# 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" for guidance on the drafting of an evaluation plan.

#### 1. Identification of the aid scheme to be evaluated

(1)	Title of the aid scheme:
	Support scheme for RES
(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) $\square$ a scheme notified to the Commission pursuant to Article 108(3) TFEU?
(3)	Reference of the scheme (to be completed by the Commission):

(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:

# The present scheme

The present scheme constitutes a prolongation of the scheme 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*) (<a href="https://ec.europa.eu/competition/state\_aid/cases/261495/261495\_1965594\_372\_2">https://ec.europa.eu/competition/state\_aid/cases/261495/261495\_1965594\_372\_2</a>. <a href="https://ec.europa.eu/competition/state\_aid/cases/261495/261495\_1965594\_372\_2">https://ec.europa.eu/competition/state\_aid/cases/261495/261495\_1965594\_372\_2</a>. <a href="https://ec.europa.eu/competition/state\_aid/cases/261495/261495\_1965594\_372\_2">https://ec.europa.eu/competition/state\_aid/cases/261495/261495\_1965594\_372\_2</a>. <a href="https://ec.europa.eu/competition/state\_aid/cases/261495/261495\_1965594\_372\_2">https://ec.europa.eu/competition/state\_aid/cases/261495/261495\_1965594\_372\_2</a>. <a href="https://ec.europa.eu/competition/state\_aid/cases/261495/261495\_1965594\_372\_2">https://ec.europa.eu/competition/state\_aid/cases/261495/261495\_1965594\_372\_2</a>.

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

<sup>&</sup>lt;sup>2</sup> SWD(2014)179 final of 28.5.2014.

2016 and initially support was to be granted until mid-2021. The scheme has been amended on a number of occasions which included its prolongation until the end of 2021 and in November 2021 the Commission cleared its prolongation for the years 2022-2027<sup>3</sup>.

## In recitals 11-12 of the decision in case SA.64713 the Commission noted:

"(11) Poland submitted the evaluation report of the RES scheme on 6 August 2021. The Commission considers that the evaluation report complies with the approved evaluation plan but notes that the report does not apply counterfactual impact evaluation methodologies to assess the direct effects of the aid measure.

(12) In view of the prolongation of the RES scheme, Poland committed to evaluate the prolonged scheme based on the same evaluation plan. However, Poland will update and improve the plan by including an appropriate counterfactual impact evaluation (hereby comparing the behaviour of the aid beneficiaries with a proper control group of undertakings that did not benefitted from the aid) in order to better assess the direct effects of the prolonged scheme. Poland will submit to the Commission an updated evaluation plan within nine month of the date of the present decision."

Since the evaluation report of the scheme SA.43697 has been already assessed by the Commission and in view of the fact that the JRC has provided its feedback, there is no need to discuss the conclusions of the evaluation report.

Following the conclusions of the evaluation report, the scheme has been amended in order to better facilitate the development of RES in a cost-effective way. One of setbacks of the previous auction structure was the fact that the volume of energy to be supported in the auctions was announced one year in advance only, e.g. ordinance of the Council of Ministers adopted in 2020 set the thresholds of the energy volume that may be sold via auctions (and consequently, to become subject of support) in 2021. Consequently, the recommendation was to prepare the schedule of the volume of energy to be offered in a multiannual perspective, in order to enable more efficient investment planning for entities that are yet to participate in the competitive bidding process. Therefore, the Council of Ministers has been empowered to issue an ordinance setting the minimum thresholds for both volume and the net worth of energy that is to be offered on auctions in a multiannual perspective, i.e. 2022-2027.

Additionally, a number of modifications in the auction design are contemplated to further facilitate RES deployment<sup>4</sup>. The first change refers to loosening the sanction regime concerning a biogas-beneficiary obligation to deliver 85% of the energy volume indicated in the winning auction offer. Second, the obligatory lead

Case SA.64713 (2021/N) – Poland - Prolongation of the support scheme for RES; <a href="https://ec.europa.eu/competition/state\_aid/cases1/202150/SA\_64713\_4006A07D-0000-C462-9BF3-85AB353809C5">https://ec.europa.eu/competition/state\_aid/cases1/202150/SA\_64713\_4006A07D-0000-C462-9BF3-85AB353809C5</a> 29 1.pdf

To this end evidence and guidelines accumulated by AURES II are taken into consideration (http://aures2project.eu/).

times and the maximum allowed age of components used in the installations developed by successful bidders could be extended to provide more flexibility in the development process. Third, a separate auction basket for RES installations integrated with storage facilities could be introduced.

The present evaluation plan mostly relies on the evaluation plan developed for the scheme SA.43697, however, in line with the JRC recommendations, it has been improved to include an appropriate counterfactual impact evaluation. In particular, recommendations set out in the report "Energy State Aid: A Toolbox on Counterfactual Impact Evaluation" have been taken into consideration.

As regards existing *ex ante* assessments, on the national level the prolongation of the scheme SA.43697 was introduced by the Act of 17 September 2021 amending the act on the renewable energy sources and certain other acts (<a href="https://isap.sejm.gov.pl/isap.nsf/download.xsp/WDU20210001873/O/D20211873.pdf">https://isap.sejm.gov.pl/isap.nsf/download.xsp/WDU20210001873/O/D20211873.pdf</a>). Legislative works on this act involved a development of *ex-ante* Impact Assessment (available here: <a href="https://legislacja.rcl.gov.pl/docs//2/12343600/12766450/12766451/dokument50274">https://legislacja.rcl.gov.pl/docs//2/12343600/12766450/12766451/dokument50274</a> 3.zip ). The Impact Assessment focused on the following matters:

- identification of the issue to be addressed;
- the recommended solution, including the planned intervention tools, and the expected outcome;
- the analysis of how the issue has been addressed in other countries, in particular OECD/EU member countries;
- list of entities affected by the prospective legislation;
- information on the scope, duration and summary of the public consultation;
- impact on public finance;
- impact on competitiveness and entrepreneurship, including the functioning of businesses, and on families, citizens and households;
- change in regulatory burden (including information obligations) resulting from the proposed legislation;
- impact on labour market.

## **Other schemes**

In respect of other State aid schemes, 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\_ 133 2.pdf) – the scheme is not available for new beneficiaries any more, however support will be paid out in subsequent years to those beneficiaries who were granted the right to support by mid-2016;

- SA.46100 (2017/N) Polish Capacity Mechanism (<a href="https://ec.europa.eu/competition/state\_aid/cases/272253/272253\_1977790\_">https://ec.europa.eu/competition/state\_aid/cases/272253/272253\_1977790\_</a>
   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 (<a href="https://ec.europa.eu/competition/state\_aid/cases1/201930/278658\_2084476">https://ec.europa.eu/competition/state\_aid/cases1/201930/278658\_2084476</a>
  \_\_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.

On 20 May 2021 the Commission adopted a decision not raise objections in respect of the scheme SA.55940 (2021/N) – Poland – Offshore Wind scheme (<a href="https://ec.europa.eu/competition/state\_aid/cases1/202126/293712\_2289315\_113\_2">https://ec.europa.eu/competition/state\_aid/cases1/202126/293712\_2289315\_113\_2</a> .pdf). An evaluation plan has been developed for this scheme, however the first interim report will be available not earlier than in 2026.

## 2. Objectives of the aid scheme to be evaluated<sup>5</sup>

**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:

### General information:

In accordance with the Act of 20 February 2015 on renewable energy sources ("the RES Act), the support scheme is based on auctions. It is addressed primarily to new and modernized installations. Additionally, installations receiving support under the green certificates scheme (SA.37345) may receive an opportunity to take part in the auction and migrate to the auction scheme (with some exceptions stipulated in the RES Act). In any case, the total period of support under both cannot exceed determined period of support which equals amortization time.

Auctions for new and existing installations serve different purposes. Procurement of electricity from new installations leads to deployment of new RES and directly

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.

contributes to the EU climate policy objectives. Auctions for existing installations stabilize on the one hand the level of support for those operators who are interested in acquiring the right to receive support in fixed amount and on the other hand costs of support for end users (the suppliers know in advance the amount of RES surcharge to be included in the electricity bill; due to volatility of support under green certificates scheme costs of financing of the scheme passed on end consumers varied significantly depending on the price of certificates).

For groups of installations mentioned above the RES Act foresees organizing separate technology-specific auctions:

- Biogas, biomass, waste incineration plants;
- Hydro, bioliquids, geothermal;
- Agricultural biogas;
- Onshore wind and PV;
- Hybrid installations.

Separate auctions are held for the installations up to 1 MW and above 1 MW in each of the categories referred to above. This division relates equally to auctions for new installations and for installations migrating from a scheme based on green certificates.

For each RES technology (sometimes also in respect of capacity ranges) reference price is established, i.e. the maximum price per MWh, which can be submitted in the auction.

#### Qualification to the auction:

Producers intending to participate in an auction are subject to formal evaluation carried out by the President of the Energy Regulatory Office on the basis of documents constituting annexes to required application documentation. In particular, the applicants are asked to provide proof that the installation secured grid connection and that the relevant authorities issued the construction permit (which is granted only after the decision on environmental conditions has been adopted). The investors are obliged to provide collateral corresponding with the installed capacity of the installation (the collateral is withheld in case the project is not implemented in due time or in the scope defined in the auction bid).

# Auction:

The auctions are conducted by the President of ERO. The participants place auction bids in which they indicate volume of electricity and the expected level of support per MWh (strike price). The bids are capped at the reference price<sup>6</sup> and are not subject to any negotiations.

The reference price is set based on LCOE of respective RES technologies.

To make sure that sufficient competitive pressure is exerted in every auction, there is a cap, where no more than 80% of volume (in MWh) of RES electricity submitted to the auction can receive support. If 80% of the electricity volume submitted exceeds the allocation stemming from the volume determined in law, this volume will constitute a binding constraint. The 80% cap is 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 80% of the volume submitted via auction bids).

Support under the scheme may be granted no later than 30 June 2027 (the day of settlement of the auction is decisive in this respect).

#### The projects:

In the case of new installations it is required that the devices for generating electricity used in these installations have been manufactured not later than 42 months (in the case of onshore wind not later than 33 months and in the case of PV – not later than 24 months) before the date of generation electricity in the plant for the first time. This arrangement has been introduced to ensure that the projects submitted to the auction for new installations will be based on a sufficiently modern technologies. It also allows to maintain equal competitive conditions for all operators.

# Form of support:

Support is paid for the period of 15 years and only in respect of the volume set out in the auction bid.

Support takes the form of a two-side contract for difference. It thus constitutes 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 is 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 their revenues, the beneficiaries are not be able to benefit from very high electricity prices. When the wholesale market price exceeds the bidding price, the generators are 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).

The support for installations of capacity of 500 kW and above is granted in the form of variable top-up premium (CfD). The operators of installations below 500 kW are not obliged to sell electricity on the market. They can sell electricity to the obliged vendor who will pay the remuneration settled in the auction (therefore in

competitive bidding process – effectively aid takes form of feed-in tariff, only its amount is not established administratively). The obliged vendor will subsequently make settlement with Zarządca Rozliczeń S.A.

The scheme is financed from proceeds from the RES surcharge imposed on every MWh of consumed electricity and collected by respective Distribution System Operator or Transmission System Operator from the entities listed in Article 95 (3) of the RES Act. The amount of RES surcharge is determined annually by the President of ERO.

#### Obligatory period for the completion of the project:

Successful bidders have a specific time for the completion of the installation: up to 42 months (in the case of onshore wind - 33 months and in the case of PV - 24 months). The introduction of these maximum periods to complete the projects aims to ensure that those who made successful bids in the auction, implement their projects in a reasonable time horizon allowing Poland to achieve defined policy objectives.

## Balancing responsibilities:

Installations with a total installed capacity of less than 500 kW are exempted from standard balancing responsibilities.

# Lack of support in periods of negative electricity prices:

Support for the installations with an installed capacity of not less than 500 kW will not be granted in the periods in which there were negative electricity prices. In particular, the support will not be paid with respect to the amount of electricity that has been generated in the hours for which the average electricity prices on power exchange were lower than 0 (zero) per 1 MWh for at least six consecutive hours.

In order to identify periods when support is not granted, spot transactions are considered.

#### Cumulation:

Any investment aid reduces the level of the CfD. Investment aid needs to be expressed as gross grant equivalent. Declaration regarding investment aid constitutes an attachment to the auction bid.

Intended categories of beneficiaries (size, sectors, location, indicative number):

The scheme is addressed to both SMEs and large enterprises, regardless of their location. It is estimated that up to several hundreds of undertakings annually will benefit from the scheme.

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

The objective of the scheme is to incentivize deployment of RES in Poland to achieve objectives set out in the European Green Deal, Fit for 55 and REPowerEU.

In points 115 and 116 of the EEAG the Commission noted that:

"(115) In particular while the EU ETS and CO2 taxes internalise the costs of greenhouse gas ('GHG') emissions, they may not, yet, fully internalise those costs. State aid can therefore contribute to the achievement of the related, but distinct, Union objectives for renewable energy. Unless it has evidence on the contrary, the Commission therefore presumes that a residual market failure remains, which can be addressed through aid for renewable energy.

(116) In order to allow Member States to achieve their targets in line with the EU 2020 objectives, the Commission presumes the appropriateness of aid and the limited distortive effects of the aid provided all other conditions are met".

Although in recent months electricity prices have reached record levels, thus increasing expected RES viability, the Russian aggression on Ukraine has created major uncertainties on commodities markets and invoked inflation not observed for decades. These factors translate to higher financing costs and reduced access to debt financing, particularly for companies with less resources than established players. By offering predictable stream of revenues from the CfD (at the expense of benefits from soaring electricity prices) the scheme at hand is a measure to ensure access to external financing to all market participants.

**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:

Although in recent years much has been done for the development of the RES technologies in Poland, the Polish electricity generation sector still heavily relies on fossil fuels, in particular coal and lignite. In consequence, in 2020 an average CO<sub>2</sub> emissions per MWh of electricity in Poland amounted to approx. 0.745 tCO<sub>2</sub><sup>7</sup>. Electricity generation in Poland results also in relatively high emissions of sulphur oxides, nitrogen oxides and dust. At the same time, the EU has assumed that by 2030 the bloc should cut emissions by at least 55% below 1990 levels.

The objective of the scheme is to further foster reductions of GHG emissions in the Polish economy and to contribute to energy security through deployment of additional low-carbon generation capacity.

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

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**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<sup>8</sup>:

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 non-steerable renewables took place relying on market incentives alone (without aid), the same issues as described below would arise.

First, generation of the most mature RES technologies (i.e. onshore wind and PV) still cannot be fully planned and controlled. Thus, their increased presence in the Polish energy mix 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, most mature RES technologies are characterized by nearly zero marginal costs, thus in principle their operation 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 electricity prices, but it is still expected that RES 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 as of 2025 capacity payments will have to be phased out for installations not satisfying the EPS 550.

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.

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

- **2.4.** Please indicate (a) the annual budget planned under the scheme, (b) the intended duration of the scheme<sup>9</sup>, (c) the aid instrument or instruments and (d) the eligible costs:
  - a) Annual budget planned under the scheme

The maximum budget assigned to the prolonged scheme over six years of its operation amounts to PLN 43.85 billion.

## b) Intended duration of the scheme

The scheme assumes that auctions may be settled by the end of June 2027.

# c) The aid instruments

Support is paid for the period of 15 years and only in respect of the volume set out in the auction bid.

Support takes the form of a two-side contract for difference. It thus constitutes a variable market premium on top of market price. The difference payment is 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 their revenues, the beneficiaries are not be able to benefit from very high electricity prices. When the wholesale market price exceeds the bidding price, the generators are 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).

The support for installations of capacity of 500 kW and above is granted in the form of variable top-up premium (CfD). The operators of installations below 500 kW are not obliged to sell electricity on the market. They can sell electricity to the obliged vendor who will pay the remuneration settled in the auction (therefore in competitive bidding process – effectively aid takes form of feed-in tariff, only its amount is not established administratively). The obliged vendor will subsequently make settlement with Zarządca Rozliczeń S.A.

#### 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 RES that cannot be recouped from the revenues from the electricity market.

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.

**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 organised for separate or multi technology-specific baskets (see: section 2.1 above) and competition will be organized on a project versus 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 budget will be allocated separately for each auction basket based on the estimated project pipeline.

The participants will place auction bids in which they will indicate volume of electricity and the expected level of support per MWh (strike price). The bids are capped at the reference price and are not subject to any negotiations.

To make sure that sufficient competitive pressure is exerted in every auction, there is a cap, based on which no more than 80% of volume (in MWh) of RES electricity submitted to the auction may receive support. If 80% of the submitted electricity volume exceeds the allocation stemming from the volume determined in law, this volume will constitute a binding constraint. The 80% cap is 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 80% of the volume submitted via auction bids).

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 in particular:

- 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 construction permit (which is granted following the adoption of the decision on environmental conditions).

In addition, the investors will be obliged to provide collateral corresponding with the installed capacity of the installation (30 PLN/kW for existing migrating installation or 60 PLN/kW for new installations).

#### **Concluding:**

 prospective beneficiaries are admitted to the auctions based on objective pre-qualification criteria, constituting equalisation of minimum formal requirements among projects to submit an offer;

- 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 in terms of maximum capacity multiplied by the respective reference prices, resulting in maximum value of possible support to be awarded;
- 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 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	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 RES (total and per project)? What is the amount of renewable electricity produced by the awarded projects? What is the land area used (total and per project)?	Number of new installations Installed capacity Amount invested Amount of renewable electricity produced by the successful projects Land area used for deployment of RES investments	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, 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 companies which developed RES without support)	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 <sup>10.</sup> 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
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 (based on information sourced from suppliers)	Descriptive statistics
	8. How does the scheme impact the levels of CO <sub>2</sub> , NO <sub>x</sub> , SO <sub>x</sub> 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	Counterfactual impact evaluation, data-based if feasible, otherwise, theory based impact evaluation

 $<sup>^{10}\,</sup>$  The supply curve aggregates all auction bids. It shows how much RES investment will be carried out depending on the auction clearing price.

9. What is the expected impact of the scheme on the gross value added in the economy <sup>11</sup> ?	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 RES and to the aid granted  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.
			Counterfactual impact evaluation, data-based if feasible, otherwise, theory based impact evaluation
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 <sup>12</sup> 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

11 Due to the timeline of evaluation, only part of the construction phase may be taken into consideration. Efficient and less efficient bidders could be determined by analysing the auction bids.

<sup>12</sup> 

	13. Is there an adverse effect on the alternative users of the same resources?	Land areas used for deployment of renewables	Ministry of Infrastructure, Ministry of Agriculture and Maritime Economy	Qualitative assessment, counterfactual impact evaluation
	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.), counterfactual impact evaluation
3.Appropriateness and proportionality of the aid	15. Is the design of the scheme optimal compared to support schemes in other EU countries (e.g. decentralized vs. centralized model, different support periods, scope of investment carried out by the State and by the aid beneficiary)	Cost of MWh of electricity produced in RES 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. Was the aid appropriately and timely adjusted to ensure proportionality? Did the reference 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
	17. Was the level of aid proportionate?	Proportionality stems directly from the design of the support system, as the auction scheme – equipped with adequate tools enabling exerting competitiveness – is to be construed as proportionate <i>per se</i>	Beneficiaries/ President of ERO	Case studies, if possible: counterfactual evaluation

18. What was the impact of the scheme on the cost of capital?	Cost of debt and equity (expressed in %)	Beneficiaries, financial institutions	Case studies, if possible: counterfactual evaluation
19. 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, theory based impact evaluation
20. 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
21. 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 RES (total and per project)? What is the amount of renewable electricity produced by the awarded projects? What is the land area used (total and per project)?	Number of new installations Installed capacity Amount invested Amount of renewable electricity produced by the successful projects Land area used for deployment of RES investments	President of ERO (data available based on auction results)	After every tender	Firm level	Aid beneficiaries
4.	What were the results of auctions carried	Number of participants in each auction,	President of ERO (data available based on auction results)	After every tender	Tender level	All tender participants

	out under the scheme?	number of bids submitted, number of winning bids for each auction				
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 companies which developed RES without support)	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	Jobs (FTE)	Central Statistical Office of Poland, aid beneficiaries (based on information	After every tender	National level	Aid beneficiaries, control group, if available

	direct beneficiaries of aid?  How many jobs are to be created in the supplier industry?		sourced from suppliers)			
8.	How does the scheme impact the levels of CO <sub>2</sub> , NO <sub>x</sub> , SO <sub>x</sub> 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	After every tender	National level	Electricity sector in Poland
9.	What is the expected impact of the scheme on the gross value added in the economy?	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 RES and to the aid granted 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 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?	Land areas used for deployment of renewables	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 support schemes in other EU countries (e.g. decentralized vs. centralized model, different support periods, scope of investment carried out by the State and by the aid beneficiary)	Cost of MWh of electricity produced in RES installations	Ministry of Climate and Environment, publicly available data on support granted in other Member States	After every tender	Data gathered on national level, data regarding schemes in other MS	Sector data
16.	Was the aid appropriately and timely adjusted to ensure proportionality? Did the reference 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	TSO
17.	Was the level of aid proportionate?	Proportionality stems directly from the design of the support system, as the auction scheme – equipped with adequate tools enabling exerting competitiveness – is to be construed as proportionate per	Beneficiaries/ President of ERO	After every tender	National level	Tender-specific data; LCOE estimates

		sefor each category of tender				
18.	What was the impact of the scheme on the cost of capital?	Cost of debt and equity (expressed in %)	Beneficiaries, financial institutions	After every tender	National level	Tender-specific data
19.	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
20.	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
21.	Did tenderers behave strategically, and what effects did strategic tenders have on the intensity of competition and the level of support offered?	support costs	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:

The proposed indicators allow to carry out a comprehensive *ex-post* evaluation of an auction scheme, as set out in section 4.1. of the report "*Energy State Aid: A Toolbox on Counterfactual Impact Evaluation*". In particular, the following constituent analyses will be conducted:

- The comparison of auction results with policy benchmarks;
- Comparison relative to a breakeven benchmark;
- Comparison relative to a deployment benchmark;
- Market concentration;
- Collusion risk.

# 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)<sup>13</sup>:

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 RES, the additional renewable capacity created, 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 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 some of the tenders (e.g. hydro or biogas) limits however the range of counterfactual impact evaluation methodologies that can likely be used to assess the effectiveness of the scheme. It should be also noted that since some RES projects are characterized by long lead times (for instance, hydro – due to extensive environmental procedures), 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, at least for some of the tenders 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 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

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non-aided RES installations using the same technology. In order to produce reliable results, the following elements should be considered:

- o 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 some of 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 principle, 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 RES installations based on market revenues. In case the control group consisting of Polish undertakings is limited, 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.
- **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, renewable projects to be developed may be located in different sites with different characteristics (for instance, different wind conditions; different water flows, 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. <sup>14</sup> 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. Part of data are 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.

As set out in section 5 above, the number of successful and unsuccessful bidders in the 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.

Moreover, PL will take stock of the lessons learnt from the evaluation report of the original scheme. In fact, during evaluation of the original scheme some data were aimed to be collected via voluntary polling amongst the beneficiaries, as there was no specific legal basis for their collection throughout relevant processes. Nevertheless, in some cases the approach turned out to be moderately ineffective, especially in relation to vulnerable enterprise data like cost of capital or job creation-related data. However, it should be underlined that the formula of the auction support system exerts competition among generators, each of whom may have different expectations in terms of cost of capital or return on investment. It should also be remembered that large companies benefit from the scale effect as well as cost optimization measures including labour costs for example. Therefore, there are significant discrepancies in terms of the above-mentioned context, making it challenging to propose standardized methodology, allowing for meaningful comparison of notions that are subjective to certain extent.

With that being said, the idea is nevertheless to explore possibilities of expanding data collection for this purpose via *e.g.* legislative initiative or establishing systematic cooperation with market participants in these matters.<sup>15</sup>

In this respect, Poland has recently pursued innovative model of cooperation in a form of sectoral agreements, bringing together different technologies RES stakeholders in order to continuously address outstanding issues of common interest, therefore the above-mentioned challenges are to be referred for discussions within these fora agendas.

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.

Furthermore, as both indicated above and in different sections, there are certain challenges identified concerning availability of data pertaining to reliable counterfactual scenario. The ideal situation would envisage referring to data of RES producers who, despite fulfilling eligibility criteria, opted out from participating in the scheme. However, public bodies do not have legally substantiated access to track such initiatives, therefore availability of data is in this respect is very limited. Therefore, as indicated above, the interim report will provide more clarity whether *e.g.* voluntary polling will be efficient enough to draw up reliable conclusions or rather horizontal legislative initiative might be required, if viable.

Further to that, correlation of certain data with the ones relating to different sources, *i.a.*, impact of the scheme on the gross value added in the economy or comparison with the schemes designed in other Member States might bear certain margin of inaccuracy, as these areas do not have clearly quantifiable "distilled" nexus amongst each other.

- **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 supplementary data are required from individual firms, such data will be collected throughout the evaluation activity.
- **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. 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 RES on electricity prices), results of economic modelling will be made available.
  - Regarding practical challenges related to data collection and the possible ways to address them, they are referred to in the answer to the question 6.1.
- **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 2022-2027. The timeline of auctions determines the frequency of data collection.

An interim report will be delivered to the Commission in the course of 2025 (6 to 12 months after the results of the auctions settled in years 2022-2024 are available) in order to assess the results of the auctions, 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 this evaluation plan.

The body conducting the evaluation will be selected in 2024.

If needs for modifications to the scheme are identified after the auctions held in years 2022-2024, respective amendments will be introduced after consultation with the market participants and after notification to the European Commission (if required).

The final evaluation report will be submitted to the Commission by the end of August 2028.

**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 August 2028.

**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. (C)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.

# 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 (<a href="https://www.gov.pl/web/klimat">https://www.gov.pl/web/klimat</a>)

**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:

n/a