oraz ulgi w opłacie OZE dla przedsiębiorstw energochłonnych*) (https://ec.europa.eu/competition/state_aid/cases/261495/261495_1965594_372_2.pdf) – this is the general RES support scheme which entered into force as of mid-2016 and support under this scheme may be granted until mid-2021;
- SA.46100 (2017/N) – Polish Capacity Mechanism (https://ec.europa.eu/competition/state_aid/cases/272253/272253_1977790_162_2.pdf) – this is the Polish generation adequacy measure under which the last main auction may be held in 2025;
- SA.51192 (2019/N) – CHP support (https://ec.europa.eu/competition/state_aid/cases1/201930/278658_2084476_147_2.pdf) – the scheme has been cleared for the period of 10 years, starting as of 1 January 2019;

Scheme SA.51192 was preceded by the scheme SA.36518 (2016/NN) – Certificates of origin for high-efficient co-generation operators (Świadectwa pochodzenia dla wytwórców energii w wysokosprawnej kogeneracji) which expired at the end of 2018 (support is no longer paid out).

None of the above schemes has been subject of *ex post* evaluation so far. The only scheme that has been made subject of obligatory evaluation in the meaning of Section 4 of the EEAG is the general RES support scheme (SA.43697). The final evaluation report will be submitted to the Commission by the end of June 2021 In addition, based on national law, the capacity market is to be evaluated by 2024 in order to verify whether generation adequacy mechanism is still necessary. Consequently, there are no *ex post* evaluation reports regarding State aid schemes available in Poland.

Offshore wind support scheme

The present scheme constitutes an operating aid scheme addressed solely to offshore wind installations. The scheme will be divided into two phases.

In the first phase support will be granted directly by the President of the Energy Regulatory Office (President of ERO) – the Polish National Regulatory Authority – in the amount covering the LCOE of the respective project. Thus, in this phase support will not be allocated in competitive procedures. The capacity that will be awarded support in the first phase of operation of the scheme will not exceed 5,9 GW. Moreover, for the projects in the first phase, the Commission will approve individually (by adopting individual State aid no objection decisions) the specific level of operating aid based on the respective detailed LCOE included in the

individual business plan of each project, in line with EEAG guidelines and in particular with point 131 EEAG. After the project receives its environmental permit, the investor will be obliged to submit its detailed business plan for the purpose of those individual notification. The Commission will assess compatibility of aid granted to beneficiaries in the first phase according to the State aid regulations in force on the day of issuance of the decision by the President of ERO on granting the aid (pursuant to Article 16 of the Offshore Wind Act), that is on the day of granting right to support pursuant to national law.

In the second phase of operation of the scheme support will be allocated in auctions where projects in different locations will compete with each other for support in one auction. The scheme will thus operate in a decentralized model as opposed to a centralized model where the state defines eligible sites and bidders in the auction compete for the right to build a wind farm at the site that has been examined[3].

The level of support will constitute the only awarding criterion and submitted bids will not be subject to negotiations. Capacity volumes to be procured in each auction will be communicated well in advance. For the time being, the Polish authorities intend to award support in auctions to offshore wind farms with installed capacity of ca. 5 GW (on top of the capacity that will be awarded aid in the first phase).

The expected economic impact of the notified scheme (Phases I and II combined) has been described in an *ex ante* analysis '*Economic impact assessment of the offshore wind farms development on the Polish economy*' (November 8, 2019) ('EIA') done by EY, which is attached to the present document. As for some of the assumptions adopted for the analysis, EIA heavily relies on the EY report '*Economic analysis in the field of offshore wind energy – LCOE and CfD analysis & results*' dated 8th November 2019 ('EY Report'), which is attached to the present document as well.

The EIA presents the estimated economic effects to be observed in Poland broken down into the investment (development) and operational phase of the projects. The impact of the investments in offshore wind farms, as well as the impact of their future operating activity, were evaluated using EY Spectrum model[4]. This model is based on input-output analysis[5], which allows to capture the interactions between producers, suppliers and buyers. EY has selected this model, as it is capable of evaluating both the impact created in the supply chain and effects generated by employees' spending.

The EIA distinguishes three types of effects related to the economic impact of the analysed investment projects: direct effects, indirect effects and induced effects. These effects are measured with use of the following indicators:

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3 **Such centralized offshore support schemes are in place for instance in Germany, Denmark and in the Netherlands.**

4 **It is the extended version of the popular input-output model, combined with spatial econometrics tools. Therefore, it allows to take into account both intersectoral and interregional flows.**

5 **Described in detail in Appendix B to the EIA.**

- **gross value added;**
- **employment;**
- **global output; and**
- **government tax revenues.**

As mentioned above, Phase I of the scheme relies on direct awards of aid which will be individually scrutinized by the Commission on a case-by-case basis. Thus, as settled during the pre-notification contacts, the *ex post* evaluation is required solely with regard to Phase II of the notified scheme.

2. Objectives of the aid scheme to be evaluated[6]

2.1. Please provide a description of the aid scheme specifying the needs and problems the scheme intends to address and the intended categories of beneficiaries, for example size, sectors, location, indicative number:

Why support is needed? (needs and problems the scheme intends to address)

The objective of the present scheme is to incentivize deployment of offshore wind farms in the Polish exclusive economic zone in the Baltic Sea. Although in a number of EU countries offshore wind farms are developed without State aid, the same does not hold true for the Polish market. Based on the EY Report, and after verification of other sources such as:

- McKinsey & Company *„Rozwój morskiej energetyki wiatrowej w Polsce. Perspektywy i ocena wpływu na lokalną gospodarkę*"

- McKinsey & Company z 2020 r. *„Neutralna emisyjnie Polska 2050"*

- Baltic energy market interconnection plan (BEMIP) *„Study on Baltic offshore wind energy cooperation under BEMIP 2019"*

- European Commission, *„Technology Market Report Wind Energy*"

- Analytical annex to the Polish Energy Policy 2040

- Analytical annex to the Polish Nuclear Energy Program

- IRENA, *„Renewable Power Generation Costs in 2019"*

The LCOE for a 'standard site project' in Phase I has been estimated at 319,6 PLN/MWh[7] (cf. Regulation of the Minister of Climate and Environment of 30 March 2021 on the maximum price for electricity generated in an offshore wind farm and fed into the grid in PLN per 1 MWh, being the basis for the settlement

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6 Beyond providing a general description of the objectives and eligibility rules of the scheme, the aim of this section is to assess how the eligibility and exclusion rules of the scheme may be used to identify the effect of aid. In some cases, the precise eligibility rules may not be known in advance. In those cases the best available expectations should be provided.

7 71,82 EUR/MWh.

of the right to cover the negative balance[8]), exceeds current and expected electricity prices.

The EY Report provides preliminary assessment of the expected level of the LCOE for Phase II projects[9] (cf. pp. 55-56 of the EY Report). According to the projections, electricity market prices will still not suffice to ensure financial viability of these projects. Thus, offshore projects in Poland cannot be deployed relying on market revenues alone.

The LCOE has been determined with use of a detailed bottom-up calculation of costs to be incurred by individual investors. Those costs were split into the following categories:

a. **development costs before construction phase;**
b. **construction costs;**
c. **OPEX costs;**
d. **decommissioning costs.**

As regards the prices of the offshore wind technology observed in Europe, these prices result from the bids submitted within the framework of operating support schemes. Even if in some cases the prices are relatively low, support schemes are still necessary to ensure stable and predictable stream of revenues in the long term (thus enabling the investors to secure external financing).

The EY Report presents justification of the difference between the LCOE of offshore projects in Poland and prices observed in other EU countries (cf. pp. 57-58 of the EY Report). In this context, those relatively low prices are observed on the matured European offshore markets with developed supply chains, stable regulations and cost of grid infrastructure investments borne in most cases by the TSO. In case of Poland there is a need to build the whole offshore industry, including *inter alia* supporting infrastructure. The investors will be also responsible for the construction of offshore grid connection, which materially impacts the LCOE. The LCOE of the Polish projects is additionally influenced by higher cost of capital and currency risk.

<u>Design of the scheme</u>

Due to the above described factors, the Polish authorities intend to put in place the notified offshore wind support scheme. After transitory period of direct awards of aid, as of 2025 Poland will organize competitive technology-specific auctions on a project v. project basis (projects in different locations will compete with each other for support in one auction) where the level of support will constitute the only awarding criterion. Capacity volumes to be procured in each auction will be communicated well in advance to provide predictability. In years 2025-2028 the

8 **https://isap.sejm.gov.pl/isap.nsf/download.xsp/WDU20210000587/O/D20210587.pdf**

9 **The EY Report assumes that auctions will be organized as of 2023. In fact, the first auction is scheduled for 2025.**

Polish authorities intend to award support to OWF with installed capacity of ca. 5 GW (on top of the capacity that will be awarded aid in the first phase). This capacity will come on stream by year 2035.

The auctions will be conducted by the President of ERO (as under the current general RES support scheme – SA.43697). To ensure that only sufficiently advanced projects are admitted to the auctions, the investors will need to hold: a valid location permit (domain concession entailing exclusivity with respect of particular location in the Polish exclusive economic zone), a grid connection agreement or grid connection conditions (to ensure that it will be feasible to connect the project to the grid in due time) and a final environmental decision. In addition, the investors will be obliged to provide collateral corresponding with the installed capacity of the installation (the collateral will be withheld in case the project is not implemented in due time or in the scope defined in the auction bid).

The investors will place auction bids in which they will indicate planned installed capacity of the project and the expected level of support per MWh (strike price). The bids will be capped at a so-called maximum price (the maximum price per MWh that can be offered in an auction)[10] and will not be subject to any negotiations.

To make sure that sufficient competitive pressure is exerted in every auction, the Polish authorities will introduce an additional cap, where no more than 90% of volume (in MW) of RES capacity submitted to the auction can receive support. If 90% of the capacity submitted will exceed the allocation stemming from the volume determined in law, this volume will constitute a binding constraint[11]. The 90% cap will be also applied in case the volume submitted does not exhaust the allocation stemming from the law (hence, the cap allows granting aid to no more than 90% of the capacity submitted via bids to the auctions).

Support is to be paid for the period of 25 years[12] and for the volume of electricity that does not exceed 100 000 full load hours multiplied by installed capacity of an installation (which translates to an annual load factor of 4000 MWh/MW).

Support will take the form of a two-side contract for difference. It will thus constitute a variable market premium on top of market price which allows for retaining the commercial incentives on the operators to sell their electricity on the market in the regular way, subject to competitive pressure from other market participants.

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10 **The maximum price will be set based on LCOE of offshore wind technology.**

11 **The only exception will apply if the closing bid does not exceed the capacity determined in law by more than 500 MW and this bid is followed by another unsuccessful bid. Such solution allows for incentivizing the deployment of greater capacity and does not compromise the competitive character of the auction, since at least one bid remains unsuccessful.**

12 **According to standard accounting principles, this period does not exceed the depreciation period of supported installations.**

The difference payment will be calculated as the difference between the strike price (i.e. a bidding price) and the wholesale market price. Therefore, when the beneficiary sells electricity at a price below the wholesale market price, its overall sale price will be below the bidding price (even after the difference payment is paid).

Furthermore, in exchange for a certain stability and predictability of its revenues, the beneficiary will not be able to benefit from very high electricity prices. When the wholesale market price exceeds the bidding price, the generators will be obliged to pay the difference to the settlement body (Zarządca Rozliczeń S.A., a wholly State-owned entity entrusted solely with the task to manage settlements within the framework of support schemes). In every case, the support will be capped at the level of the bidding price. Support will thus take the same form as under the current general RES support scheme[13].

In line with the EEAG, the beneficiaries will be subject to standard balancing responsibilities and support will not be paid with respect to the amount of electricity that has been generated in the imbalance settlement periods[14] for which single day-ahead coupling clearing prices for the Polish bidding zone were lower than zero PLN per 1 MWh.

2.2. Please indicate the objectives of the scheme and the expected impact, both at the level of the intended beneficiaries and as far as the objective of common interest is concerned:

The Polish electricity generation sector heavily relies on fossil fuels, in particular coal and lignite. In consequence, in 2019 average CO_2 emissions per MWh of electricity in Poland amounted to approx. 0.75 tCO_2[15]. Electricity generation in Poland results also in relatively high emissions of sulphur oxides, nitrogen oxides and dust.

In parallel, the EU has assumed that by 2030 the bloc should cut emissions by at least 40% below 1990 levels. This target is to be revised shortly and it is expected that the 2030 reduction target will be defined at the level not lower than 50-55%. Moreover, the current EU 2030 target for the share of renewable energy consumed in the Union is at least 32 %. Offshore projects deployed in consequence of direct awards of support in Phase I of operation of the scheme will contribute to the attainment of those policy objectives as the entire capacity supported in Phase I will come on stream not later than in 2030.

Projects to be developed in consequence of auctions concluded within the framework of Phase II of the scheme will contribute to policy objectives defined in more far-reaching perspective. On 11 December 2019 the Commission adopted the

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13 **Cf. Recital 208 of the Decision in case SA.43697.**

14 **As defined in art. 2 (10) of the Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing (OJ L 312, 28.11.2017, p. 6–53).**

15 **https://www.kobize.pl/uploads/materialy/materialy_do_pobrania/wskazniki_emisyjnosci/Wskazniki_emisyjnosci_grudzien_2020.pdf**

Communication 'the European Green Deal' which sets out ambitious climate policy objectives leading to the attainment by the EU of climate neutrality by 2050. Although Poland has not committed to achieving climate neutrality by 2050, it is definitely its objective to stimulate electricity generation sector to shift from fossil fuels to renewables.

Moreover, the scheme will contribute to the country's energy security as Phase II of the scheme should result in ca. 5 GW of offshore capacity being put on stream.

Finally, while Phase I of the scheme is expected to pave the way for the establishment of an entirely new branch of economy in Poland, support granted in Phase II and subsequent investments are meant to contribute to further development of the offshore industry.

Concluding, as regards the scheme's contribution to the development of production of electricity from offshore wind without distorting competition in a way contrary to the common interest, the scheme will contribute to increased share of renewable electricity in total electricity consumed, to the reduction of greenhouse gases and to increased energy security. The scheme is also expected to facilitate the development of a highly innovative offshore industry.

As regards the beneficiaries of the aid, they will be incentivized to carry out massive investments which can contribute to the development of the entire economy.

2.3. Please indicate possible negative effects, on the aid beneficiaries or on the wider economy, that might be directly or indirectly associated with the aid scheme[16]:

As regards possible negative effects of the scheme on the wider economy, in principle it is not the aid, but rather the characteristics of intermittent RES generation that may entail negative effects. In other words, if the deployment of offshore wind farms took place relying on market incentives alone (without aid), the same issues as described below would arise.

First, although offshore wind farms have significantly higher load factor than other intermittent RES, their generation still cannot be fully planned and controlled. Thus, their increased presence in the Polish energy mix (together with other intermittent RES, mainly onshore wind and PV) will pose a challenge for the stable operation of the Polish Power System in terms of stable backup capacity needed or in terms of safe operation of the grid.

Second, offshore wind farms are characterized by nearly zero marginal costs, thus their generation is profitable regardless of the prices observed on the electricity market. The more RES capacity with zero marginal costs is deployed, the more probable occurrence of negative electricity prices (as illustrated by examples of Germany or Denmark). The scheme will deny support at times of negative

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16 Examples of negative effects are regional and sectorial biases or crowding out of private investments induced by the aid scheme.

electricity prices, but it is still expected that the offshore wind farms may significantly impact the prices observed on the electricity market.

Third, support granted to RES with zero marginal costs leads to crowding out of installations characterized by stable and steerable generation (both RES and conventional), resulting in their lower annual productivity. This in turn results in a 'missing money' issue which translates to problems with sufficient steerable capacity. At this moment there is a generation adequacy mechanism in place (the capacity market which received State aid clearance in the procedure SA.46100) which allows to secure necessary capacity, but by the time the projects supported in Phase II will be deployed (most likely not earlier than 2030), it is rather unlikely that the capacity market in its current design will be maintained.

As regards the aid beneficiaries, it seems unlikely that aid might have any negative effects on them. The auctions will be based on the rules of competition between potential aid beneficiaries. The pre-qualification criteria will ensure that only sufficiently developed projects may be awarded support and aid will be awarded based on the lowest expected price of electricity. Since offshore wind farms are large scale projects, which will be carried out by companies with necessary experience and resources (in some cases, it is expected that joint ventures will be set up) the risk of placing unreliable bids is limited.

2.4. Please indicate (a) the annual budget planned under the scheme, (b) the intended duration of the scheme[17], (c) the aid instrument or instruments and (d) the eligible costs:

a) <u>Annual budget planned under the scheme</u>

At this moment Poland plans to organize two auctions in the second phase of operation of the scheme (in each auction at least 2.5 GW of capacity is to be awarded support) with the possibility to organize subsequent auction in 2028 if the total capacity threshold of 5 GW is not exhausted in the second auction planned for 2027.

The auctions will be organized in years 2025 and 2027. Although the support will be paid out for 25 years following the first injection of electricity to the grid, the award of aid takes place upon the conclusion of an auction. Thus, at this stage, it is foreseen that support will be awarded in 2025 in the amount not exceeding EUR 6.8 bn and in 2027 in the amount not exceeding EUR 8.2 bn[18]. The actual amount of support will depend on the market electricity prices and bids placed in auctions.

Based on estimates, the total payments in all years for projects supported in both phases will amount to ca. 22.5 billion EUR, which translates to annual amount of

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17 Aid schemes defined in Article 1(2)(a) of Regulation (EU) No 651/2014 are excluded from the scope of the Regulation six months after their entry into force. After having assessed the evaluation plan, the Commission may decide to extend the application of the Regulation to such schemes for a longer period. Member States are invited to precisely indicate the intended duration of the scheme.

18 **Although the capacity to be procured is the same as in 2025, it is expected that, at least to some extent, successful bids may refer to projects located in sites with more unfavourable conditions (in particular in terms of distance from the shore or water depth), thus with higher LCOE. Possible locations for project will be determined by the Maritime Spatial Plan that is to be adopted in 2021.**

actually paid support within the range of 780-990 million EUR (for years when all projects will be in operation).

b) Intended duration of the scheme

The Offshore Wind Act, which regulates the support scheme, entered into force on 18 February 2021. In the first phase of its operation (which is not subject of the evaluation) support will be awarded directly. As of 2025 aid will be awarded in auctions (Phase II of the scheme which is subject of evaluation). It is foreseen that the last auction will be concluded not later than in 2028, but based on paragraph 121 of the EEAG, Poland seeks State aid clearance for the period 2021-2030.

c) The aid instruments

Support is to be paid for the period of 25 years and for the volume of electricity that does not exceed 100 000 full load hours multiplied by installed capacity of an installation (which translates to an annual load factor of 4000 MWh/MW).

Support will take the form of a two-side contract for difference. It will thus constitute a variable market premium on top of market price which allows for retaining the commercial incentives on the operators to sell their electricity on the market in the regular way, subject to competitive pressure from other market participants.

The difference payment will be calculated as the difference between the strike price (i.e. a bidding price) and the wholesale market price. Therefore, when the beneficiary sells electricity at a price below the wholesale market price, its overall sale price will be below the bidding price (even after the difference payment is paid). Furthermore, in exchange for a certain stability and predictability of its revenues, the beneficiary will not be able to benefit from very high electricity prices. When the wholesale market price exceeds the bidding price, the generators will be obliged to pay the difference to the settlement body. In every case, the support will be capped; the level of support is determined on a "pay-as-bid" basis noting that the bid price cannot exceed the maximum price. This maximum price will be defined as the maximum price applicable in a particular auction and is based on the LCOE of offshore wind technology in Poland.

In line with the EEAG, the beneficiaries will be subject to standard balancing responsibilities and support will not be paid with respect to the amount of electricity that has been generated in the imbalance settlement periods for which single day-ahead coupling clearing prices for the Polish bidding zone were lower than zero PLN per 1 MWh.

d) The eligible costs

Since the scheme at hand foresees granting of operating aid, the EEAG do not stipulate a closed list of costs eligible for financing. The aim of the operating aid is to secure economic viability of supported installations, thus the eligible costs are

the total costs of producing electricity in offshore wind farms that cannot be recouped from the revenues from the electricity market.

2.5. Please provide a summary of the eligibility criteria and the methods for selecting the aid beneficiaries. In particular, please describe the following: (a) the methods used for selecting beneficiaries (e.g. such as scoring), (b) the indicative budget available for each group of beneficiaries, (c) the likelihood of the budget being exhausted for certain groups of beneficiaries, (d) the scoring rules, if they are used in the scheme, (e) the aid intensity thresholds and (f) the criteria the authority granting the aid will take into account when assessing applications:

As mentioned above, aid will be awarded in competitive procedures, i.e. auctions. Auctions will be open only to offshore wind projects (thus, they will be technology-specific) and competition will be organized on a project v. project basis (projects in different locations will compete with each other for support in one auction – de-centralized model). There will be no scoring system as the level of expected support declared in an auction bid will constitute the only awarding criterion.

The investors will place auction bids in which they will indicate planned installed capacity of the project and the expected level of support per MWh (strike price). The bids will be capped at a so-called maximum price (the maximum price per MWh that can be offered in an auction)[19] and once submitted, bids may not be modified and may not be subject of negotiations.

To make sure that sufficient competitive pressure is exerted in every auction, the Polish authorities have introduced an additional cap, where no more than 90% of volume (in MW) of RES capacity submitted to the auction can receive support.

If 90% of the capacity submitted will exceed the allocation stemming from the volume determined in law, this volume will constitute a binding constraint. The 90% cap will be also applied in case the volume submitted does not exhaust the allocation stemming from the law (hence, the cap allows granting aid to no more than 90% of the volume submitted via bids to the auctions).

The only exception will apply if the closing bid does not exceed the capacity determined in law by more than 500 MW and this bid is followed by another unsuccessful bid. Such solution allows for incentivizing the deployment of greater capacity and does not compromise the competitive character of the auction, since at least one bid remains unsuccessful.

Capacity volumes to be procured in each auction will be communicated well in advance to provide predictability. In years 2025-2028 the Polish authorities intend to award support to OWF with installed capacity of ca. 5 GW (on top of the capacity that will be awarded aid in the first phase).

In order to participate in an auction, prospective bidder will be obliged to pass the pre-qualification procedure before the President of the Energy Regulatory Office. To this end, the investor will need to submit:

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19 **The maximum price will be set based on LCOE of offshore wind technology.**

- **a valid location permit (domain concession entailing exclusivity with respect of particular location in the Polish exclusive economic zone);**
- **a grid connection agreement or grid connection conditions (to ensure that it will be feasible to connect the project to the grid in due time); and**
- **an environmental decision.**

In addition, the investors will be obliged to provide collateral corresponding with the installed capacity of the installation. If the declared capacity (with allowed downward flexibility of 10%, provided that the President of ERO is notified of such modification in due time) is not deployed in 7 years following the conclusion of the auction, the collateral is withheld by the regulator.

Concluding:

- **prospective beneficiaries are admitted to the auctions based on objective pre-qualification criteria;**
- **aid is awarded to those beneficiaries who require the lowest amount of support per MWh and all eligible projects compete in particular auction;**
- **the auction design ensures that competitive pressure is exerted in each and every auction, thus it is certain that not all bidders can receive aid (as per paragraph 19 (43) of the EEAG;**
- **the 'budget' of the auction will be expressed not in terms of amount of aid to be granted but in terms of maximum capacity that may be awarded support;**
- **since support constitutes operating aid, no maximum aid intensity has been defined.**

2.6. Please mention specific constraints or risks that might affect the implementation of the scheme, its expected impacts and the achievement of its objectives:

The risk to the achievement of the scheme's objectives is the deterioration of the macroeconomic situation resulting in the developers withholding their investments or in an unavailability of external financing necessary to carry out capital-intensive offshore investments.

3. Evaluation questions

3.1. Please indicate the specific questions that the evaluation should address by providing quantitative evidence of the impact of aid. Please distinguish between (a) questions related to the direct impact of the aid on the beneficiaries, (b) questions related to the indirect impacts and (c) questions related to the proportionality and appropriateness of the aid. Please explain how the evaluation questions relate to the objectives of the scheme:

The matrix below lists all evaluation questions together with indicators, sources of data and proposed evaluation methods:

Evaluation category	Evaluation questions	Indicators	Sources	Methods to be used
1. Direct impact of the aid on beneficiaries	1. How much aid was awarded?	Amount of total aid (expressed as price premium – requires comparison between auction bids and projected electricity prices)	President of ERO (data available based on auction results)	Descriptive statistics
	2. How many enterprises have received the aid under the scheme?	Number of enterprises that received support	President of ERO (data available based on auction results)	Descriptive statistics
	3. How many new installations are to be developed under the scheme? How many projects were approved under the scheme and what is the installed capacity of each project? What is the amount of investment in offshore wind (total and per project)? What is the amount of renewable electricity produced by the awarded projects? What is the area at sea used (total and per project)?	Number of new offshore installations Number of new projects Installed capacity Amount invested Amount of renewable electricity produced by the awarded projects Maritime areas used for deployment of offshore wind farms	President of ERO (data available based on auction results)	Descriptive statistics
	4. What were the results of auctions carried out under the scheme?	Number of participants in each auction, number of bids submitted and number of winning bids for each auction.	President of ERO (data available based on auction results)	Descriptive statistics

	5. Did the beneficiaries increase: i) electricity production from renewables; ii) their RES capacity; iii) investments in RES projects? (compared to an appropriate control group such as, e.g., non- successful applicants to the auctions, or a synthetic control group)	Additional electricity produced from renewables Additional RES capacity installed Amount of funds invested	President of ERO (data regarding both beneficiaries and unsuccessful applicants to the auctions)	Counterfactual impact evaluation, data-based if feasible, otherwise, theory based impact evaluation
	6. What would be the (marginal) award price of the tenders if the tender volume were increased or reduced with a constant bidding curve (i.e. constant bidding values)? How would the total cost of support change in this case (absolute and per MWh)?	A "supply curve" will be constructed using the auction bids[20]. Determination of a hypothetical marginal award price if e.g. the tender volume increases or decreases by, for example, 10 % and 20 %.This comparative static may indicate price and cost effects of an exogenous change in the volume of tenders and illustrates the slope of the supply curve.	President of ERO	Descriptive statistics Supply curve analysis

[20] **The supply curve aggregates all auction bids. It shows how much RES investment will be carried out depending on the auction clearing price.**

2. Indirect impacts of the aid scheme	7. How many jobs are to be created by the direct beneficiaries of aid? How many jobs are to be created in the supplier industry?	Jobs (FTE)	Central Statistical Office of Poland, aid beneficiaries, reports under presently drafted Polish offshore sector deal President of ERO (data from supply chain plans to be submitted shortly after auctions)	Descriptive statistics
	8. How will the scheme impact the levels of CO_2, NO_x, SO_x and dust emissions in Poland?	Levels of emission: RES vs Non- RES / total national levels. Comparison among different RES technologies, possibly using a life-cycle approach	President of ERO, KOBiZE	Descriptive statistics and simulation based on model of the Polish electricity market (to see how many non-RES will be replaced by RES)
	9. What is the expected impact of the scheme on the gross value added in the economy[21]?	Gross value added	Central Statistical Office of Poland, data from supply chain plans submitted by aid beneficiaries	Descriptive statistics
	10. What is the expected impact of the scheme on electricity prices and on the trade in electricity?	Changes in electricity prices (retail and wholesale) that can be attributed to increased share of offshore technology Changes in import/exports level of electricity	President of ERO /Transmission System Operator (PSE S.A.)	Simulation based on the model of electricity market (available to PSE S.A.) if data are available in the timespan of the evaluation given long lead times for project completion

[21] **Due to the timeline of evaluation, only part of the construction phase may be taken into consideration.**

	11. What is the impact of the scheme on the concentration of the Polish electricity generation sector? What is the impact of the scheme on the market position of large beneficiaries?	Share in electricity generation in Poland (per firm) Market shares, concentration, etc. (also check whether more or less efficient[22] bidders increase market share)	President of ERO/PSE S.A.	Descriptive statistics, qualitative assessment
	12. What is the expected impact on the investments necessary to ensure the stability of the grid?	Investments necessary to ensure stability of the grid	President of ERO/ PSE S.A./ distribution system operators	Descriptive statistics
	13. Is there an adverse effect on the alternative users of the same resources	Area of sea used for deployment of offshore installations	Ministry of Infrastructure, Ministry of Agriculture and Maritime Economy	Qualitative assessment
	14. What is an estimated impact of the scheme on the conventional electricity producers?	Revenues, profits, possible exit from the market, need for generation adequacy measures.	Ministry of Climate and Environment /PSE S.A.	Simulation based on the model of electricity market (available to PSE S.A.)

[22] **Efficient and less efficient bidders could be determined by analysing the auction bids.**

3.Appropriateness and proportionality of the aid	15. Is the design of the scheme optimal compared to offshore scheme in other EU countries (e.g. de-centralized vs. centralized model, 25-year period of support, scope of investment carried out by the State and by the aid beneficiary)	Cost of MWh of electricity produced in offshore installations	Ministry of Climate and Environment, publicly available data on support granted in other Member States	Theory based impact evaluation, comparative analysis with other MS
	16. What would have been the effects (in terms of costs of the scheme and grid stability) if the offshore wind technology would have been part of the general RES scheme instead of having a technology specific tender for offshore wind?	Comparison of grid investment needed if technology-neutral tenders would have been introduced with additional aid given because of technology-specific tenders.	President of ERO/ PSE S.A.	Quantitative assessment – supply curve analysis assuming technology neutral tenders?
	17. Was the aid appropriately and timely adjusted to ensure proportionality? Did the maximum prices contribute to proportionality?	Needs of adjustment, adjustment procedure, speed of adjustment; comparison with a relevant benchmark, e.g. LCOE estimates	Ministry of Climate and Environment / President of ERO	Descriptive statistics

	18. How did the intensity of competition evolve or become differentiated over time?	Relationship between bid and tender volumes Differences between the bid prices	President of ERO	Descriptive statistics Qualitative assessments
	19. How did the tender award prices evolve or become differentiated over time?	Quantity-weighted tender award prices by selection rounds	President of ERO	Descriptive statistics, comparison of the tenders in 2025 and 2027
	20. Did tenderers behave strategically, and what effects did strategic tenders have on the intensity of competition and the level of support offered?	Evolution of the support costs Evolution of the level of competition	Ministry of Climate and Environment / President of ERO	Descriptive statistics Qualitative assessment

4. Result indicators

4.1. Please use the following table to describe which indicators will be built to measure outcomes of the scheme, as well as the relevant control variables, including the sources of data, and how each result indicator corresponds to the evaluation questions. In particular, please mention (a) the relevant evaluation question, (b) the indicator, (c) the source of data, (d) the frequency of collection of data (for example, annual, monthly, etc.), (e) the level at which the data is collected (for example, firm level, establishment level, regional level, etc.), (f) the population covered in the data source (for example, aid beneficiaries, non-beneficiaries, all firms, etc.):

Evaluation question	Indicator	Source	Frequency	Level	Population
1. How much aid was awarded?	Amount of total aid (expressed as price premium – requires comparison between auction bids and projected electricity prices)	President of ERO (data available based on auction results)	After every tender	Firm level	Aid beneficiaries
2. How many enterprises have received the aid under the scheme?	Number of enterprises that received support	President of ERO (data available based on auction results)	After every tender	Firm level	Aid beneficiaries
3. How many new installations are to be developed under the scheme? How many projects were approved under the scheme and what is the installed capacity of each project? What is the amount of investment in offshore wind (total and per project)? What is the amount of renewable electricity produced by the awarded projects? What is the area at sea used (total and per project)?	Number of new offshore installations Number of new projects Installed capacity Amount invested Amount of renewable electricity produced by the awarded projects Maritime areas used for deployment of offshore wind farms	President of ERO (data available based on auction results)	After every tender	Firm level	Aid beneficiaries
4. What were the results of auctions carried out under the scheme?	Number of participants in each auction, number of bids submitted and number of winning bids for each auction.	President of ERO	After every tender	Tender level	All tender participants

5. Did the beneficiaries increase: i) electricity production from renewables; ii) their RES capacity; iii) investments in RES projects? (compared to an appropriate control group such as, e.g., non-successful applicants to the auctions, or a synthetic control group)	Additional electricity produced from renewables Additional RES capacity installed Amount of funds invested	President of ERO (data regarding both beneficiaries and unsuccessful applicants to the auctions)	After every tender	National level	Aid beneficiaries, control group if available
6. What would be the (marginal) award price of the tenders if the tender volume were increased or reduced with a constant bidding curve (i.e. constant bidding values)? How would the total cost of support change in this case (absolute and per MWh)?	A "supply curve" will be constructed using the auction bids . Determination of a hypothetical marginal award price if e.g. the tender volume increases or decreases by, for example, 10 % and 20 %.This comparative static may indicate price and cost effects of an exogenous change in the volume of tenders and illustrates the slope of the supply curve.	President of ERO	After every tender	National level	All tender participants
7. How many jobs are to be created by the direct beneficiaries of aid? How many jobs are to be created in the supplier industry?	Jobs (FTE)	Central Statistical Office of Poland, aid beneficiaries, reports under presently drafted Polish offshore sector deal President of ERO (data from supply chain plans to be submitted shortly after auctions)	After every tender	National level	Aid beneficiaries, control group, if available
8. How will the scheme impact the levels of CO_2, NO_x, SO_x and dust emissions in Poland?	Levels of emission: RES vs Non-RES / total national levels. Comparison among different RES technologies, possibly	President of ERO, KOBiZE	After every tender	National level	Electricity sector in Poland

	using a life-cycle approach				
9. What is the expected impact of the scheme on the gross value added in the economy[23]?	Gross value added	Central Statistical Office of Poland, data from supply chain plans submitted by aid beneficiaries	After every tender	National level	Aid beneficiaries (based on supply chain plans)
10. What is the expected impact of the scheme on electricity prices and on the trade in electricity?	Changes in electricity prices (retail and wholesale) that can be attributed to increased share of offshore technology. Changes in import/exports level of electricity.	President of ERO /Transmission System Operator (PSE S.A.)	After every tender	National level	Observations based on the model of electricity market (available to PSE S.A.)
11. What is the impact of the scheme on the concentration of the Polish electricity generation sector? What is the impact of the scheme on the market position of large beneficiaries?	Share in electricity generation in Poland (per firm) Market shares, concentration, etc. (also check whether more or less efficient[24] bidders increase market share)	President of ERO/PSE S.A.	After every tender	National level	All market participants
12. What is the expected impact on the investments necessary to ensure the stability of the grid?	Investments necessary to ensure stability of the grid	President of ERO/ PSE S.A./ distribution system operators	After every tender	National level	TSO/DSOs
13. Is there an adverse effect on the alternative users of the same resources	Area of sea used for deployment of offshore installations	Ministry of Infrastructure, Ministry of Agriculture and Maritime Economy	After every tender	National level	Representatives of stakeholders (e.g. fisherman)
14. What is an estimated impact of the scheme on the conventional electricity producers?	Revenues, profits, possible exit from the market, need for generation adequacy measures.	Ministry of Climate and Environment /PSE S.A.	After every tender	National level	Observations based on the model of electricity market (available to PSE S.A.)
15. Is the design of the scheme optimal compared to offshore scheme in other EU countries (e.g. de-	Cost of MWh of electricity produced in offshore installations	Ministry of Climate and Environment, publicly available data on support	After every tender	Data gathered on national level, data regarding	Sector data

[23] **Due to the timeline of evaluation, only part of the construction phase may be taken into consideration.**

[24] **Efficient and less efficient bidders could be determined by analysing the auction bids.**

centralized vs. centralized model, 25-year period of support, scope of investment carried out by the State and by the aid beneficiary)		granted in other Member States		schemes in other MS	
16. What would have been the effects (in terms of costs of the scheme and grid stability) if the offshore wind technology would have been part of the general RES scheme instead of having a technology specific tender for offshore wind?	Comparison of grid investment needed if technology-neutral tenders would have been introduced with additional aid given because of technology-specific tenders.	President of ERO/ PSE S.A	After every tender	National level	TSO
17. Was the aid appropriately and timely adjusted to ensure proportionality? Did the maximum prices contribute to proportionality?	Needs of adjustment, adjustment procedure, speed of adjustment; comparison with a relevant benchmark, e.g. LCOE estimates	Ministry of Climate and Environment / President of ERO	After every tender	National level	Tender-specific data; LCOE estimates
18. How did the intensity of competition evolve or become differentiated over time?	Relationship between bid and tender volumes Differences between the bid prices	President of ERO	After every tender	National level	Tender-specific data
19. How did the tender award prices evolve or become differentiated over time?	Quantity-weighted tender award prices by selection rounds	President of ERO	After every tender	National level	Tender-specific data
20. Did tenderers behave strategically, and what effects did strategic tenders have on the intensity of competition and the level of support offered?	Evolution of the support costs Evolution of the level of competition	Ministry of Climate and Environment / President of ERO	After every tender	National level	Tender-specific data

Please explain why the chosen indicators are the most relevant for measuring the expected impact of the scheme:

In terms of its design, the notified scheme is not complex as it foresees granting operating support to developers of installations using specific RES technology. Aid

will be granted in auctions and the lowest bid will constitute the only awarding criterion. The notified scheme is not novel as similar designs of offshore support schemes have been observed for instance in Germany and in the United Kingdom. It is expected that overall, in the two (maximum three) rounds of tenders together, no more than 10-20 bids will be submitted. Thus, the tenders themselves will not provide an extensive base for evaluation in terms of data points gathered. Moreover, since offshore projects are characterized by long lead times (the developers will be given 7 years to put their installation into operation), the actual effects of support (for instance, the actual impact of offshore generation on electricity prices) will not be known within the assumed timeline of the evaluation.

Considering the above, the proposed evaluation questions together with the indicators primarily aim at verification whether the assumed design of the scheme (de-centralized model) is optimal and if not, which modifications should be introduced.

5. Envisaged methods to conduct the evaluation

5.1. In light of the evaluation questions, please describe the envisaged methods to be used in the evaluation to identify the causal impact of the aid on the beneficiaries and to assess other indirect impacts. In particular, please explain the reasons for choosing those methods and for rejecting other methods (for example, reasons related to the design of the scheme)[25]:

The evaluation will be conducted using the following methods relevant to the ex-post evaluation:

- **descriptive statistics and qualitative assessment: some questions can be answered through descriptive statistics and qualitative assessment, such as the number of beneficiaries that received aid under the scheme, the amount of investments in offshore wind plants, the additional capacity created for wind energy generation, etc. This type of data will be easy accessible and is reliable.**
- **empirical economic analysis, if possible counterfactual evaluation:**

  A proper counterfactual analysis is the preferred methodology, subject to data availability. If a sufficient number of bidders participate in the tenders, the group of winning bidders which are awarded aid in the offshore wind tenders (treatment group) can be compared to a control group that has properties that are as similar as possible (apart from the aid received). Bidders that participated in the tenders but that have not been awarded a contract in the same tender are one possible control group, provided that the tender was not undersubscribed and not all tenderers received aid. Comparing the behaviour of the treatment group and control group can then provide insights in the effectiveness and causal effects of the aid.

  The foreseen limited number of bidders in the Polish offshore wind tenders limits however the range of counterfactual impact evaluation methodologies that can likely be used to assess the effectiveness of the scheme. It should be

[25] Please make reference to SWD(2014)179 final of 28.5.2014.

also noted that since offshore projects are characterized by long lead times, observations of actual effects of the scheme (including behaviour of an appropriate control group) may be possible only after a number of years following award of support.

While difference-in-differences (including regression discontinuity design approaches) based on data from the Polish tenders would be desirable, it is unlikely that the data situation will allow the use of such techniques.

A possible less onerous counterfactual approach to assess the effectiveness of the scheme that will be explores might be to exploit a synthetic control method. A recent piece of evidence applies this approach to remedy the lack of proper counterfactual within a similar framework (Andersson, 2019). In practice, while the treatment group would be composed of Polish beneficiaries, the comparison group could be built on the basis of firms operating in other European countries having non-aided offshore wind plants. Alternatively, to test the overall effectiveness of the introduction of offshore wind in Poland, the treatment group would be Poland and the comparison group could be built based on countries with similar characteristics, but without offshore wind. In order to produce reliable results, the following elements should be considered:

- **longer time series would reinforce the validity of the research design. Nevertheless, there are a few papers that perform synthetic control methods by relying on few observations before the policy adoption (for example, Cerulli, 2019; Peri and Yesenov, 2019, and the literature therein cited);**
- **it would be advisable to collect macro-level information, such as population, GDP, unemployment, structure of the economy, indicators related to environment, indictors related to energy sector, for some countries with similar characterises to build the (synthetic) control group. Clearly, the chosen countries should be not affected by similar aids along the time span of the analysis.**

Another strategy could be to exploit the staggered time (if any) in the aid reception. More in details, groups receiving the aid at time t+1 could be used as controls for beneficiaries that receive the aid at time t (see, for instance, Goodman-Bacon, 2018; Callaway and Sant'Anna, 2020). As explained above, given the limited number of bidders in the tenders, it is not sure that this methodology can be applied.

The above described counterfactual impact evaluation methodologies and their feasibility will be tested in an interim report. Then, in agreement with the European Commission, it will be decided whether these evaluation methodologies can be applied for the eventual evaluation of the scheme. If not, the alternative evaluation strategies described below will still be applied, in combination with qualitative assessments and descriptive statistics drawn

from administrative and survey data (even if aggregated) in support of the evidence, especially when potentially relevant unobservable factors are not directly measurable.

In addition to the counterfactual evaluation methodologies described above, or in case these methodologies are not feasible due to a lack of data, the direct effects of the aid scheme will be assessed/complemented by the following methodologies:

- **Supply curve analysis: the supply curves formed by the bids received in individual tenders will be analysed in more detail on the basis of the tender data. The slope of the constructed supply curve or curves allows a comparative static analysis of price and cost effects of an exogenous change in the tender volume;**
- **Theory-based impact evaluation: rather than on a precise estimation of the size of the effect, a theory based impact evaluation would focus on identifying the mechanism that explains effects. This type of mixed-methods evaluation has two key stages: conceptual and empirical. In the conceptual phase, researchers work with local stakeholders to develop a theory of change (ToC), i.e. the causal mechanism describing how the intervention is expected to lead to its intended outcomes. In the empirical part, the ToC is tested to investigate how their observed outcomes came about.**

Specific features of the tenders should also be highlighted and analysed if relevant, e.g. the presence of zero-cents bids in the tenders, the height of the bid caps, undersubscription of tenders or presence of only a few bidders.

5.2. Please describe precisely the identification strategy for the evaluation of the causal impact of the aid and the assumptions on which the strategy relies. Please describe in detail the composition and the significance of the control group:

In the present case the control group may be constituted by unsuccessful bidders in auctions (i.e. projects which participated in the auctions, but have not been awarded support) or by those developers who constructed offshore wind farms based on market revenues, which may theoretically happen in the future. In any case, the control group consisting of Polish undertakings will be limited as the number of potential offshore projects is limited by the availability of sites. Thus, as set out in section 5.1 above, it may be necessary to refer to another type of control group, e.g. projects developed in other EU Member States. However, in such case account will need to be taken of possible differences in regulatory environments, which could render projects or undertakings not fully comparable. Also, as mentioned above, due to long lead-times of offshore projects access to data regarding actual effects of the scheme may in some instances be limited.

5.3. Please explain how the envisaged methods address potential selection bias. Can it be claimed with sufficient certainty that observed differences in the outcomes for the aid beneficiaries are due to the aid?

In the case at hand, offshore projects to be developed will be located in different sites with different characteristics (for instance, water depth, wind conditions, seabed conditions, etc.) which may impact economics of individual projects. Due to these factors, the differences between aided and non-aided projects may not be entirely due to the aid. The body conducting the evaluation will thus need to take account of these circumstances.

5.4. If relevant, please explain how the envisaged methods intend to address specific challenges related to complex schemes, for example schemes that are implemented in a differentiated manner at regional level and schemes that use several aid instruments:

The scheme at hand is uniform in its nature. It is not differentiated territorially and all types of undertakings are treated on equal footing. Thus, there is no need to address specific challenges related to the complexity of the scheme.

6. Data collection

6.1. Please provide information on the mechanisms and sources for collecting and processing data about the aid beneficiaries and about the envisaged counterfactual.[26] Please provide a description of all the relevant information that relates to the selection phase: data collected on aid applicants, data submitted by applicants and selection outcomes. Please also explain any potential issue as regards data availability:

Sources of data and frequencies of its collection have been listed in detail in sections 3 and 4 above. The majority of data is either available *ex officio* or will be collected based on legal provisions in force. For example the President of the Energy Regulatory Office collects information about market participants on the basis of separate regulations, such as the energy law. Also the Offshore Wind Act in Article 42 constitutes an obligation for generators applying for the right to cover the negative balance to draw up a plan for the materials and services supply chain considering the state of progress of the work on construction the offshore wind farm together with the set of equipment for evacuation of power as on the day of drawing up the plan, which shall include the following:

(a) the first name, the surname and the residential address or the name and the seat of the generator;

(b) description of the capital group to which the generator belongs;

[26] Please note that the evaluation might require sourcing of both historical data and data that will become progressively available during the deployment of the aid scheme. Please identify the sources for both types of information. Both types of data should preferably be collected from the same source as to guarantee consistency across time.

(c) **the material and financial schedule of the construction of the offshore wind farm together with the set of equipment for evacuation of power;**

(d) **the name, location and the installed electric capacity of the offshore wind farm to which the plan relates;**

(e) **description of the key technical parameters of the offshore wind farm together with the set of equipment for evacuation of power, with an indication of the planned technology of construction and method of operation;**

(f) **the planned dates of the key procedures for selection of materials and services suppliers, with an indication of the planned mode of business partners selection and the proposed terms of participation in the procedure as well as the offer evaluation criteria;**

(g) **the planned date when the electricity generated in the offshore wind farm to which the plan relates will be fed into the grid for the first time;**

(h) **description of the actions that the generator or the entrepreneurs belonging to the same capital group as the generator intend to undertake in order to ensure competitiveness between the suppliers of materials and services used for the purpose of construction or operation of the offshore wind farm together with the set of equipment for evacuation of power;**

(i) **description of the share of investment expenditure anticipated by the generator or entrepreneurs belonging to the same capital group as the generator to be incurred for the benefit of entities with their seat or branch in the territory of the Republic of Poland in the total expenditure on the construction or operation of the offshore wind farm together with the set of equipment for evacuation of power;**

(j) **description of anticipated initiatives concerning research and development as well as innovation which are related to the development of the offshore wind farm together with the set of equipment for evacuation of power;**

(k) **description of the actions on the territory of Poland, that the generator or the entrepreneurs belonging to the same capital group as the generator or their suppliers of services or goods used for the construction or operation of the offshore wind farm intend to undertake for the development of human resources with respect to competencies and improvement of professional skills needed for construction or operation of an offshore wind farm together with the set of equipment for evacuation of power;**

(l) **the results of the initial dialogue with authorities of sea ports and the operators of the terminals operating in these ports concerning the use of the sea ports for construction and operation of offshore wind farms together with the set of equipment for evacuation of power, taking into account the use of the sea ports located in the territory of the Republic of Poland;**

(m) description and estimated number of jobs that

- **the generator or the entrepreneurs belonging to the same capital group as the generator, and**
- **suppliers of materials or services used in connection with the construction or operation of the offshore wind farm**

intend to create on the territory of Poland in connection with the construction or operation of the offshore wind farm together with the set of equipment for evacuation of power;

The descriptions shall be prepared separately for the construction phase and for the operation phase of the offshore wind farm together with the set of equipment for evacuation of power.

The above-mentioned data will be available for both successful and unsuccessful tender participants.

Nevertheless, as set out in section 5 above, the number of successful and unsuccessful bidders in Polish offshore wind tenders might be insufficient to carry out a proper counterfactual impact evaluation. Therefore, depending on the actual amount of data collected during the tender rounds, the interim report will provide more clarity on the (counterfactual) evaluation methodologies to be used for the drafting of the final evaluation report.

6.2. Please provide information on the frequency of the data collection relevant for the evaluation. Are observations available on a sufficiently disaggregated level, that is to say at the level of individual undertakings?

Sources of data and frequencies of its collection have been listed in detail in sections 3 and 4 above. In those cases where data is required from individual firms, such data will be collected based on the Offshore Wind Act, that is a legal basis for the notified scheme.

6.3. Please indicate whether the access to the necessary data for conducting the evaluation might be hindered by laws and regulations governing confidentiality of data and how those issues would be addressed. Please mention other possible challenges related to data collection and how they would be overcome:

It is not expected that the access to the necessary data for conducting the evaluation might be hindered by laws and regulations governing confidentiality of data. Data on individual firms will be collected based on the Offshore Wind Act, that is a legal basis for the notified scheme. . In case any issues are encountered in this respect, Poland commits to introduce necessary amendments in respective laws and regulations to ensure access to data.Where appropriate, the body conducting the evaluation will receive access to individual (anonymised) data (for instance, as regards renewable generation and renewable capacities), whereas in other instances (e.g. projected impact of offshore wind farms on electricity prices), results of economic modelling will be made available.

6.4. Please indicate whether surveys of aid beneficiaries or of other undertakings are foreseen and whether complementary sources of information are intended to be used:

The exhaustive list of sources of data and information has been provided in sections 3 and 4 above. Additional involvement of aid beneficiaries and other undertakings is foreseen in cases where possible changes to the scheme will be introduced.

7. Proposed timeline of the evaluation

7.1. Please indicate the proposed timeline of the evaluation, including milestones for data collection, interim reports and involvement of stakeholders. If relevant, please provide an annex detailing the proposed timeline:

Auctions under the notified scheme are scheduled for years 2025 and 2027 (with possible additional auction in 2028). The timeline of auctions determines the frequency of data collection.

Prior to the first auction, the body conducting the evaluation will be selected.

An interim report will be delivered to the Commission in the course of 2026 (6 to 12 months after the results of the auction in 2025 are available) in order to assess the first results of the auction, in particular, to verify whether there are any difficulties with the data collection and to test the feasibility of the methodologies as described in section 5 of the evaluation plan.

If needs for modifications to the scheme are identified after the auction held in 2025, respective amendments will be introduced after consultation with the market participants and after notification to the European Commission (if required).

Depending on whether the last auction will be held in 2027 or 2028, in 2028 or 2029 data will be aggregated and the final evaluation report will be submitted.. In any case, the final evaluation report will be submitted to the Commission by the end of March 2029.

7.2. Please indicate the date by which the final evaluation report will be submitted to the Commission:

The final evaluation report will be submitted to the Commission at the latest by the end of March 2029.

7.3. Please mention factors that might affect the envisaged timeline:

As mentioned above the envisaged timeline may be affected by modified schedule of auctions.

8. The body conducting the evaluation

8.1. Please provide specific information on the body conducting the evaluation or, if not yet selected, on the timeline, procedure and criteria for its selection:

The body conducting the evaluation has not been selected yet. It will be selected specifically for the purpose of preparing the interim and final evaluation report.

The body conducting evaluation will be selected in an open transparent and non-discriminatory procedure in accordance with relevant UE legislation on public procurement.

The criteria for selection of the body conducting the evaluation will include requirements related to the following:

- **experience in carrying out evaluative research concerning schemes and instruments designed for the improvement of competitiveness and innovativeness of economy;**
- **experience in evaluation conducted within the framework of the Cohesion Policy or in evaluation required under State aid rules (i.e. EEAG or the GBER);**
- **experience in conducting evaluation in the energy sector;**
- **qualifications and experience of experts being members of the evaluation team in conducting evaluative research in the above mentioned areas, using the methods which will be used for the evaluation of the scheme.**

The evaluation of the scheme will be commissioned and financed by the Ministry of Climate and Environment.

8.2. Please provide information on the independence of the body conducting the evaluation and on how possible conflict of interest will be excluded during the selection process:

The evaluation task will be entrusted to the body (most likely, a commercial evaluator) that is both structurally and functionally independent from the Ministry of Climate and Environment or its successor.

8.3. Please indicate the relevant experience and skills of the body conducting the evaluation or how those skills will be ensured during the selection process:

Please refer to information provided in section 8.1 above.

8.4. Please indicate which arrangements the granting authority will make to manage and monitor the conduct of the evaluation:

The evaluation will be carried out by an independent entity selected by the Ministry of Climate and Environment based on objective criteria and in accordance with the Public Procurement Law. The evaluation shall be delivered on the basis of an agreement between the contractor and the Ministry of Climate and Environment. The agreement will stipulate obligations of the entity conducting the evaluation related to informing the contracting authority of the course of the evaluation and to presenting key elements of the evaluation process, such as the methodological report, research tools, and the final report, for consultation and approval. In addition, the agreement will provide for contractual penalties to be imposed on the contractor in the event of a default in due completion of the key stages of the evaluation.

8.5. Please provide information, even if only of an indicative nature, on the necessary human and financial resources that will be made available for carrying out the evaluation:

It is estimated that the evaluation will require continued commitment of human resources within entities responsible for data collection. These will be employees of the Ministry of Climate and Environment, the Energy Regulatory Office, the Ministry of Infrastructure, PSE S.A., Central Statistical Office, KOBiZE and Zarządca Rozliczeń S.A. It is not expected that new workplaces will need to be set up specifically for the purpose of the scheme's evaluation. Rather, obligations associated with the scheme's evaluation will constitute part of the present employees' duties.

The remuneration of the commercial evaluator will be established in the procurement procedure. It is estimated that it will exceed EUR 60,000.

9. Publicity of the evaluation

9.1. Please provide information on the way the evaluation will be made public, that is to say, through the publication of the evaluation plan and the final evaluation report on a website:

The evaluation plan and the final evaluation report will be published on the website of the Ministry of Climate and Environment (https://www.gov.pl/web/klimat)

9.2. Please indicate how the involvement of stakeholders will be ensured. Please indicate whether the organisation of public consultations or events related to the evaluation is envisaged:

The final evaluation report, drawn up by the contractor, will be circulated among respective bodies within the Polish public administration.

Furthermore, the final evaluation report will be subject to consultation with the entities related to the energy sector, including associations of entrepreneurs.

9.3. Please specify how the evaluation results are intended to be used by the granting authority and other bodies, for example for the design of successors of the scheme or for similar schemes:

The results of the evaluation will be used by the Ministry of Climate and Environment in deciding on the possible need to implement a successor scheme.

9.4. Please indicate whether and under which conditions data collected for the purpose or used for the evaluation will be made accessible for further studies and analysis:

Data collected for the purpose of the evaluation, excluding data constituting business secret and raw data from detailed research will be made available by the Ministry of Climate and Environment in accordance with the statutory rules on access to public information.

9.5. Please indicate whether the evaluation plan contains confidential information that should not be disclosed by the Commission:

The evaluation plan does not contain any confidential information.

10. Other information

10.1. Please indicate here any other information you consider relevant for the assessment of the evaluation plan:

n/a

10.2. Please list all documents attached to the notification and provide paper copies or direct internet links to the documents concerned:

'*Economic impact assessment of the offshore wind farms development on the Polish economy*' (November 8, 2019);

'*Economic analysis in the field of offshore wind energy – LCOE and CfD analysis & results*' (November 8, 2019).