

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 651/2014¹ 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:

SA.102385 – State aid scheme for the decarbonisation of industry from the Recovery and Resilience Plan (component 4) – Slovakia

SA.102388 – State aid scheme for the decarbonisation of industry financed from the Modernization Fund

(2) Does the evaluation plan concern:

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:

(a) A brief description of the study's objectives, methodologies used, results and conclusions

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.

The Slovak authorities have realised preliminary stakeholder consultations on expression of interest in implementation of decarbonization projects.

No previous bidding procedure was held, no industrial decarbonization has been supported by public funding previously.

Preliminary stakeholder consultations:

The Slovak authorities have realised preliminary stakeholder consultations on expression of interest in implementation of decarbonization projects. The preliminary stakeholder consultations (open to all ETS stakeholders) had a form of submission of a preliminary investment proposal stating a brief description of the investment, estimation of CAPEX, CO₂ reduction, preliminary timeline of the investment. The purpose of the preliminary collection was to estimate the potential of all decarbonisation investment projects for various sectors, including industry to streamline public funded support to the relevant areas to meet the CO₂ reduction targets.

The examples of potential reference projects are as follows:

- **Installation of industrial waste heat recovery technologies to produce electricity based on Organic Ranking Cycle principles**
- **Installation of industrial waste heat recovery technologies for input material preheating (substrate, semi products, etc.) resulting in energy efficiency increase / substantial decrease or elimination of fossil fuels**
- **Replacement of production technologies joint with changes in the production process to avoid GHG emissions directly produced (e.g. in chemical and building materials industries industry)**
- **Exchange of existing compressor units, which consist of a combustion turbine and a rotary turbocharger, for new compressor units, consisting of an electric drive and a new turbocharger**
- **Replacement of solid fuel based powered production process by electrified technology thus eliminating direct GHG emissions (including replacement of solid fossil fuels based manufacturing of basic metals by electrified processes)**
- **Replacement of natural gas based hydrogen by electrolysis**

Results from realised preliminary stakeholder consultations were as follows:

The average duration of industrial decarbonisation projects realisation stated by project proponents was 2 years, the maximum project duration is 4 years, minimum 6 months. The average investment costs of industrial decarbonisation projects was EUR 60 mil. The average annual GHG reduction was 250 000 t CO₂ eqv, hence the average investment costs per reduced ton of CO₂eqv was calculated EUR 240.

The sectors participating in the preliminary analysis were manufacture of chemicals and chemical products, manufacture of other non - metallic mineral products, manufacture of basic metals, manufacture of paper and paper products, producing the largest amounts of GHG emissions in Slovakia.

The schemes are directed at activities under EU ETS sector, based on this following structure of facilities falling under EU ETS in Slovakia and the relevant sectors are as follows:

- **Manufacture of food products**
- **Manufacture of beverages**
- **Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials**
- **Manufacture of paper and paper products**
- **Manufacture of coke and refined petroleum products**
- **Manufacture of chemicals and chemical products**
- **Manufacture of basic pharmaceutical products and pharmaceutical preparations**
- **Manufacture of rubber and plastic products**
- **Manufacture of other non-metallic mineral products**
- **Manufacture of basic metals**
- **Manufacture of motor vehicles, trailers and semi-trailers**
- **Manufacture of furniture**

The Slovak authorities have prepared 6 reference projects for decarbonisation of industry and the approach to funding gap calculations, demonstrating the existence of a financing gap calculation of costs and revenues.

(b) Specific challenges that the evaluations and studies might have faced from a methodological point of view are as follows:

- **Considering the time period, a funding gap calculation as an attachment to the application is foreseen to differ to reference projects calculation attached to the scheme approval.**
- **Given the invasion of Russia to Ukraine, a new geopolitical situation, covid outbreak and its impact on macroeconomic changes.**
- **WACC calculations were prepared up to July of 2022. Given the circumstances of constant changes on the market, WACC calculations result needs to be a subject of change and needs to be updated with the grant application submission in order to be correct from a methodological standpoint.**

2. Objectives of the aid scheme to be evaluated³

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:

The context of Slovak industrial sector:

³Beyond 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.

Slovakia ranks among the Member States with the highest share of GHG emissions from industry, largely due to ageing industrial technologies and energy intensity of industry.

Industry contributes significantly to the total emissions of the Slovak Republic⁴; therefore, its participation is essential in meeting the decarbonisation target by 2030 with a vision of carbon neutrality by 2050⁵. It should be stressed that the share of industry in total GDP in the Slovak Republic is one of the highest in the EU.

Industrial production and the use of fossil fuels in industry is the source of 41% of all emissions produced in Slovakia, which is the highest figure among the EU countries⁶. The EU ETS sector accounts for about half of the total GHG emissions in the Slovak Republic and about 90% of GHG emissions in industry (emissions from industrial processes and fuel combustion) come from the EU ETS.⁷

The purpose of the State Aid Scheme for the decarbonization of industry from the Recovery and Resilience Plan ('RRP') (component 4) and the State Aid Scheme for the decarbonization of industry from the Modernisation Fund ('MoF') is to support environmental investments in the form of reducing greenhouse gas emissions in the sectors of industrial production in a cost-effective manner in accordance with the national goals of the Integrated National Energy and Climate Plan for 2021 - 2030 and the Low Carbon Development Strategy of the Slovak Republic until 2030 with a view to 2050.

The aim of the schemes is to contribute to reducing greenhouse gas emissions by supporting industrial decarbonization projects leading to primary/ final energy savings and introducing the use of innovative environmental technologies in industrial production, thus directly supporting the achievement of national, European and global climate targets under the Paris Agreement.

The extent of the emission reductions compared to the reference period should reach at least 1,233,000 ton CO₂eqv on an annual basis for the RRP and approximately 3,000,000 ton CO₂eqv on an annual basis for the MoF.

Beneficiaries:

Eligible beneficiaries of the aid are undertakings pursuant to Article 107(1) TFEU, i.e. entities engaged in an economic activity and carrying out activities falling under Annex 1 to the Trading Act may be the beneficiary of the aid (ETS sector).

Categories of the beneficiaries:

- a) Micro, small and medium-sized enterprises ('SME')**
- b) Large enterprises—are enterprises that cannot be classified as small and medium-sized enterprises.**

⁴ Source: European Commission, Country Report: Slovakia 2018, 2019, 2020

⁵ Source: Integrated National Energy and Climate Plan for 2021–2030, Low Carbon Development Strategy of the Slovak Republic until 2030 with a View to 2050

⁶ Source: Eurostat

⁷ Source: verified emission data under the EU ETS directive and Effort Sharing Decision

The beneficiary of the aid is an undertaking which is a Slovak or foreign natural or legal person with its registered office in the Slovakia Republic and which operates under Section 2(2) of the Commercial Code as a person registered in the Business Register of the Slovak Republic.

The aid applicant is the beneficiary himself who submits the grant application. The grant application is made on the basis of a call for submission of grant applications, which specifies the conditions for granting of the aid.

All regions in the Slovak Republic (Bratislava Region, Western Slovakia, Central Slovakia, Eastern Slovakia) are eligible for aid under this scheme.

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 measures of the schemes shall lead to lower greenhouse gas emissions in enterprises, reduced energy losses and a higher uptake of innovative environmental technologies in industrial production. The decarbonisation shall have a lasting impact on the environment and air quality in Slovakia.

The investments shall secondarily strengthen the competitiveness of Slovak industry and secure jobs at the local level.

The measures shall contribute to fulfil various strategic goals and recommendations as following:

- **Support investments into environmental protection in the form of reduction of greenhouse gas (hereinafter ‘GHG’) emissions in industrial sectors in a cost-effective manner in accordance with the national objectives of the Integrated National Energy and Climate Plan for 2021–2030 (hereinafter also ‘NECP’), and the Low Carbon Development Strategy of the Slovak Republic until 2030 with a View to 2050.**
- **Meet the EU’s climate objectives within the meaning of Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 (‘the European Climate Law’).**
- **The Country Specific Recommendation conveyed to Slovakia in 2020, on the need to “focus investment on the green digital transitions, in particular on clean and efficient production and use of energy and resources” (Country Specific Recommendation 3/2020).**
- **The Commission staff working document, namely: “Analysis of the recovery and resilience plan of Slovakia”⁸.**
- **Overview of Slovakia objectives, targets and contributions under Regulation EU) 2018/1999**

⁸SWD(2021) 161 final, from Brussels, 21.6.2021. More detail can be found in Table 2: Overview of Slovakia objectives, targets and contributions under Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action, https://ec.europa.eu/info/system/files/com-2021-339_sw_d_en_0.pdf

of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action.

As a result of the scheme implementation, the emission reductions compared to the reference period should reach at least 1,233,000 ton CO₂eqv on an annual basis for the RRP and 3,000,000 ton CO₂eqv on an annual basis for the MoF. Furthermore, the amount of GHG /in CO₂eqv emitted by the undertakings supported under the scheme will decrease by at least 30% CO₂eqv compared to the reference period⁹ in case of RRP and by at least 10,000 ton CO₂eqv on an annual basis for the MoF.

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 scheme¹⁰:

The scheme aims to eliminate negative side effects, however there might be not all of them fully addressed as follows:

1. **Negative externalities arising from greenhouse gas emissions are not fully reflected in the cost of GHG emissions. Therefore, consumers do not take into account the full costs when consuming goods and services that generate GHG emissions.**
2. **Significant uncertainty concerning future market developments related to energy prices, also in cases for renewable energy investments where electricity revenues are not coupled to input costs.**
3. **As a result of the implementation of projects within the framework of the scheme, other side effects may occur: further induced investments (construction works, etc.), changes in requirements for employees and an increased need for employees upskilling.**

2.4. Please indicate (a) the annual budget planned under the scheme, (b) the intended duration of the scheme¹¹, (c) the aid instrument or instruments and (d) the eligible costs:

a) **The estimated total amount of aid to be granted under the RRP is EUR 357,343,413, under the MoF it is EUR 750,000,000 while the annual budget planned under the scheme does not annually exceed EUR 150 mil.**

b) **he RRP scheme is expected to be implemented in duration of years 2022–2026, the MoF scheme shall be implemented between 2022 - 2030** T

c) **he aid instrument: grant / non-repayable financial contribution** T

d) **he eligible costs shall include in general:** T

⁹ Annex is prepared based on the Annex to the Council Implementing Decision, as revised and agreed by the Financial Counsellors Working Party, based on the Commission Proposal COM (2021) 339 on the approval of the assessment of the recovery and resilience plan for Slovakia

¹⁰ Examples of negative effects are regional and sectorial biases or crowding out of private investments induced by the aid scheme.

¹¹ 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.

- **capital expenditure on tangible and intangible assets.**
- **investments in tangible assets represent expenditure on the acquisition of tangible assets such as:**
 - **Design and engineering activities,**
 - **Investments in site/land preparation and release (induced investments),**
 - **Building and construction**
 - **Plant and machinery/ equipment (technologies)**
 - **Supervision**

The amount of aid and eligible expenditures is determined by means of a competitive bidding procedure.

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:

Aid under this scheme is provided in accordance with the rules set out in the System for the Implementation of the Recovery and Resilience Plan of the Slovak Republic and state aid related legislation (e.g. Act No 358/2015 Coll. on the regulation of certain relations in the field of state aid and minimum aid, Act No 523/2004 Coll. on budget rules of public administration, please refer to the section B, Legal basis of the schemes).

(a)

The best cost-effectiveness of the measure is ensured through application of competitive bidding procedure (“the best value for money”). The competitive bidding process is open to all eligible beneficiaries in order to allow for a cost-effective allocation of the aid and to reduce the number of distortions of competition. The aid limited to the minimum needed for carrying out the aided project or activity (the maximum aid intensity and the maximum aid volume requested) is ensured by competitive bidding, the preliminary collection of projects indicates that the amount of funding for projects interested in participation far exceeds the given allocation for both schemes

The competitive bidding procedure leverages on the better cost-effectiveness of the measure, resulting in a project ranking from the lowest ‘amount of grant requested from the RRP in EUR per tonne of CO₂eqv emissions saved (...)’ to the highest ‘amount of grant requested from the RRP/MoF in EUR per tonne of CO₂eqv emissions saved (...)’ in accordance with the conditions set out in both schemes under the “Principal criterions” mentioned below.

The application of the selection criteria determines the order of grant applications according to which the grant applications are approved up to the amount of the allocation available for the call.

Two types of selection criteria apply under the RRP/MoF conditions:

- **the principal criterion, and**

- differentiating criteria—applicable only if, in the order established after the application of the principal criterion, several applications are ranked equally on the threshold given by the amount of the call allocation.

(b)

The bidding process is not limited to one or more specific categories of beneficiary. There is only a total aid allocation available for all groups of beneficiaries.

(c)

The likelihood of the budget being exhausted for certain groups of beneficiaries, is not relevant given the fact, that only a total aid allocation for all groups of beneficiaries is available.

(d)

The scoring rules determine the order of grant applications according to which the grant applications are approved up to the amount of the allocation available for the call.

Principal criterion

- The amount of grant requested from the RRP/ MoF in EUR per tonne of CO₂eqv emissions saved as a result of the implementation of the supported investment¹² (70 weight/ points).
- The contribution to the GHG reduction in tonnes CO₂eqv. (30 weight/ points)¹³.
- The decrease in the amount of greenhouse gases (in units of CO₂eqv) from processes directly related (linked) to the project after full commissioning, emitted by undertakings compared to the reference period.

	Sub - criterion	Weight/ points	Explanation	Method of calculation
1	The amount of grant requested in EUR per tonne of CO ₂ eqv emissions saved as a result of the implementation of the supported investment	70	The maximum number of points will be awarded to the bidder with the lowest proposed 'amount of grant requested in EUR per tonne of CO ₂ eqv emissions saved'. In the case of further proposals for performance, as set out in the other bids, the number of points awarded will be determined indirectly. The score for each additional proposed 'amount of grant requested in EUR per tonne of CO ₂ eqv emissions saved' shall be calculated as the ratio of the lowest proposed 'amount of grant requested in EUR per tonne of CO ₂ eqv emissions saved' to the proposed 'amount of grant requested in EUR per tonne of CO ₂ eqv emissions saved' of the relevant evaluated bid, multiplied by the maximum number of points awarded for that criterion.	[(lowest bid on 'amount of grant requested in EUR per tonne of CO ₂ eqv emissions saved' / evaluated bid on 'amount of grant requested in EUR per tonne of CO ₂ eqv emissions saved') * (maximum points)]

¹² The amount of aid for a specific applicant and the project will be determined on the basis of the individually submitted bid and the amount of the grant for the reduced tonne of CO₂eqv emissions requested by him.

¹³ Ranking of projects from the highest contribution to the GHG reduction objective of the scheme to the lowest contribution to the GHG reduction objective of the scheme (the lowest 'amount of grant requested from the RRP/MoF in EUR per tonne of CO₂eqv emissions saved (...)' to the highest 'amount of grant requested from the RRP/MoF in EUR per tonne of CO₂eqv emissions saved (...)').

2	Contribution to the GHG reduction objective of the scheme	30	<i>Contribution to the GHG reduction objective shall be determined based on the highest amount of GHG (in CO₂eqv) reduced by the project calculated in accordance with point H.3 of the scheme. The maximum number of points will be awarded to the project of the applicant with the highest contribution to the GHG reduction objective of the scheme i. e. the highest GHG reduction calculated in accordance with point H.3 of the scheme. In the case of further proposals, as set out in the other projects, the number of points awarded will be determined by proportionality. The score for each additional proposed contribution to the GHG reduction objective of the scheme is calculated as the ratio of the proposed contribution to the GHG reduction objective of the scheme of the respective evaluated offer to the maximum contribution to the GHG reduction objective of the scheme, multiplied by the maximum number of points awarded for that criterion.</i>	<i>[(evaluated project amount of GHG (in CO₂eqv) reduced calculated in accordance with point H.3 of the scheme / highest amount of GHG (in CO₂eqv) reduced calculated in accordance with point H.3 of the scheme) * (maximum points)]</i>
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Differentiating criteria

Where several grant applications are ranked equally on the threshold given by the amount allocated to the call, the following differentiating selection criteria apply:

- **Earlier project completion - the grant applications ranked equally after the application of the selection criteria are ranked according to the project completion date, starting from the grant application with the earliest project completion date to the one with the latest project completion date.**
- **Reduction of particulate matter emissions achieved by the project implementation—in case that even the application of the first differentiating selection criterion has not resulted in a clear ranking of the grant applications, the grant applications that still have the same ranking are ranked in such a way that the grant application that achieves a greater reduction of particulate matter emissions is ranked higher.**

(e)

The amount of aid will be determined on the basis of competitive bidding process.

- **The minimum aid amount per project has not been set.**
- **The maximum aid amount per project has not been set.**
- **Individual aid granted under this scheme with the application of a competitive bidding process is not subject to the additional notification requirement under Article 108(3) of the Treaty, irrespective of the aid amount per project and per undertaking.**
- **The maximum aid intensity has not been set. Under this scheme, aid is to be granted on the basis of a competitive bidding process, which ensures the best cost-effectiveness of the measure.**

(f)

The Ministry of Environment of the Slovak Republic (‘MoE’ or ‘grant provider’) assesses the grant applications submitted by the applicants in accordance with the call, scheme and other relevant legal regulations, in the manner and according to the criteria specified in the call. Based on the assessment of the grant applications, the grant provider identifies those applications that met the conditions for the provision of grant and applications that did not meet the conditions for the provision of grant.

Only project meeting eligibility criteria (defined in section H.2 of the schemes and the call) will proceed to the selection process which will be based on the criteria mentioned in section d) above.

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

- In case of undersubscribed bidding processes, the design of undersubscribed bidding processes during the implementation of a scheme is to be corrected to restore effective competition in the subsequent bidding processes or, failing that, as soon as appropriate.
- In order to prevent any cumulation of the aid beyond authorised limits and to avoid double funding of the same expenditures from different public funds, the MoE adopts an effective mechanism for verifying this fact, both in the phase of assessment of the submitted grant applications and in the phase of implementation of the projects. Also applicants are invited to submit, along with the grant application, a declaration that they have not received or are not seeking aid from other public sources for the same eligible expenditures.
- Additionally, it is necessary to note, that the funding sources pose additional time constraints on their time availability, throughout which they are provided, projects under the RRP have to be completed by December 2025 (with financial close out till June 2026) and projects under Modernisation fund have to be complete by 2030. The Provider will establish efficient systems of project evaluation and implementation, avoid posing excessive administrative burdens to enable smooth implementation and realisation of projects.
- Insufficient capacities of public officials involved in implementing RRP and the Modernisation Fund investments with state aid implications.
- Supply chain failure in relation with pandemic situations or Russia invasion to Ukraine.
- Problems which relate to lengthy public procurement procedures, resulting in possibly long-term supply of technology.
- Currently, renewable technologies are more expensive than their less sustainable counterparts, which may lead to higher prices of final products.

3. Evaluation questions

Questions related to the direct impact of the aid on the beneficiaries

1. What was impact of the scheme on the emissions reduced by the beneficiaries as opposed to those reduced by the entire EU ETS sectors?

Relevant indicator: Achieved amount (%) of CO2 eqv reduction by entire EU ETS (excl. supported projects) & Achieved amount of CO2 eqv reduction by the projects supported by the schemes (%).

2. Did the project lead to increased energy efficiency in industrial installations that do not stimulate or prolong the use of fossil fuels and energy resources?

Relevant indicator: Number of implemented measures to reduce energy consumption not using fossil fuels sources.

3. Has the measure led to an increase in investment in innovative environmental technologies in industrial production, more in supported undertakings in the energy-intensive industry as compared to non-supported undertaking

Relevant indicator: Increase in expenditures by supported undertakings / private investment in addition to government support relative to annual turnover.

4. Has emission reductions by beneficiaries compared to the reference period decreased by at least 1,233,000 ton CO₂eqv on an annual basis for the RRP scheme?

Relevant indicator: Amount of CO₂eqv reduction on an annual basis under the RRP scheme.

5. Has the amount of GHG /in CO₂eqv emitted by beneficiaries under the RRP scheme decreased by at least 30% CO₂eqv compared to the reference period?

Relevant indicator: Percentage of GHG /in CO₂eqv decreases under the RRP scheme, compared to the reference period.

6. Has emission reductions by beneficiaries compared to the reference period decreased by at least 3,000,000 ton CO₂eqv on an annual basis for the MoF scheme?

Relevant indicator: Amount of CO₂eqv reduction on an annual basis under the MoF scheme.

7. Has the amount of GHG /in CO₂eqv emitted by beneficiaries decreased by at least 10,000 ton CO₂eqv on an annual basis for the MoF scheme?

Relevant indicator: Amount of GHG /in CO₂eqv reduction per project under the MoF scheme, compared to the reference period on an annual basis.

8. Has the energy consumption (in GJ/year) per each project decreased by at least 10 % compared to the reference period under the MoF scheme?

Relevant indicator: Energy consumption reduction, expressed in % compared to the reference period under the MoF scheme.

9. Have the direct impacts been heterogeneous across different type of beneficiaries (size/location/sector)?

Relevant indicator: Proportion of beneficiaries (%) as per: i. size (small, medium, large enterprises), ii. Location (western, central, eastern Slovakia), iii. sector (NACE)

10. Has the measure resulted in the change in the competitive position of the beneficiaries in comparison to non-beneficiaries following the granting of aid?

Relevant indicator: Increase of beneficiary market share.

11. How many jobs were created as a result of projects implementation in granted undertakings;

Relevant indicator: Number of FTE created in granted undertakings

(a) **Questions related to the indirect impacts**

1. How many jobs were created as a result of projects implementation in the supplier industry?

Relevant indicator: Number of FTE created in the supplier industry.

2. Has the aid resulted in skilled workers in the financed industries displacing skilled work from other industries?

Relevant indicator: Number of FTE in the financed industries displacing skilled work from other industries?

3. Has the measure resulted in spill over effects (the potential use of the supported technologies in further undertakings, sectors and regions)

Relevant indicator: Further use or planned use of promoted technologies in the given industry/ other industries/ regions.

4. Has the measure resulted in the change in supply and demand structures in the markets towards products and technologies with low or zero GHG emissions?

Relevant indicator: Shares of the supported products in the EU-wide turnover of the products mainly affected by the support.

5. Has the measure resulted in an increased demand for electricity and in particular increase in demand of fossil-based electricity by beneficiaries?

Relevant indicator: (i) increase in overall electricity consumption, (ii) variations in the production capacity of electricity produced from fossil fuels, (iii) variations in the production of electricity produced from fossil fuels

Relevant indicator in case of increase of demand for fossil-based electricity: comparison of the amount of increased CO₂ emissions resulting from fossil-based electricity increase to the emission reductions stipulated as aid scheme objectives.

c) **Questions about the proportionality and appropriateness of the aid:**

1. Were beneficiaries granted by the aid through a competitive bidding process?

Relevant indicator: (i) Open, clear, transparent and non discriminatory bidding process, based on objective criteria, defined ex ante in accordance with the objective of the schemes (ii) Selection of projects with application of cost-efficiency related bidding criterion.

2. Were all criteria published in advance of the deadline for submitting applications?

Relevant indicator: Time to submit a grant application from the publication of the call for grant applications.

3. Did all bidders receive aid?

Relevant indicator: The amount of requested aid which exceeded the entire

allocation.

4. How much aid compared to the total investment costs have the projects within each project category received on average?

Relevant indicator: The amount of average awarded aid, compared to the total project investment costs, expressed for each project category¹⁴.

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.):

Table 4.1. (a) the relevant evaluation questions

Evaluation question	Indicator (b)	Source (c)	Frequency (d)	Level	Population (f)
a) 1.	Relevant indicator: Achieved amount (%) of CO2 eqv reduction on an annual basis by entire EU ETS (excl. supported projects) & Achieved amount of CO2 eqv reduction by the projects supported by the schemes (%)	MoE,	annually from 2023	programme	aid beneficiaries
a) 2.	Amount of final energy saved by all aided projects in GJ/ year	MoE,	based on grant applications evaluation / a report on the investment project completion	programme	aid beneficiaries
a) 3.	Increase in expenditures by supported undertakings / private investment in addition to government support relative to annual turnover	MoE,	annually from 2023	programme	aid beneficiaries

¹⁴ Various representative group of similar or recurrent projects by ETS industries.

a) 4.	Amount of CO ₂ eqv reduction on an annual basis under the RRP scheme.	MoE,	based on an annual report on investment utilisation	programme	aid beneficiaries
a) 5.	Relevant indicator: Percentage of GHG /in CO ₂ eqv decreases under the RRP scheme, compared to the reference period.	MoE,	based on an annual report on investment utilisation	programme	aid beneficiaries
a) 6.	Relevant indicator: Amount of CO ₂ eqv reduction on an annual basis under the MoF scheme.	MoE,	based on an annual report on investment utilisation	programme	aid beneficiaries
a) 7.	Relevant indicator: Amount of GHG /in CO ₂ eqv reduction per project under the MoF scheme, compared to the reference period on an annual basis.	MoE,	based on an annual report on investment utilisation	programme	aid beneficiaries
a) 8.	Relevant indicator: Energy consumption reduction, expressed in % compared to the reference period under the MoF scheme.	MoE,	based on an annual report on investment utilisation	programme	aid beneficiaries
a) 9.	Proportion of beneficiaries (%) as per: i. size (small, medium, large enterprises), ii. Location (western, central, eastern Slovakia), iii. sector (NACE)	MoE,	based on an annual report on investment utilisation	programme	aid beneficiaries
a) 10.	Increase of beneficiary market share	MoE, Statistics office	annually from 2023	programme	aid beneficiaries
a) 11.	Number of FTE created in granted undertakings	MoE, Statistics office	based on grant applications evaluation / a report on the investment project completion	programme	aid beneficiaries
b) 1.	Number of FTE created: in the supplier industry	MoE, Statistics office	based on grant applications evaluation / a report on	programme	aid beneficiaries

			the investment project completion		
b) 2	Number of FTE in the financed industries displacing skilled work from other industries	MoE, Statistics office	annually from 2023	programme	aid beneficiaries
b) 3.	Further use or planned use of promoted technologies in the given industry/ other industries/ regions.	MoE,	annually from 2023	programme	aid beneficiaries
b) 4.	Shares of the supported products in the EU-wide turnover of the products mainly affected by the support.	MoE,	annually from 2023	programme	aid beneficiaries
b) 5.	<p>Relevant indicator: (i) increase in overall electricity consumption, (ii) variations in the production capacity of electricity produced from fossil fuels, (iii) variations in the production of electricity produced from fossil fuels.</p> <p>Relevant indicator in case of increase of demand for fossil-based electricity: comparison of the amount of increased CO2 emissions resulting from fossil-based electricity increase to the emission reductions stipulated as aid scheme objectives.</p>	MoE,	based on an annual report on investment utilisation	programme	aid beneficiaries
c) 1.	<p>(i) Open, clear, transparent and non discriminatory bidding process, based on objective criteria, defined ex ante in accordance with the objective of the schemes.</p> <p>(ii) Selection of projects with application of the cost-efficiency related bidding criterion.</p>	MoE,	based on grant applications evaluation	programme	all firms
c) 2.	Time to submit a grant application from the	MoE,	based on grant	programme	aid beneficiaries

	publication of the call for grant applications.		applications evaluation		and non-beneficiaries
c) 3.	The amount of requested aid which exceeded the entire allocation.	MoE,	based on grant applications evaluation / a report on the investment project completion	programme	aid beneficiaries and non-beneficiaries
c) 4.	The amount of average awarded aid, compared to the total project investment costs, expressed for each project category.	MoE,	(i) a report on the investment project completion (ii) based on an annual report on investment utilisation	programme	aid beneficiaries

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

The indicators chosen to measure the implementation of the scheme are aimed at measuring all the results of the decarbonisation projects to confirm the achievements of the objectives of the schemes.

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 of the scheme)¹⁵

(a) S
lovak authorities commit to assess the effectiveness of the scheme by using counterfactual impact evaluation¹⁶ methods and according to the timeline indicated in section 7.1.

(b) T
he specific methodology for the evaluation will be discussed and agreed with the European Commission and it will be described in the first interim report to be delivered to the European Commission by 30 June 2023.

(c) T
he following methodological considerations will be used as the starting point for the

¹⁵ Please make reference to SWD(2014)179 final of 28.5.2014.

¹⁶ A counterfactual impact evaluation will be conducted along the lines of the approaches proposed in the Common Methodology for State aid Evaluation

identification of the evaluation approach to be used: Given the characteristics of the aid scheme and the limitations described above, the most viable methodology to be applied for the purpose of the evaluation of the effectiveness of the Aid scheme appears to be Difference-in-Differences (DiD). In particular, undertaking the staggered time of the aid intervention allows to exploit the different round of calls foreseen in the scheme. Along these lines, successful projects in a given call are compared, over the same period, to other projects that have not been granted the aid yet, but they will be successful in the next call. More in detail, projects that at time “t”, are not started yet could represent the “control” group of projects that, instead, have already started over the same time. This approach would allow the identification of the causal effect of the aid. To this end, the analysis shall include the relevant statistical exercises that allow testing the main assumptions underlying the applied model. These will encompass an event-study analysis to assess the absence of differential trends in performance across beneficiaries and non-beneficiaries before the intervention, at least in the context of the direct effects of the aid. If feasible, also a placebo test shall be implemented, either on a related-but-unaffected outcome or treatment group or based on a “fake” treatment date (in this latter case, the sample would be restricted to the pre-implementation period only). In case the validity of the applied method is not confirmed by these tests, the evaluation report should clearly specify and discuss to what extent the estimated relationships can be interpreted as simple correlations. Further dimensions, such as the geographical area, could be possibly exploited to create different definitions of treated and control groups. The above empirical approach, as well as all possible caveats and issues equipped in the context of this specific scheme, shall be described in a methodological report. Then, in agreement with the European Commission, it will be decided whether to confirm the use of the DiD in the final version of the evaluation or to investigate and pursue different evaluation strategies. In all cases, the counterfactual analysis shall be accompanied by descriptive statistics drawn from administrative and survey data (even if aggregated at sector/region level) in support of the evidence, especially when potentially relevant unobservable factors, such as the firms’ propensity to invest in renewables, are not directly measurable.

(d) Slovakia commits that the evaluation will be conducted by an independent evaluation body in accordance with the criteria laid down in the evaluation plan, as updated by the first interim report to be delivered to the European Commission by 30 June 2023.

(e) Slovakia commits to inform the Commission of any difficulty identified during the evaluation process that could significantly affect the implementation of the agreed evaluation plan, in order to identify and agree on possible solutions.

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:

The control group is defined at the level of the most similar undertakings, which stands for the ETS sector, including 50 companies. The list of EU ETS industrial sectors is provided in section 1. Identification of the aid schemes to be evaluated, point 4a.

Magnitude of the ETS sector as the control group is given by the amount of the CO2 emissions production (ETS sector produces GHG emissions up to 90% of the entire Slovak CO2 production).

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?

The subject of support are projects in EU ETS industrial sectors aimed at reduction greenhouse gas emissions. It is foreseen that differences in the outcomes for the aid beneficiaries are therefore due to the received aid. Otherwise, it is assumed that investments made to ensure that an undertaking would realise investment or operational measures to slightly reduce the amount of CO2 emission.

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:

Not relevant, as no specifics apply. The call for proposal is open to all eligible applicants from the EU ETS industrial sector; all regions in the Slovak Republic (Bratislava Region, Western Slovakia, Central Slovakia, Eastern Slovakia) are eligible for aid under this scheme based on the bidding competitive procedure.

4. 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.¹⁷ 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:

Effective monitoring of the schemes application and accurate data collection is ensured by two main source data as follows:

- 1. Data collection from project implementation,**
- 2. Data collection from administrative (public) sources.**

Legal context:

At the national level the legal context is outlined in section B Legal basis of the schemes.

Additionally, the underlying legislation for the use and provision of the RRP mechanism's resources, intended for the implementation of reforms and investments under various components to which the Slovak Republic committed itself in the Recovery Plan, is the

¹⁷Please 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.

Slovak Act No 368/2021 Coll. on the mechanism to support recovery and resilience and on the amendment of certain laws, as amended.

Furthermore, pursuant to Section 4 (3c) of Act No 368/2021, NICA prepared the RRP System of Implementation, which was approved by the Resolution of the Government of the Slovak Republic.

The RRP System of Implementation sets out common rules for the implementation of investments and reforms included in the RRP and creates a basic implementation framework, while respecting the applicable legislation of the EU and the Slovak Republic and agreements concluded between the Slovak Republic and the EU, as well as the specifics of the implementation of individual measures.

NICA is a part of the Government Office of the SR and is responsible for coordinating and guiding executors in the implementation of the RRP, controlling, monitoring and evaluating the state of its implementation and securing, directing and managing financial flows.

**1. D
ata collection from grant applications and project implementation**

1.1 Data collection from grant applications (e.g. on counterfactual scenario) and project implementation received from beneficiaries

The MoE, as the aid grantor, which manages funds from RRP - component 4 and MoF is obliged to create a system of project realisation and its monitoring. The main conditions of the monitoring mechanism are laid down in the System of RRP implementation¹⁸ (equal monitoring system will be established for MoF) and further legislation on state aid provision, which oblige each beneficiary to submit monitoring reports to the MoE, as follows:

- a
n annual progress report on investment project implementation,**
- a
report on the investment project completion,**
- a
n annual report on investment utilisation, over a period of project utilisation after the year of work and financial completion of a project.**

Deadlines for submitting reports and scope of required information is stipulated in the contract for the provision of the funds to the RRP mechanism¹⁹/ MoF legislation.

The MoE uses this information to monitor whether or not the recipient meets the project's criteria and milestones.

Furthermore, other documents submitted by each applicant in the published call for proposals and by each beneficiary during the implementation period serve as a source data as follows:

¹⁸ Source: The System of RRP implementation, Chapter 5.2 Monitoring of project implementation, <https://www.planobnovy.sk/site/assets/files/1236/sipoo.pdf>

¹⁹ Template of the contract for the provision of the funds to the RRP mechanism and a template of the monitoring report is available on the link: <https://www.planobnovy.sk/realizacia/dokumenty/>

- application for provision of funding from the mechanism, a
- payment requests, p
- other documents submitted by the beneficiaries, (e.g. GHG emission reports authorised by certified auditors in accordance with para 24 of Act No 414/2012 Coll. on emission allowance trading and on amendments to certain acts, as amended - an energy audit), o
- others. o

1.2 Data collection from project implementation, documents elaboration by the MoE

The MoE prepares a list of completed projects supported by the decarbonisation scheme, which forms the basis for measuring the GHG emission reductions of the measure. GHG emission reductions are monitored, either based on the collection of data on projects under the decarbonisation scheme, or demonstrated through the projected parameters of the technologies supported by the measure on the basis of manufacturers' certificates, or a combination of both approaches.

1.3 Processes of reporting obligations and used information and communication technologies

The MoE submits all required information on implementation of Component 4 to NICA in the Monitoring report on investment and reforms in a months interval; as a rule, within 10 working days from the end of the calendar month for which the investment and reform monitoring report is submitted.

A new information system, namely "ISPO"²⁰ was introduced by 30 September 2022. Additionally, at least 20 joint service centres will be established by 31 December 2024 which will ensure collecting and processing data about the aid beneficiaries.

2. Data collection from administrative (public) sources

Information on the total CO₂ emission reductions are available to the MoE from the annual reporting to the EU ETS under Directive 2003/87/EC. Specific information shall be collected from the Statistical office.

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?

The frequency of the data collection from beneficiaries is envisaged to be ensured on an annual basis (please see 1.1 above mentioned comment). Data is collected at the level of

²⁰COMMISSION STAFF WORKING DOCUMENT, Analysis of the recovery and resilience plan of Slovakia, https://ec.europa.eu/info/system/files/com-2021-339_swd_en_0.pdf

individual undertakings (i) by the annual progress reports during the project realisation; (ii) by the completion report and (iii) by the utilisation reports of the period of the project utilisation.

The frequency of the data collection from the MoE to NICA is envisaged to be ensured on a month basis (please see 1.3 above mentioned comment).

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:

Access to the necessary data is granted by the aid provider and from public administration information systems. The MoE has all the necessary data sources and tools to be able evaluate fulfilment of the programme indicators.

The MoE reports data on GHG emissions in the EU ETS in accordance with Article 21 of Directive 2003/87/EC. These data are published in aggregate and are thus not subject to confidentiality restrictions. The EU ETS GHG emissions data are publicly available from the allowance registry website: <https://ec.europa.eu/clima/ets/>.

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:

All available data are available internally from applications and from the MoE's records.

The MoE confirms that following information are published on the website www.minzp.sk/:

- a) business name(s) of all the beneficiaries;**
- b) form and amount of aid granted to each beneficiary,**
- c) date on which the aid was granted,**
- d) objective of the aid;**
- e) type of enterprise (SME/large enterprise);**
- f) region in which the beneficiary is located (at NUTS II level);**
- g) main economic sector in which the beneficiary operates (at NACE group level).**

5. 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:

State aid evaluations should normally be considered as ongoing evaluations, to be conducted while the aid scheme is still in operation, rather than as purely ex-post ones, conducted only after the implementation of the scheme is completed.

Proposed timeline takes into consideration the duration of the scheme, including milestones for collecting the data and time for the evaluation and submitting the final report as well.

The timeline of the evaluation:

First interim evaluation report (in reference to milestone collecting data):

Delivered by 30 June 2023 .

This report stands for collecting early evidence and statistics on the implementation of the scheme. Based on collected and analysed information, a revised methodology will be devised and subsequently agreed with the Commission alongside with a consolidated version of the evaluation plan.

Final report for the RRP scheme (serving as second interim evaluation report i.e. for the Modernisation Fund scheme⁰):

Delivered by 30 September 2025.²¹

Final report for the MoF scheme (which will also serve as an additional report for the RRP scheme) will be delivered by 30 March 2030²².

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

Final report for the RRP scheme (which will also serve as second interim report i.e. for the Modernisation Fund scheme) to be submitted by 30 September 2025, i.e. 9 months before the expiry of the RRP scheme;

Final report for the MF scheme (which will also serve as an additional report for the RRP scheme) to be submitted by 30 March 2030, i.e. 9 months before the expiry of the MF scheme.

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

It is important to set an appropriate timeline for the evaluation, allowing enough time to collect sufficient evidence whilst also providing results, so that potential improvements can be introduced in due time.

Eventual cases of delay in case of undersubscribed bidding processes and following design of the competitive bidding process to restore effective competition in the subsequent

²¹ 9 months before the expiry of the RRP scheme

²² 9 months before the expiry of the MoF scheme

bidding processes/call are partly corrected by the different timetables of the individual projects implementation.

6. 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:

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 entity, or entities, that will be responsible for carrying out the evaluation, will be selected in accordance with national and EU public procurement rules. The award of the contract to an evaluation body will be based on the technical quality and economic conditions of the tender.

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

The entities participating in the public procurement procedure must demonstrate their suitability and skills, and in particular expertise in issues related to the decarbonisation of industry and environmental protection in order to be able to fully evaluate the scheme and its effects.

8.4. 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:

Human and financial resources of the Section of climate change and air protection of the Ministry of Environment will be available for evaluation.

7. 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:

NIKA gives adequate publicity to the evaluation plan and first interim evaluation plan, final report for the RRP scheme and final report for MoF scheme on the following website: <https://www.planobnovy.sk>.

The grantor ensures that the following information is published on the website: www.minzp.sk/

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:

Appropriate involvement of relevant stakeholders will be ensured by inviting them to discuss initial evaluation findings on the basis of the annual progress reports on investment project implementation.

The results of evaluation findings will be presented at the meetings, which consist of representatives of stakeholders from state administration bodies, professional associations, the professional public and other partners.

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:

Evaluation results are intended to be used by the granting authority to provide sufficient data from many different types of beneficiaries. These results are essential for decision makers both at the Member State and EU level. This will help to improve the efficiency of future schemes, future investment support programmes and, possibly, of future rules for granting State aid.

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:

The data collected during the evaluation will be made accessible for the purpose of replicating results or for further studies under conditions not more restrictive than those imposed on the body conducting the initial evaluation.

In particular, the data collected during the evaluation will serve for the purpose of preparing similar instruments supported by relevant aid programmes.

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

The submitted evaluation plan does not contain any confidential information.

8. Other information

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

We do not consider any other information relevant for the evaluation plan.

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

No attachments attached.