

TEMPLATE

KEY PROJECT INFORMATION & PROJECT DESIGN DOCUMENT (PDD)

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KEY PROJECT INFORMATION

GS ID of Project	GS905
Title of Project	Sah Wind Power Plant
Time of First Submission Date	15/08/2025
Date of Design Certification	15/11/2013 CP1 15/11/2018 CP2
Version number of the PDD	v0.3
Completion date of version	28/10/2025
Project Developer	Galata Wind Enerji Anonim Şirketi
Project Representative	Rüzgar Karbon ve Enerji Danışmanlık San.Tic. Ltd. Şti.
Project Participants and any communities involved	Galata Wind Enerji Anonim Şirketi
Host Country (ies)	Türkiye
Activity Requirements applied	☐ Community Services Activities ☒ Renewable Energy Activities (GS4GG) ☐ Land Use and Forestry Activities/Risks & Capacities ☐ N/A
Scale of the project activity	☐ Micro scale ☐ Small Scale ☒ Large Scale
Other Requirements applied	-
Methodology (ies) applied and version number	Sectoral Scope 1, category "Energy industries (renewable - / non-renewable sources)" and ACM0002: Grid connected electricity generation from renewable electricity generation - Version 22.0
Product Requirements applied	☒ GHG Emissions Reduction & Sequestration ☐ Renewable Energy Label ☐ N/A
Project Cycle:	☒ Regular ☐ Retroactive

Table 1 – Estimated Sustainable Development Contributions

SUSTAINABLE DEVELOPMENT GOALS TARGETED	SDG IMPACT (DEFINED IN B.6)	ESTIMATED ANNUAL AVERAGE	UNITS OR PRODUCTS
13 Climate Action (mandatory)	Emission Reduction	217,324	tCO ₂
7 Affordable and Clean Energy	Generating Clean Energy	347,094.200	MWh
		Between 20 and 25 people	
8 Decent Work and Economic Growth	Employment	One Health and Safety Training per year	Number

SECTION A. DESCRIPTION OF PROJECT

A.1 Purpose and general description of project

The main purpose of this project activity is to generate electricity from a Wind Power Plant and supply of power generated to the Turkey national grid. Galata Wind Enerji A.S. has installed Sah WPP with 105 MWm/105 MWe installed capacity in Bandirma district of Balikesir and Karacabey district of Bursa, Turkey. Sah Wind Power Plant has 35 turbines of which 24 turbines are in Balikesir province, and 11 turbines are in Bursa province, each having an output of 3.0 MW. The total electricity production of the project is estimated as 306,566 MWh/year.

The connection of the project to the National Electricity System is done via 35 km transmission line to the 154 kV Gobel Transformer Station. The project operational lifetime is 49 years.

The project replaces anthropogenic emissions of greenhouse gases (GHG's) estimated to be approximately 171,828 tCO₂e per annum for the second crediting period, thereon displacing 306,566 MWh/year amount of electricity from the generation- mix of power plants connected to the electricity grid, which is mainly dominated by thermal/fossil fuel based power plant. The project leads to reduction in GHGs and achieve sustainable development of the host country.

In the beginning phase, 31 turbines were fully commissioned. After the completion of the construction works and commissioning, the project was taken over by Doğan Enerji Yatırımları San. ve Tic. A.Ş. in June 2012. In the further stages of the project, the company decided to increase the total installed capacity of the project to 105 MWm/105 MWe with additional 4 Vestas V90 / 3000 kW type wind turbines. The total estimation annual electricity generation of the project is calculated as 341,275 MWh/yr with 35 turbines-105 MWe according to Wind Assessment Report.

But in the years between 2011 and 2017, the average annual net electricity export to the grid was only approximately 293,479 MWh/yr. And the same WPP had produced annual average of 306,566 MWh between years 2015 and 2017 with 35 turbines. So the PP uses the amount of 306,566 MWh as electricity generation average value and approximately 171,828 tCO₂e as emission reduction value for the second crediting period. (15/11/2018-14/11/2025). And expected total of reduction of 1,521,268 tCO₂-eq over the second 7 year crediting period.

Sah WPP will be installing one another turbine with 6.8 MWm/6.8 MWe and the total capacity will be 111.8 MWm/111.8 MWe during the CP3. The average electricity generation value of Şah WPP's CP2 over the past 7 years (2018–2025) is 326,007 MWh, with a capacity factor of 35.4%. The addition of a 6.8 MW turbine is expected to generate approximately 21,087.072 MWh on average. So the total expectation electricity generation value will be 347,094.200 MWh and approximately 217,324 tCO₂e as emission reduction value during the third crediting period-CP3 (15/11/2025-14/11/2032).

Additional one turbine expectation electricity generation value can be calculated as below:

One turbine: $6.8 \times 24 \times 365 \times 0.354 = 21,087.072$ MWh

Total expectation electricity generation value will be 347,094.200 MWh during the third crediting period-CP3.:

SDG7= $326,007.128 + 21,087.072 = 347,094.200$ MWh

PLF of the project is calculated as follows:

PLF: = $347,094.200 \text{ MW} / (111.8 \text{ MW} * 8760) * 100 = 35.4\%$

The project helps Turkey to stimulate and commercialise the use of grid connected renewable energy technologies and markets. It demonstrates the viability of wind power plants which support improved energy security, improved air quality, alternative sustainable energy futures, improved local livelihoods and sustainable renewable energy industry development.

This electricity amount have contributed to the following goals:

- Reducing greenhouse gas emissions in Turkey compared to business-as-usual scenario,
- Helping to stimulate the growth of wind power industry in Turkey,
- Creating local employment during the operation phase of the plant,
- Helping to reduce Turkey's increasing energy deficit and
- Diversifying the electricity generation mix and reducing import dependency.

Milestones of the project activity is listed as below:

Milestones	Dates
EIA not required decision by the Ministry of Environment and Forestry for Balikesir region	March 21 st , 2008
License obtained from EMRA	April 10 th , 2008
Board's Decision on application to carbon finance (prior consideration)	October 14 th , 2008
Wind and Energy Yield Estimation Report	December 1 st , 2008
Acquisition of GALATA by Agaoglu Group	April 2 nd , 2009
Agreement with turbine supplier	December 31 st , 2009
EIA not required decision by the Ministry of Environment and Forestry for Bursa region	March 23 rd , 2010
System Connection Agreement with TEIAS	May 14 th , 2010
Agreement with the PDD Consultant	May 21 st , 2010
Construction agreement with the contractor	May 27 th , 2010
Loan agreement with the bank	June 4 th , 2010
Local Stakeholder Consultation Meeting	June 18 th , 2010
GALATA's declaration of non-use of ODA funding	June 21 st , 2010
Permission granted by Ministry of Environment and Forestry for the use of forestry are in the project area	July 9 th , 2010
Land delivery to the company for construction (Start Date of the Construction)	August 6 th , 2010
Agreement with the DOE	October, 2010
System Usage Agreement with TEIAS	January 17 th , 2011
Start of VER validation	January 24 th , 2011
Commissioning date of the first phase of the plant (21 x 3 = 63 MW)	May 19 th , 2011
Commissioning of the second phase (9 x 3 = 27 MW)	June 3 rd , 2011
Commissioning of the last phase (1 x 3 = 3 MW)	July 29 th , 2011
Additional Protocol signed with VESTAS for the capacity addition	February 10 th , 2012
License Amendment (Increase in number of turbines)	April 4 th , 2012
License Amendment (Change of corporate name to Galata Wind Enerji A.Ş.)	June 11 th , 2012
Galata Wind Enerji A.Ş. is taken over by Doğan Enerji	June 20 th , 2012

Commissioning date of additional 4 turbines	May ^{24th} , 2013
License Amendment (Change of capacity to 105 MWe/105 MWm.)	September 26 th , 2013
Gold Standard Project Registration	November 6 th , 2013
First Monitoring Period	Between November 15 th of 2011 and 31 th of October 2013
Second Monitoring Period	Between 1 th June of 2015 and 31 th of May 2018
Start Second Crediting Period	November 15 th , 2018
Third Monitoring Period	Between 1 th June of 2018 and 28 th of February 2021
Fourth Monitoring Period	Between 1 th March of 2021 and 30 th of September 2022
Fifth Monitoring Period	Between 1 th October of 2022 and 31 th of March 2024
Start Third Crediting Period	November 15 th , 2025

A.1.1. Eligibility of the project under Gold Standard

The project activity meets the eligibility criteria as per section 3.1.1 of GS4GG Principles & Requirements document as described below.

- The project applies methodology ACM0002 Version 22.0, which is an approved methodology under Gold Standard.
- The project type is wind which is an eligible project type as it is in accordance with 1.1.1 a) and 1.1.1 b) of the Eligible Project Types & Scope under Renewable Energy Activity Requirements.
- The project activity results in displacement of electricity from thermal power stations while contributing to sustainable development of Türkiye. Hence, the project contributes to the Gold Standard Vision and Mission.
- Wind project is an approved project type and does not require approval from Gold Standard.

- This project activity is not associated with geo-engineering or energy generated from fossil fuel or nuclear, fossil fuel switch, nor does it enhance or prolongs such energy generation.

General Eligibility Criteria under Renewable Energy Activity Requirements

Project Type: Wind project, As discussed above, the project type is eligible.

Project Location: The project is located in in Bandirma district of Balikesir and Karacabey district of Bursa, Turkey. Thus, the project is eligible.

Project scale: The project activity is a 111.8 MWm/111.8 MWe. Wind power plant and thus qualifies under large scale projects.

There is no possibility to trade emissions that include the scope of the project in Türkiye and no risk of double counting now.

It has been stated to the VVB and to the GS by written confirmation, that neither ODA is used to buy carbon credits from the project nor other REC/VER schemes are used for the project. The documents has been provided to the VVB for validation process.

A.1.2. Legal ownership of products generated by the project and legal rights to alter use of resources required to service the project

The project participant is Galata Wind Enerji A.Ş is the legal owner of the project and has the legal rights for the credits. Rüzgar Karbon ve Enerji Danışmanlık Sanayi Ticaret Limited Şirketi act as carbon consultants for the Project. Contact details are provided in Annex 1.

A.2 Location of project

The Sah Wind Power Plant project is located at Bandirma district of Balikesir province and Karacabey district of Bursa province. The nearest small village are Sahmelek Village and Dedeoba Village.

The coordinates of the turbines are as the following:

Table 2 Turbine Coordinates ¹

Turbine	E	N
T1	601446	4469492
T2	601695	4469465
T3	601926	4469480
T4	601743	4470297
T5	602108	4470241
T6	602333	4470018
T7	602874	4470631
T8	603224	4470533
T9	603444	4470612
T10	603343	4470097
T11	603636	4470090
T12	603976	4470085
T13	604164	4469983
T14	604329	4469736
T15	604562	4469683
T16	604850	4469820
T17	604592	4469322
T18	604616	4469042
T19	603447	4469092
T20	603741	4468904
T21	604059	4468715
T22	604243	4468577
T23	604367	4468170
T24	604528	4468006
T25	604974	4468277
T26	605165	4468800
T27	604791	4468934
T28	605437	4469378
T29	605164	4469847
T30	605619	4470422

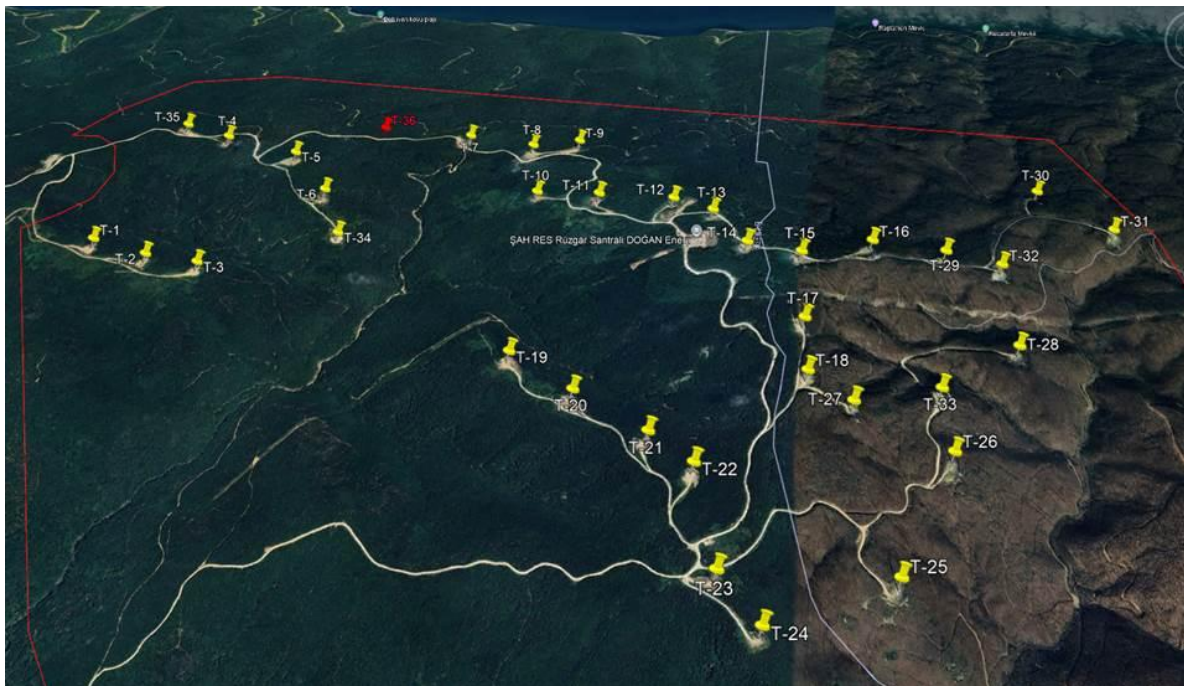
¹ Generation License

T31	605910	4470168
T32	605403	4469825
T33	605127	4469094
T34	602472	4469783
T35	601498	4470370
T36	602430,8	4470628

Figure 1 Project Location on Turkey Map



Figure 2 Site Layout of 36 turbines



A.3 Technologies and/or measures

Wind power is one of the most commonly used environment friendly technologies in energy sector all over the world. Within the scope of the project, all precautions have been taken for the environment during the design phase and the project has been implemented in line with the environmental law and related regulations.

The Sah WPP consists of 35 wind turbines of 3.0 MWm/3.0 MWe each and generating electricity with capacity 105 MWm/105 MWe. The first-hand turbines which is used in the project is Vestas V90 type with 80 m hub height and 90 m rotor diameter as you can see in Table 3 and 1 turbine Goldwind GW182 type with 110 m hub height and 182 m rotor diameter as you can see in Table 4. The wind turbines of the plant are to be supplied from Vestas which is the world's leading company in wind power technologies. The technology used in the plant includes first wind turbines and its auxiliary equipments with extensive automatization. The main equipment used in the Project is wind turbines with the following specifications:

Table 3 Technical specifications of V90 turbines

Parameter	Value
Rated Power	3,000 kW
Rotor Diameter	90 m
Gearbox Type	2 Helical stages ,1 Plenatary stage
Number of blades	3
Swept Area	6,362 m ²
Hub Height	80 m
Cut out wind speed	25 m/s

Table 4 Technical specifications of Goldwind GW182 turbine²

Parameter	Value
Rated Power	7,200 kWm/6,800 kWe
Rotor Diameter	182.0 m

² This is not exactly defined yet just assumption. Reference link: <https://en.wind-turbine-models.com/turbines/2393-goldwind-gw-182-7200>

Number of blades	3
Swept Area	26,016 m2
Hub Height	80 m
Cut out wind speed	24 m/s

The project must ensure that the metering devices are in line with the technical requirements which are set out by the Communiqué for Metering Devices to be used in the Electricity Market, which describes the minimum accuracy requirement the metering devices have to fulfil, which are categorized according to the installed capacity.

The Project reduces GHG emissions by substituting fossil fuel generated electricity, thereby contributing to climate change mitigation along with other environmental benefits. The lifetime of the project activity has been supposed as 25 years.

The Project annual average emission reduction is 217,324 tCO₂e by producing 347,094.200 MWh/year electricity during CP3 crediting period. Totally 1,521,268 tCO₂ emission reduction is expected over the period of 7 years.

The electricity generation is mainly done by fossil fuel fired power plants in Turkey. The share of resources in the electricity generation in Turkey has been shown in the Section B.4 of the PDD.

As detailed in Section B.3, the greenhouse gas that is reduced is carbon dioxide. In the baseline scenario, the electricity delivered to the grid by the project would have otherwise been generated by the operation of grid-connected power plants. Since Türkiye's grid mainly consists of thermal power plants, this would have resulted in GHG emissions. However, in the project scenario, the project generates electricity from wind power and result in emission reductions in parallel with its electricity generation figures. Briefly, in the absence of the project activity, the electrical energy would have been delivered to the grid through a mix of existing power generation resources, as described in more detail in section B.4. Necessary trainings to the plant staff are delivered by the supplier in line with the agreement between the project owner and the supplier

The amount of electricity generated by the project is not influenced by factors outside the project boundary such as other power plants or demand for electricity. Rather, the governing factor is the wind speed at the project site.

A.4 Scale of the project

This is large scale project.

A.5 Funding sources of project

The project activity does not have any public funding or Official Development Assistance (ODA) funding. This is a design change process and still does not have any funding.

SECTION B. APPLICATION OF APPROVED GOLD STANDARD METHODOLOGY (IES) AND/OR DEMONSTRATION OF SDG CONTRIBUTIONS

B.1. Reference of approved methodology (ies)

The project applies CDM-EB approved "ACM0002: Grid-connected electricity generation from renewable sources - Version 22.0"³

Project type: Type I – Renewable Energy Projects

Category: D – Electricity generation for a system

Sectoral Scope: 01 Energy industries (renewable - / non-renewable sources) as per 'Sectoral scopes related approved methodologies.

The methodology refers to:

- "Tool 01, Tool for the demonstration and assessment of additionality", Version 07.0.⁴
- "Tool 02, Combined tool to identify the baseline scenario and demonstrate additionality", Version 07.0⁵
- "Tool 03, Tool to calculate project or leakage CO2 emissions from fossil fuel combustion", Version 03.0⁶

³ <https://cdm.unfccc.int/UserManagement/FileStorage/R0IJ1X9LQ7W2GOYHSMBFCPE3VKZ685>

⁴ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-01-v7.0.0.pdf>

⁵ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-02-v7.0.0.pdf>

⁶ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-03-v3.pdf>

- “Tool 07, Tool to calculate the emission factor for an electricity system”, Version 07.0.⁷
- “Tool 10, Tool to determine the remaining lifetime of equipment”, Version 01⁸
- Tool 27, Methodological tool Investment analysis Version 14.0⁹
- Tool 24, Methodological tool Common Practise v3.1¹⁰
- Tool 11 “Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period” Version 3.0.1¹¹

B.2. Applicability of methodology (ies)

The methodology ACM0002 “Large scale Consolidated baseline methodology for grid-connected electricity generation from renewable sources” is applicable to grid-connected renewable power generation project activities that a) install a new power plant at a site where no renewable power plant was operated prior to the implementation of the project activity (greenfield); b) involve a capacity addition c) involve a retrofit of (an) existing plant(s); or d) involve a replacement of (an) existing plant(s).

Since the proposed project activity install a new power plant at a site where no renewable power plant was operated prior to the implementation of the project activity (greenfield), ACM0002 “Large scale Consolidated baseline methodology for grid-connected electricity generation from renewable sources” version 22.0 is applicable. The choice of methodology ACM0002/Version 22.0 is justified as the proposed project activity meets relevant applicability criteria.

The applicability criteria and conditions may be seen in more detail as below:

Applicability Condition	Justification
This methodology is applicable to project activities that: a) Install a Greenfield power plant; b) Involve a capacity addition to (an) existing plant(s);	The project activity involves installation of a power plant at a site where there was no renewable energy power plant operating prior to the implementation of the project activity. The proposed project

⁷ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-07-v7.0.pdf>

⁸ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-10-v1.pdf>

⁹ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-27-v14.0.pdf>

¹⁰ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-24-v1.pdf>

¹¹ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-11-v3.0.1.pdf>

c) Involve a retrofit of (an) existing operating plants/units; d) Involve a rehabilitation of (an) existing plant(s)/unit(s); or e) Involve a replacement of (an) existing plant(s)/unit(s). f) Install a Greenfield power plant together with a grid-connected Greenfield pumped storage power plant. The greenfield power plant may be directly connected to the PSP or connected to the PSP through the grid.	activity is a greenfield wind project activity.¹²
In case the project activity involves the integration of a BESS, the methodology is applicable to grid-connected renewable energy power generation project activities that (a) Integrate BESS with a Greenfield power plant; (b) Integrate a BESS together with implementing a capacity addition to (an) existing solar photovoltaic¹³ or wind power plant(s)/unit(s); (c) Integrate a BESS to (an) existing solar photovoltaic or wind power plant(s)/unit(s) without implementing any other changes to the existing plant(s); (d) Integrate a BESS together with implementing a retrofit of (an) existing solar photovoltaic or wind power plant(s)/unit(s); (e) Integrate a BESS together with a Greenfield power plant that is operating in coordination with a PSP. The BESS is located at site of the greenfield renewable power plant	The proposed project activity is a wind project activity. So there is no BESS activity.

¹² EMRA Generation License

¹³ In case of retrofit or capacity addition for concentrated solar power projects, stakeholders may submit a request for revision to this methodology, providing an apportioning approach to calculate the project emissions due to any fossil fuel consumption attributed to the increased electricity generation from the BESS.

The methodology is applicable under the following conditions: a) Hydro power plant/unit with or without reservoir, wind power plant/unit, geothermal power plant/unit, solar power plant/unit, wave power plant/unit or tidal power plant/unit; b) In the case of capacity additions, retrofits, rehabilitations or replacements (except for wind, wind, wave or tidal power capacity addition projects the existing plant/unit started commercial operation prior to the start of a minimum historical reference period of five years, used for the calculation of baseline emissions and defined in the baseline emission section, and no capacity expansion, retrofit, or rehabilitation of the plant/unit has been undertaken between the start of this minimum historical reference period and the implementation of the project activity. c) In case of Greenfield project activities applicable under paragraph (a) above, the project participants shall demonstrate that the BESS was an integral part of the design of the renewable energy project activity (e.g., by referring to feasibility studies or investment decision documents); d) The BESS should be charged with electricity generated from the associated renewable energy power plant(s). Only during exigencies¹⁴ may the BESS be charged with electricity from the grid or a fossil fuel electricity generator. In such cases, the corresponding GHG emissions shall be accounted for as project emissions following the requirements under section The charging using the grid or using fossil fuel electricity generator should not amount to more than 2 per cent of the electricity generated by the project renewable energy plant during a monitoring period. During the time periods (e.g., week(s), months(s)) when the BESS consumes more than 2 per cent of the electricity for charging, the project participant shall not be entitled to issuance of the certified emission reductions for the concerned periods of the monitoring period.	a) The project activity is the installation of wind turbine generators (WTGs). Hence, meets this criterion. b) The project activity does not involve capacity additions, retrofits, rehabilitations or replacements. Hence this criterion is not applicable to the project activity. c-d) The proposed project activity is a wind project activity. So there is no BESS activity. e)The proposed project activity is a wind project activity. So, this project does not involve PSP.
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e) In case the project activity involves PSP, the PSP shall utilize the electricity generated from the renewable energy power plant(s) that is operating in coordination with the PSP during pumping mode.	
In case of hydro power plants, one of the following conditions shall apply: a) The project activity is implemented in an existing reservoir, with no change in the volume of reservoir; b) The project activity is implemented in existing single or multiple reservoirs, where the volume of the reservoir(s) is increased and the power density calculated using equation (7), is greater than 4 W/m²; or (c) The project activity results in new single or multiple reservoirs and the power density, calculated using equation (7), is greater than 4 W/m²; or (d) The project activity is an integrated hydro power project involving multiple reservoirs, where the power density for any of the reservoirs, calculated using equation (7), is lower than or equal to 4 W/m², all of the following conditions shall apply: (i) The power density calculated using the total installed capacity of the integrated project, as per equation (8), is greater than 4 W/m²; (ii) Water flow between reservoirs is not used by any other hydropower unit which is not a part of the project activity; (iii) Installed capacity of the power plant(s) with power density lower than or equal to 4 W/m² shall be: a. Lower than or equal to 15 MW; and b. Less than 10 per cent of the total installed capacity of integrated hydro power project.	This condition is not applicable to the project activity as it does not involve the installation of a hydro power plant.¹⁵
In the case of integrated hydro power projects, project proponent shall: (a) Demonstrate that water flow from upstream power plants/units spill directly to the downstream reservoir and that collectively constitute to the	The project activity is not a hydro power plant. Hence this applicability criterion is not relevant to the project activity.

¹⁴For example, upon deep discharge of the batteries.

¹⁵ The Generation License for 49 years obtained for WPP from Electricity Market Regulation Authority (EMRA)

generation capacity of the integrated hydro power project; or (b) Provide an analysis of the water balance covering the water fed to power units, with all possible combinations of reservoirs and without the construction of reservoirs. The purpose of water balance is to demonstrate the requirement of specific combination of reservoirs constructed under CDM project activity for the optimization of power output. This demonstration has to be carried out in the specific scenario of water availability in different seasons to optimize the water flow at the inlet of power units. Therefore, this water balance will take into account seasonal flows from river, tributaries (if any), and rainfall for minimum five years prior to implementation of CDM project activity.	
In the case of PSP, the project participants shall demonstrate in the PDD that the project is not using water which would have been used to generate electricity in the baseline.	The project activity is not a hydro power plant. Hence this is not relevant to the project activity.
The methodology is not applicable to: (a) Project activities that involve switching from fossil fuels to renewable energy sources at the site of the project activity, since in this case the baseline may be the continued use of fossil fuels at the site; (b) Biomass fired power plants/units	Project activity does not involve: - Switching from fossil fuels to renewable energy sources at the site of the project activity. - Biomass fired plants. Hence this criterion is not applicable.
In the case of retrofits, rehabilitations, replacements, or capacity additions, this methodology is only applicable if the most plausible baseline scenario, as a result of the identification of baseline scenario, is "the continuation of the current situation, i.e. to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance."	The project is not a retrofit, rehabilitations, replacements or capacity addition; hence this applicability criterion is not relevant.
In addition, the applicability conditions included in the tools referred to above apply.	Applicability conditions of the applied tool are justified.

From the above it is concluded that the project activity meets all the applicability conditions of the methodology ACM0002 version 22.0 "Grid connected electricity generation from renewable sources".

The project activity also meets the following applicability conditions of "Tool 07, Tool to calculate the emission factor for an electricity system".

Applicability Conditions of "Tool 07, Tool to Calculate the Emission Factor For an Electricity System" for Sah Wind Power Plant" as follow:

SI No	Applicability condition	Applicability to this project activity
1	This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity that substitutes grid electricity, i.e. where a project activity supplies electricity to a grid or a project activity that results in savings of electricity that would have been provided by the grid (e.g. demand-side energy efficiency projects).	The project activity substitutes grid electricity by supplying renewable power to grid. Hence this criterion is applicable.
2	In case of CDM projects the tool is not applicable if the project electricity system is located partially or totally in an Annex I country.	Project electricity system is not located in an Annex I country.

Applicability Conditions of "Tool 01, Tool for the demonstration and assessment of additionality Version 07.0.0 for Sah Wind Power Plant" as follow:

SI No	Applicability condition	Applicability to this project activity
1	The use of the "Tool for the demonstration and assessment of additionality" is not mandatory for project participants when proposing new methodologies. Project participants may propose alternative methods to demonstrate additionality for consideration by the Executive Board. They may also submit revisions to approved methodologies using the additionality tool.	This condition is not applicable since there is no new methodology proposed. Therefore this criteria is satisfied.

2	Once the additionally tool is included in an approved methodology, its application by project participants using this methodology is mandatory.	Since the additionality tool is applied the use of this tool is mandatory and is also applied therefore the condition is satisfied.
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Applicability Conditions of “Tool 02, Combined tool to identify the baseline scenario and demonstrate additionality v07.0 for Sah Wind Power Plant” as follow:

SI No	Applicability condition	Applicability to this project activity
1	The tool is applicable to all types of proposed project activities. However, in some cases, methodologies referring to this tool may require adjustments or additional explanations as per the guidance in the respective methodologies. This could include, inter alia, a listing of relevant alternative scenarios that should be considered in Step 1, any relevant types of barriers other than those presented in this tool and guidance on how common practice should be established.	This tool is applicable to all types therefore the condition is satisfied.

Applicability Conditions of “Tool 03, Tool to calculate project or leakage CO₂ emissions from fossil fuel combustion v03.0 for Sah Wind Power Plant” as follow:

SI No	Applicability condition	Applicability to this project activity
1	This tool provides procedures to calculate project and/or leakage CO ₂ emissions from the combustion of fossil fuels. It can be used in cases where CO ₂ emissions from fossil fuel combustion are calculated based on the quantity of fuel combusted and its properties. Methodologies using this tool should specify to which combustion process j this tool is being applied.	This tool is applicable to all types therefore the condition is satisfied.

Applicability Conditions of “Tool 10, Tool to determine the remaining lifetime of equipment v0.1 for Sah Wind Power Plant” as follow:

SI No	Applicability condition	Applicability to this project activity
1	The tool provides guidance to determine the remaining lifetime of baseline or project equipment. The tool may, for example, be used for project activities which involve the replacement of existing equipment with new equipment or which retrofit existing equipment as part of energy efficiency improvement activities.	This tool is referred by the applied methodology hence it is applicable.
2	Methodologies referring to this tool should clearly specify for which equipment the remaining lifetime should be determined. The remaining lifetime of relevant equipment shall be determined prior to the implementation of the project activity. Project participants using this tool shall document transparently in the CDM-PDD how the remaining lifetime of applicable equipment has been determined, including (references to) all documentation used	This tool is referred by the applied methodology hence it is applicable.
3	Under this tool, impacts on the lifetime of the equipment due to policies and regulations (e.g. environmental regulations) or changes in the services needed (e.g. increased energy demand) are not considered. Methodologies referring to this tool shall, where applicable, provide specific guidance on how regulations that warrant the replacement of the equipment before it has reached the end of its technical lifetime should be addressed.	This tool is referred by the applied methodology hence it is applicable.

Applicability Conditions of "Tool 27, Methodological Tool Investment Analysis v14.0" as follow:

SI No	Applicability condition	Applicability to this project activity
1	This methodological tool is applicable to CDM project activities and programmes of activities (PoAs) that	Since the project activity applies investment analysis for the demonstration of additionality this

	conduct an investment analysis for the demonstration of additionality and/or the identification of the baseline scenario.	condition is applied. Therefore this criteria is satisfied.
2	In case the applied approved baseline and monitoring methodology contains requirements for the investment analysis that are different from those described in this methodological tool, the requirements contained in the methodology shall prevail.	Since the applied methodology does not indicate any other requirements this condition is not relevant. Therefore this criteria is satisfied.

Applicability Conditions of "Tool 24, Methodological Tool Common Practise v03.1" as follow:

SI No	Applicability condition	Applicability to this project activity
1	This methodological tool is applicable to project activities that apply the methodological tool "Tool for the demonstration and assessment of additionality", the methodological tool "Combined tool to identify the baseline scenario and demonstrate additionality", or baseline and monitoring methodologies that use the common practice test for the demonstration of additionality	Since the tool "Tool for the demonstration and assessment of additionality" is applied the use of this tool is applicable.
2	In case the applied approved baseline and monitoring methodology defines approaches for the conduction of the common practice test that are different from those described in this methodological tool, the requirements contained in the methodology shall prevail.	Since the tool "Tool for the demonstration and assessment of additionality" is applied the use of this tool is applicable.

Applicability Conditions of "Tool 11, Methodological Tool Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period v03.0.1" as follow:

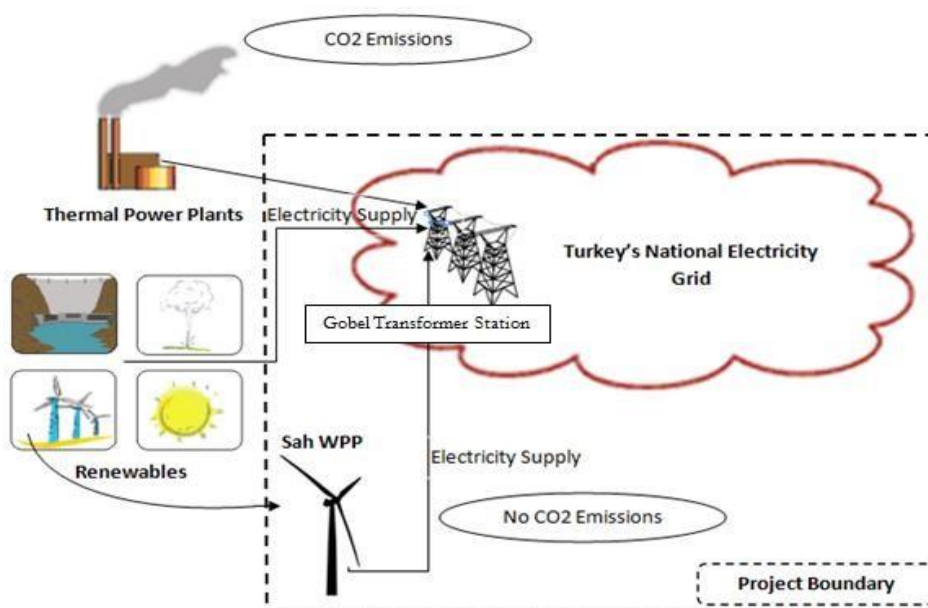
SI No	Applicability condition	Applicability to this project activity
1	The tool consists of two steps. The first step provides an approach to evaluate whether the current baseline	This project is under the renewal of the crediting period process, therefore

	is still valid for the next crediting period. The second step provides an approach to update the baseline in case that the current baseline is not valid anymore for the next crediting period.	these two steps are assessed under Section B.4 of the PDD.
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B.3. Project boundary

The spatial extent of the project boundary includes the project power plant and all power plants connected physically to the electricity system. The greenhouse gasses and emission sources are defined for the project activity and the baseline scenario. As a result, the project boundary for Sah Wind Power Plant is as demonstrated in the figure below

Figure 3 Project Boundary



In addition, please see the justification of the given project boundary in the table below:

Table 5 The greenhouse gasses and emission sources

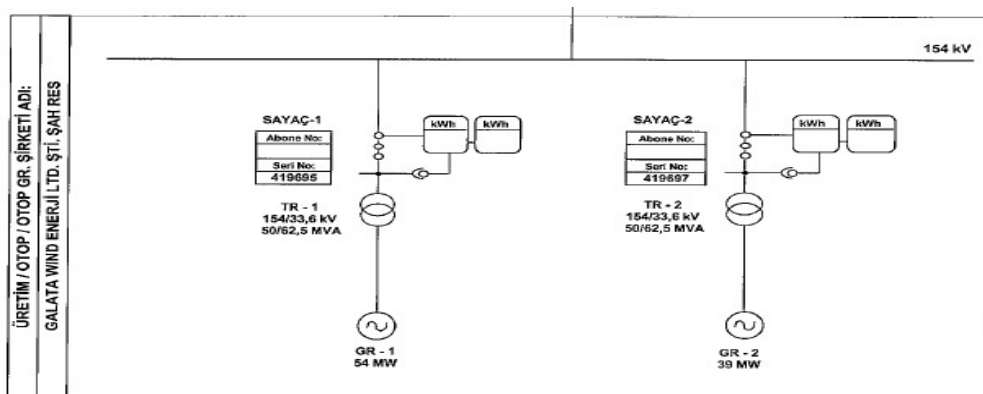
Source		GHGs	Included?	Justification/Explanation
Baseline	CO ₂ emissions from electricity generation in	CH ₄	No	The major source of emissions in the baseline
		N ₂ O	No	The minor emission source in the baseline.

	fossil fuel fired power plants that are replaced due to the project activity	CO ₂	Yes	Main emission source. The dominant emissions from power plants are in the form of CO ₂ , therefore CO ₂ emissions from fossil fuel fired power plants connected to the grid is considered in baseline calculations.
Project scenario	Construction and operation of the project activity	CO ₂	No	Minor emission source. The project activity has a diesel generator, however the use of fossil fuels for the back up or emergency purposes (e.g. diesel generators) can be neglected as per the applicable methodology. As suggested by the baseline methodology, project emissions (PEy) are assumed to be 0 and it is not considered
		CH ₄	No	
		N ₂ O	No	

Potential leakage emissions in the context of power sector projects are emissions that arise from the project activities such as power plant construction, fuel handling and land inundation. According to ACM0002 / Version 22.0, such emissions do not need to be taken into account.

The following figure represents the line diagram of the project activity

Figure 4 Single Line Diagram



The scheme shows the connection points of Şah Wind Power Plant with the national grid. The Şah Wind Power Plant has to be connected to the national grid via 154 kV Göbel TM.

B.4. Establishment and description of baseline scenario

The project applies for a renewal of the crediting period under the requirements of The Gold Standard Foundation so the Methodological Tool "Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period", Version 03.0.1 has been applied to demonstrate that the baseline of the project is still valid.

The Tool consists of two steps:

Step 1: The “Procedures for the renewal of the crediting period of a registered CDM project activity” approved by the CDM Executive Board require assessing the impact of new relevant national and/or sectoral policies and circumstances on the baseline. The validity of the current baseline is assessed using the following Sub-steps:

Step 1.1: Assess compliance of the current baseline with relevant mandatory national and/or sectoral policies.

The Project baseline is the “grid-connected electricity generation from renewable sources”. The Project is still in compliance with Electricity Market Law with Number 4628 and dated 03/03/2001 and Law on Utilization of Renewable Energy Resources for the Purpose of Generating Electrical Energy with Number 5346 and dated 18/05/2005 (current legal framework, all required relevant regulations and laws). There is no changes or revision of these laws and legislation.

The conclusion is that the baseline of the project activity complies and will continue to comply with the laws and regulations in the sector for the next crediting period.

Step 1.2: Assess the impact of circumstances.

The conditions used to determine the baseline emissions in the previous crediting period are still valid.

Step 1.3: Assess whether the continuation of use of current baseline equipment(s) or an investment is the most likely scenario for the crediting period for which renewal is requested.

The same circumstances are valid for the price of electric energy.

The baseline scenario identified at the validation of the project activity was the continuation of CO₂ emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity. Under this scenario, no investment from the project’s proponent or third party (or parties) has been envisioned later specifically for the project. Thus, this step is not applicable.

According to the equipment agreement, the system has 25 years linear pique power warranty. So, there is no changes about their technology.

There is no change in investment and technology affecting project implementation so related conditions used to determine the baseline emissions in the previous crediting period are still valid.

Step 1.4: Assessment of the validity of the data and parameters

The emissions reduction calculations are based on two main parameters: the energy produced and the grid emission factor.

Since the energy generated under the project activity is monitored, only the grid emission factor should be updated for the purpose of the crediting period renewal.

The emission factors and values for the calculation of the baseline emissions have been determined for the whole crediting period and parameters not monitored have been changed. Therefore, Step 2 has been applied.

According to the methodology, baseline scenario was identified as “the electricity delivered to the grid by the project activity that otherwise would have been generated by the operation of grid-connected power plants and by the addition of new generation sources”.

Step 2: Update the current baseline and the data and parameters.

Step 2.1: Update the current baseline.

As confirmed in Step 1, under the current context of the sectoral policies and circumstances, the project baseline for the next crediting period is the use of electricity from the national grid. This is conformed to the provisions of the latest version of the approved applicable methodology to the project activity namely: In respect of large-scale consolidated methodology ACM0002 “Grid-connected electricity generation from renewable sources”, the baseline scenario is that the electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources into the grid”.

Step 2.2: Update the data and parameters

The grid emission factor has been updated according to the version of the tool: Tool to calculate the emission factor for an electricity system (Version 07.0).

According to tool three options has provided. The PP has used Option 1 of Paragraph 17 for national EF by Turkish Republic Ministry of Energy as 0.6261 tCO₂/MWh¹⁶

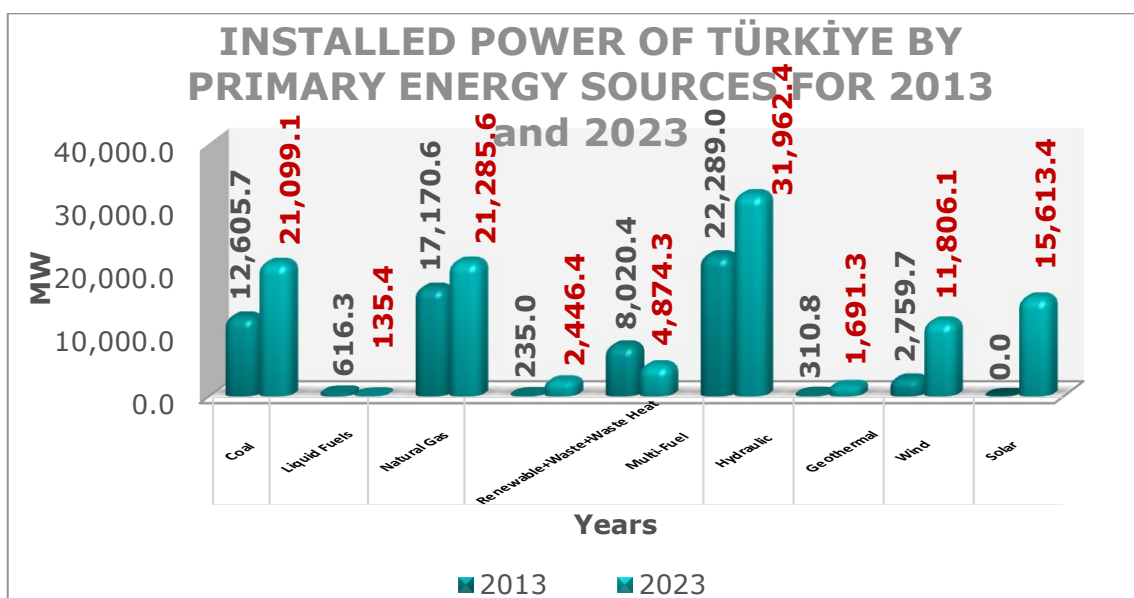
¹⁶https://enerji.gov.tr//Media/Dizin/EVCED/tr/ÇevreVeİklim/İklimDeğişikliği/TUESEmisyonFktr/Belgeler/Sebeke_EF_Bilgi_Formu_2022.pdf

The electricity generation is predominantly composed by fossil fuel fired power plants in Turkey. The share of resources in the electricity generation in Turkey may be seen in Figure 6²⁰.

Since the proposed project activity is "The installation of a new grid-connected renewable power plant ", the baseline scenario is defined as the consolidation of electricity delivered to the grid by the project activity and electricity generated by the operation of grid-connected power plants in Turkey and electricity produced by the new generation sources. The electricity generation is predominantly composed by fossil fuel fired power plants in Turkey.

According to the 5-year projection fossil fuels will remain the main sources for electricity generation. The electricity generation is predominantly composed by fossil fuel fired power plants in Turkey. The share of resources in the electricity generation in Turkey may be seen in below Figure 6.¹⁷

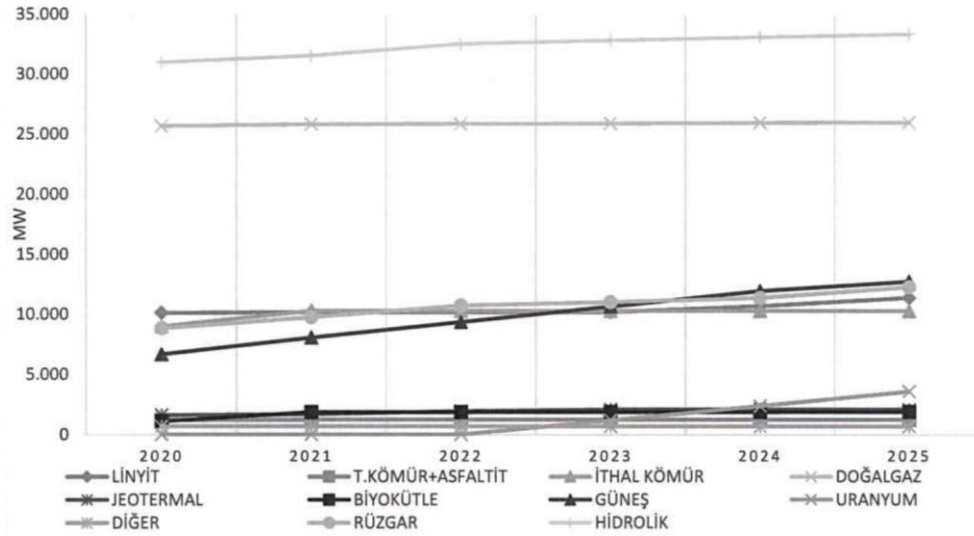
Figure 5 The share of resources in the electricity generation



As per the 5-year capacity projection of TEIAS (Türkiye Electricity Transmission Company), it is obvious that fossil fuels would continue being the main sources for electricity generation (approximately 56.95% in 2023). For this reason, main part of the new capacity will be fossil fuel based.

¹⁷ <https://www.teias.gov.tr/tr-TR/turkiye-elektrik-uretim-iletim-istatistikleri>

Figure 6 Capacity projection, 2021-2025¹⁸



The proposed project activity is the installation of a grid-connected renewable power plant/unit. The baseline scenario in accordance with ACM0002 v22.0 is defined as followed.

Electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described in the tool to calculate the emission factor for an electricity system.

According to the "Baseline Methodology Procedure" in "Tool to calculate the emission factor for an electricity system, Version 07.0" baseline emissions are calculated

Since the proposed project activity is "The installation of a new grid-connected renewable power plant ", the baseline scenario is defined as the consolidation of electricity delivered to the grid by the project activity and electricity generated by the operation of grid-connected power plants in Türkiye and electricity produced by the new generation sources.

Installed electricity generation capacity in Türkiye has reached 110,914 MW as of 2023. Wind Power projects have totally had 11,806 MW.¹⁹

¹⁸ <https://www.teias.gov.tr/tr-TR/ilgili-raporlar>

¹⁹ <https://www.teias.gov.tr/turkiye-elektrik-uretim-iletim-istatistikleri> Grafik I.IV

Türkiye as an advanced developing nation has looked at dealing with energy security by developing and constructing high-capacity coal and natural gas power plants. The development of thermal power plants has been also encouraged by the large natural resource availability in Türkiye, especially the abundance of economically accessible lignite.

B.5. Demonstration of additionality

Referred by the Baseline Methodology, the “Tool for the Demonstration and Assessment of Additionality” outlines a step by step approach for the assessment of additionality or in other words the emission reductions that would have occurred in the absence of the project.

Step 1: Identification of alternatives to the project activity consistent with current laws and regulations

Sub-step 1a: Define alternatives to the project activity

In the absence of the proposed project activity, plausible and credible project activities to the proposed project activity are as follows:

Alternative 1 : Construction of a thermal power plant with the same annual power output

Alternative 2 : The proposed project activity not undertaken as a VER project activity

Alternative 3 : The same service of power supply is provided from the grid (Sah WPP is not built)

Although the coal and natural gas reserves in Turkey is very limited, there are many thermal power plants that have been being commissioned in recent years and Turkey’s grid mainly consists of thermal power plants. As they have become common practice in the energy sector due to off-take agreements provided by the government, these projects face easier circumstances in terms of financing and realisation. In addition, these projects use imported coal, so they can be realized regardless of their geographic proximity to coal supply. Therefore, construction of a thermal plant with the same annual electricity output is a realistic alternative.

As mentioned above, the Turkish Electricity Sector is heavily dependent on fossil fuel plants. According to a new bill that passed in 2001 (Electricity Market Law, Law No: 4628, Enactment Date: 20/02/2001), the public funding in energy investments have stopped. The new bill allows incentives for private sector participation in energy investments. In addition to rehabilitation of existing plants, new capacities to be added to meet the increasing demand require mass amount of investments. Because the public funding of energy investments is no more legitimate, the new projects need to be accomplished by private sector. Yet, Sah WPP cannot influence the future fuel mix in the energy market, but can only decide to invest on the project because Sah WPP has no influence on the domestic energy policy of the decision makers.

Under these circumstances, analyzing these three alternatives, it is seen that all scenarios are consistent with the baseline definition of ACM0002 / Version 18.0 where it defines the baseline scenario as the amount of electricity that would be delivered to the grid by the project activity, generated by the operation of existing grid-connected power plants and by the addition new generation sources, as reflected by the combined margin.

Sub-step 1b: Consistency with mandatory laws and regulations

The following applicable mandatory laws and regulations have been identified:

1. Electricity Market Law
2. Law on Utilization of Renewable Energy Resources for the Purpose of Generating Electrical Energy
3. Forest Law
4. Environment Law
5. Regulation on procedures and principles of signing the agreement of utilization of water resources for the purpose of electricity production in the electricity market
6. Regulation on Environmental Impact Assessment

All energy projects are in compliance with the mandatory laws and regulations listed above except 2nd and 6th one. "Law on Utilization of Renewable Energy Resources for the Purpose of Generating Electrical Energy" is only applicable for renewable energy projects. Also, "Regulation on procedures and principles of signing the agreement of utilization of water resources for the purpose of electricity production in the electricity market" is only applicable for hydropower projects. The electricity Market Law structures the market in general. Therefore, it is applicable for all projects in the electricity market. On the other hand, Forest Law, Environment Law, energy efficiency Law and the Regulation on EIA are also applicable for all alternatives.

Outcome of Sub-Step b

The alternatives discussed above are in line with applicable legal and regulatory requirements.

Step 2: Investment Analysis

The purpose of investment analysis is to determine whether the proposed project activity is economically or financially less attractive without carbon revenues than the remaining alternatives. To conduct the investment analysis, the following sub-steps are adhered to:

Sub-step 2a: Determine appropriate analysis method

The „Tool for the Demonstration and Assessment of Additionality’, version 05.2, from EB39, lists three possible analysis methods:

- Option I: Simple cost analysis;
- Option II: Investment comparison analysis; and
- Option III: Benchmark analysis.

Since the proposed project generates financial and economic benefits via the sales of electricity other than carbon revenues, Option I cannot be used.

Option II is only applicable to projects where alternatives should be similar investment projects in terms of generation capacity. Between Option II and Option III, benchmark financial analysis (Option III) is selected as the analysis method.

As a result Option III: Benchmark Analysis is selected as the analysis method and the Equity IRR is selected as the financial indicator for the demonstration of the additionality of the project.

Sub-step 2b: Option III. Apply Benchmark Analysis

While applying the Benchmark Analysis, Option III, the Equity IRR is selected as the financial indicator for the demonstration of the additionality of the project as permitted in the additionality tool.

The relevant benchmark rate is calculated in line with the suggestion in “Tool for the demonstration and assessment of additionality” which suggests using the government bond rates, increased by a suitable risk premium. In relation to this, the

benchmark rate is calculated in line with the Capital Asset Pricing Model (CAPM)²⁰ . The CAPM suggests below formula to calculate the discount rate (in other words benchmark rate).

$$E(R_i) = R_f + \beta_i(E(R_m) - R_f)$$

$E(R_i)$ is the expected return on the capital asset

R_f is the risk-free rate of interest such as interest arising from government

β_i bonds (the beta coefficient) is the sensitivity of the asset returns to market returns, or

also
$$\beta_i = \frac{\text{Cov}(R_i, R_m)}{\text{Var}(R_m)}$$

$E(R_m)$ is the expected return of the market

$E(R_m) - R_f$ is sometimes known as the market premium or risk premium (the difference between the expected market rate of return and the risk-free rate of return)

Risk Free Rate (R_f)

As the Turkish Eurobonds represent a risk-free rate, it must be increased by a suitable risk premium, which reflects the premium that investors demand for an average risk investment. The interest rate for Eurobond with longest duration of 10 years which XS0285127329 - 02.04.2019 was 5.66% at the time of decision (End of August 2009, please see <http://www.ziraat.com.tr/tr/bankamiz/faiz-ve-ucretler/asp/eurbond.aspx> for 31 of August 2009). However the maturity of this bond does not match with the investment analysis duration which is 25 years (technical life of the equipment). Therefore the yield of a synthetic bond with 27 years maturity at the time of decision was calculated using the yield curve derived from <http://www.ziraat.com.tr/tr/bankamiz/faiz-ve-ucretler/asp/eurbond.aspx> was used. Please see Annex 7 to see the yield curve. According to this calculation the synthetic bond's yield should be around 7.883%.

The Beta Coefficient (β_i)

The Beta coefficient of securities with values close to 1 determines the company securities as being of average risk. There are four power generating and trading companies under trade in the Istanbul Stock Exchange (ISE). The β_i for the Electricity

²⁰ https://en.wikipedia.org/wiki/Capital_asset_pricing_model for the definition of CAPM

Index is calculated as 0.939 by Bloomberg which is one of the prominent data suppliers in financial markets. (Please see Annex 8 for Betas of these companies)

Market risk premium ($E(R_m) - R_f$)

To estimate the “Market risk premium” of Turkey, the independent study of Aswath Damodaran – Stern School of Business (New York University) was used. The study offers an assessment of the market risk for different countries according to their credit ratings as the determined market risk premium for Turkey is 12.88%, calculated on the basis of the credit rating Ba3 with positive perspective given to Turkey by Stern School of Business.²¹

All in all, the relevant discount rate is calculated as:

$$7.88\% + 12.88\% * 0.939 = 19.97\%$$

The above discount rate can easily be assumed as conservative as the above benchmark assumes that the benchmark and the project have same natures in terms of risk. However, the Beta of the index includes lower risk compared to the project, as the index includes already established companies (which are up and running). However, it is obvious that the project includes more risk compared to already established companies as there are extra construction risks and inexperienced operational risks for the project. Therefore, the Beta of the project should be significantly higher than the index Beta. All in all, we can say that the CAPM derived benchmark rate is conservative and also in consistency with the benchmark rates received from local bankers mentioned above.

IRR Calculation of the Project

The below IRR calculations of the project reveal the fact that the project is not financially attractive. Therefore, carbon revenues are crucial for the project and the company considered potential carbon revenues in its financial feasibilities shared with the top management before the project activity start date. In the further stages of the project (before the construction start), the company took necessary actions to develop this project as a Gold Standard VER project.

Aiming to show that the income of the GS VER is important for the financial performance of the project, two scenarios are presented in this section, one which excludes revenues from the sale of GS VERs and the second which includes the revenues from the sale of GS VERs. The assumptions used for this analysis are outlined as follows:

- The project lifetime is defined as 25 years, which is the technical lifetime for the project.

²¹ <http://www.stern.nyu.edu/~adamodar/pc/archives/ctryprem08.xls>

- The financial analysis is performed over the 27 years period. This therefore includes the investments made by the project owner during the construction phase and the operational costs along the financial analysis period.
- The Equity IRR (Internal Rate of Return) of the project cash flow has been calculated.
- A tax rate of 20% is applied to the project in line with Turkish tax laws.
- The depreciation period of turbines was assumed as 10 years, depreciation period of machinery and equipment was assumed as 15 years.(Please see http://www.gib.gov.tr/fileadmin/user_upload/Tebliğler/VergiUsul_Kanunu/verusulteb365ek.htm). In the meantime, the other fixed assets' (buildings etc) depreciation life is assumed as 40 years.
- The annual power generation figure is assumed as 341,275,000 kWh. (306,566,000 kWh for second crediting period and 347,094,200 kWh for third crediting period.)
- The power purchase price for the project is assumed to be 5.5 Euro cents per kWh which is the purchase guarantee offered by the State as an incentive to the investment (Please refer to Turkish Renewable Energy Law No: 5346 Article 6.c.)

The revenues from GS VERs are excluded from scenario 1, and included in scenario 2. The volume of GS VERs generated by the project is calculated by multiplying the annual electricity output of the project by the emission factor. For sensitivity analysis, the revenues related to the sale of the GS VERs are applied by multiplying the volume of GS VERs by the €5, €6 and €7 price. The GS VERs are generated and sold for the first 7 years of the operational lifetime of the project. (Unfortunately this is not realized because of the market condition. The price and every related condition of this market has changed)

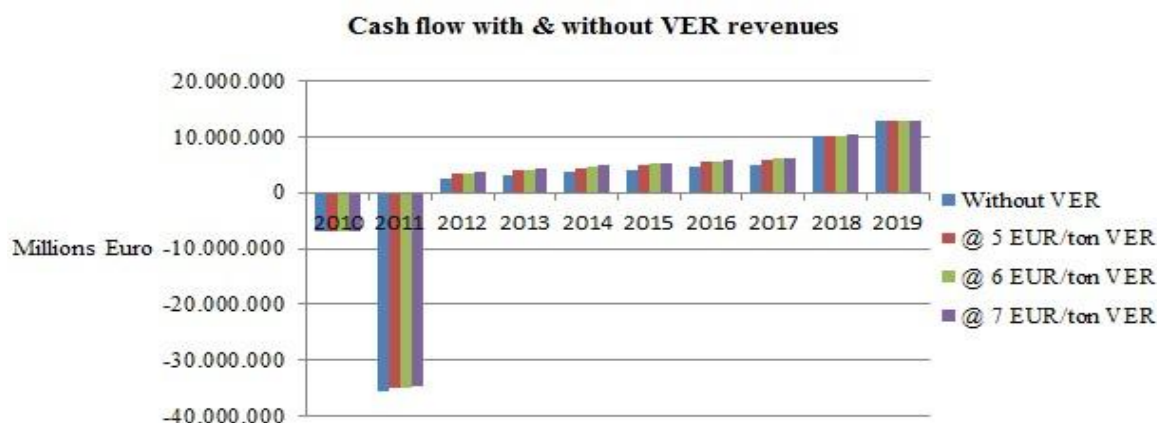
Results

The cash flow analysis has been performed on two project scenarios;

- Scenario 1 – excludes revenues from the sale of GS VER

- Scenario 2 – includes revenues from the sale of GS VERs

Figure 7 : Project Cumulative Cash Flow Comparison, with and without GS VERs.



Sub-step 2c: Calculation and Comparison of Financial Indicators

1. Parameters required for calculation of key financial indicators

The parameters required for the calculation of key financial indicators are in Table 6:

Table 6 Basic Parameters for Financial Analysis

Parameter	Value	
Before Design Change		After Design Change*
Basic parameters		
Installed Capacity	105 MWm	112,2 MWm / 111,8 MWe
Annual Electricity Production	341,275 MWh/year	347,094 MWh/year
Electricity Sales Price	5.5 Euro cent	6.2 Euro cent
Income tax rate	20%	20%
Project lifetime – (years)	25.0	25.0
Annual Costs		
Turbine Repair, Maintenance & Spare Parts	2,170,000 Euro	2.520.000 Euro
Personnel	240,000 Euro	240,000 Euro
Energy Transfer Fee (System Usage Fee)	344,299 Euro	368.400 Euro
Insurance	0.1% of total investment	0.1% of total investment
Investment Items		
Project Development Costs	14,415,000	14,415,000

Costs for Turbines	82,080,000	88,080,000
Construction	7,571,186	8,571,186
Electromechanical Installments	5,000,000	6,500,000
Financing		
Loan Amount	65% of total investment	53% of total investment
Interest	8%	8%
Tenor	10	10

*These are also based on assumption.

2. Results of the Financial Analysis

Table 6 includes the results of the financial analysis for the Project, at the time that the decision to go ahead was made, both with and without VER financing. The IRR of the Project without VER financing was lower than the applicable benchmark rate of return. This therefore indicates that in comparison to alternative investments, the Project was financially unattractive in the absence of VER financing.

Table 7 Summary of Project investment analysis without and with VER financing

	Without VER	@ 5 Eur/ton VER	@ 6 Eur/ton VER	@ 7 Eur /ton VER
Equity IRR (%)	12,16%	13,5%	13.7%	14,0%

3. Comparison of IRR for the proposed project to the financial benchmark

In accordance with benchmark analysis (Option III), if the financial indicators of the proposed project, such as the project IRR²², are lower than the benchmark, the proposed project is not considered financially attractive.

Table 6 highlights the project IRR with and without carbon revenues. Without the additional income to the project developer resulting from VER sales, the Equity IRR is 12.16 %, which is lower than the financial benchmark. Thus, the proposed project is not financially attractive. However, taking VER revenues into consideration, the Equity IRR increases to 14.0 % (with 7 EUR/ton VER price).

While the IRR with VERs remains lower than the financial benchmark of 19.97%, the Project Developer will also benefit from the following intangible benefits that VERs provide:

²² For Benchmark Analysis, the IRR shall be calculated as equity IRR, according to the "Tool for the demonstration and assessment of additionality", version 05, from EB39.

A third party review of project documents will give extra confidence to both investors and financiers.

-Enhanced corporate green image of the project developer through its contribution to a clean source of electricity and the diversification of electricity sources in Turkey, which broadens stakeholder confidence.

Sub-step 2d: Sensitivity Analysis

Sensitivity analysis was applied to Investment Costs, Energy Production, Electricity Sales Price and O&M Cost. Applying variations on investment costs, the range was considered to be in a bandwidth of +10% and –10% as advised in “Tool for the demonstration and assessment of additionality”

The sensitivity in the investment amount was applied to the investment items which represent equal or above 20% of the total investment amount (namely, “Regulator, tunnel & canals construction” and “Electromechanical Installments”) as suggested by “Tool for the demonstration and assessment of additionality.”

Table 8 Sensitivity to Variation in Investment Costs

	IRR Sensitivity with Investment Costs				
Change in %	-10%	-5%	0%	5%	10%
Without VER	14.06%	13.04%	12.16%	11.37%	10.67%
IRR @ 5 Eur/ton VER	15.61%	14.46%	13.47%	12.60%	11.83%
IRR @ 6 Eur/ton VER	15.92%	14.75%	13.74%	12.85%	12.07%
IRR @ 7 Eur/ton VER	16.24%	15.04%	14.01%	13.10%	12.30%

Variation on energy production was also applied in a bandwidth of +10% and –10%.

Table 9 Sensitivity to Variation in Energy Production

	IRR Sensitivity with Electricity Production				
Change in %	-10,0%	-5,0%	0,0%	5,0%	10,0%
Without VER	7.51%	9.78%	12.16%	14.68%	17.41%
IRR @ 5 Eur/ton VER	8.55%	10.94%	13.47%	16.19%	19.14%
IRR @ 6 Eur/ton VER	8.76%	11.18%	13.74%	16.50%	19.49%
IRR @ 7 Eur/ton VER	8.96%	11.41%	14.01%	16.81%	19.85%

Due to the fact that the feed in guaranteed tariff prices are fixed in Turkey, the unit energy price is not considered to be an exogenous variable. However, sensitivity on the upward side was also applied to see the effect of price changes.

Table 10 Sensitivity to Variation in Energy Price

	IRR Sensitivity with Electricity Price				
Change in %	-10,0%	-5,0%	0,0%	5,0%	10,0%
Without VER	9.70%	11.68%	12.16%	13.39%	14.63%
IRR @ 5 Eur/ton VER	10.99%	12.49%	13.47%	14.73%	15.99%
IRR @ 6 Eur/ton VER	11.26%	12.65%	13.74%	15.00%	16.27%
IRR @ 7 Eur/ton VER	11.52%	12.82%	14.01%	15.27%	16.55%

Last, the Operating & Maintenance costs are also included to the Sensitivity Analysis. The results are as shown in the table below:

Table 11 Sensitivity to Variation in Operating and Maintenance Costs

	IRR Sensitivity with O&M Cost				
Change in %	-10,0%	-5,0%	0,0%	5,0%	10,0%
Without VER	13.17%	12.98%	12.16%	12.58%	12.38%
IRR @ 5 Eur/ton VER	14.05%	13.85%	13.47%	13.45%	13.24%
IRR @ 6 Eur/ton VER	14.24%	14.03%	13.74%	13.63%	13.42%
IRR @ 7 Eur/ton VER	14.42%	14.22%	14.01%	13.81%	13.61%

The above benchmark and accompanying sensitivity analyses reveal the fact that no alternative scenario, with or without VER revenues, can make the project pass the benchmark IRR expectation. The equity IRR without VER revenues of the project, even with a increase of 10% in the electricity price/production, cannot exceed 19.97% which is much lower than the benchmark rate. On the other hand, in case of a 10% decrease in the investment amount, the equity IRR with VER revenues approaches the benchmark rate, but not exceeds. Therefore, the project is not financially attractive without VER revenues. Consequently, the project has a strong additionality argument according to the results of investment analysis.

In addition to the assessment of chosen parameters for Sensitivity analysis, the impact of design change of the project (increase of installed capacity with add 1 turbine) is assessed to demonstrate that the project is additional in line with the "Gold Standard Procedures for Approval of Design Changes". The cost of additional 1 wind turbine is 8,650,000 Euros + VAT based on the agreement made with Goldwind GW182. In addition, the most up-to-date electricity generation estimation after the implementation of the additional turbines is used for the calculation of electricity sales revenues. (347,094 MWh/yr) Last, the "Turbine Repair, Maintenance and Spare Parts" cost is increased to 36/35 of the cost used in the investment analysis, since this cost is based on the number of WTGs and additional costs for construction works of the 1 turbine is used (70,000 Euros)

In the light of these values, the equity IRR of the project is recalculated and the result is 14.29 %, which is also much lower than the benchmark rate. The Sah WPP with 36 turbines still strong additionality argument according to the results of investment analysis.

Table 12 Sensitivity of Equity IRR (without VER revenues) to variations on different parameters

	Equity IRR without VER				
Sensitivity Parameter /Change Rate	-10%	-5%	0%	5%	10%
Investment Cost	15.21%	14.16%	12.16%	12.45%	11.74%
Energy Production	10.86%	12.05%	12.16%	14.47%	15.71%
Electricity Sales Price	10.86%	11.68%	12.16%	14.47%	15.71%
O&M Cost	13.58%	13.42%	12.16%	13.09%	12.92%

Outcome of Step 2

The sensitivity analysis shows that the equity IRR of the proposed project does not overcome the financial benchmark despite favourable conditions.

The sensitivity analysis further substantiates that the project activity is not a feasible alternative and so additional.

Step 3: Barrier Analysis

The analysis is not applied.

Step 4: Common Practice Analysis

According to “Tool for the demonstration and assessment of additionality” version 07.0.0, the proposed project activity applies the measures listed in the definitions section of the tool. So, Sub-step 4a is applied.

Sub-step 4a Analyse other activities similar to the proposed project activity:

The proposed VER project activity(ies) applies measure(s) that are listed in the definitions section EB 69 Report Annex 8, “The Guidelines on Common Practice” version 02.0 is applied for the proposed project activity. Projects are considered similar if they are in the same country/region and rely on a broadly same technology, are of similar scale and take place in a comparable environment with respect to regulatory framework, investment climate, access to technology, access to financing.

Step 1: Calculate applicable capacity or output range as +/-50% of the total design capacity or output of the proposed project activity.

The installed capacity of the proposed project activity is 111.8 MWm/111.8 MWe. Therefore, the lower limit of the applicable output range is 74.53 MW and upper limit is 167.70 MW.

Step 2: Identify similar projects (both CDM and non-CDM) which fulfill all of the following conditions:

- (a) The projects are located in the applicable geographical area;
- (b) The projects apply the same measure as the proposed project activity: ;
The projects use the same energy source/fuel and feedstock as the proposed project activity, if a technology switch measure is implemented by the proposed project activity;
- (c) The plants in which the projects are implemented produce goods or services with comparable quality, properties and applications areas (e.g. clinker) as the proposed project plant;
- (d) The capacity or output of the projects is within the applicable capacity or output range calculated in Step 1;
- (e) The projects started commercial operation before the project design document (CDM-PDD) is published for global stakeholder consultation or before the start date of proposed project activity, whichever is earlier for the proposed project activity.

Regarding the conditions:

- Applicable geographical area has been selected as Türkiye.
- Electricity Generation Energy Projects have been selected regarding the same energy source type of projects. (Wind, Hydro, Solar, Biomass and Geothermal)
- There is no technology switch in this project
- The selected plants deliver the same service (Renewable).
- Applicable output range has been determined from Electricity Production License Database by EMRA for 2025 which is the latest available year before the start date of the project activity.
- The complimentary stakeholder meeting date is 26/05/2025. The start date of this project is not defined because the agreement has not signed yet. Since the complimentary stakeholder meeting date was earlier, the most up-to-date project list data available at that time was used. That's why "2025 YEK Listesi" has been used for this part.

Step 3: Within the projects identified in Step 2, identify those that are neither registered CDM project activities, project activities submitted for registration, nor project activities undergoing validation. Note their number Nall.

From the list obtained from EMRA (EPDK) Report²³ it has been understood that there are initially 762 projects. When we apply all steps in the tool and filter out the projects that are not within the capacity range of 74.53 MW-167.70 MW, the number falls to 8, Satisfying the steps 2 and 3, Nall project is 8.

Nall=8

Step 4: Within similar projects identified in Step 3, identify those that apply technologies that are different to the technology applied in the proposed project activity. Note their number Ndiff.

According to the tool, for "Different technologies"; (a) Energy source/fuel (example: energy generation by different energy sources such as wind and hydro and different types of fuels such as biomass and natural gas); was chosen. Therefore, all only "wind" projects are excluded.

²³ <https://www.epdk.gov.tr/Detay/Icerik/5-12885/2023-yili-nihai-yek-listesi>

Step 5: Calculate factor $F=1-N_{diff}/N_{all}$ representing the share of similar projects (penetration rate of the measure/technology) using a measure/technology similar to the measure/technology used in the proposed project activity that deliver the same output or capacity as the proposed project activity.

The factor F defined in the guideline is calculated with the formula below:

$$F = 1 - N_{diff}/N_{all}$$

$$F = 1 - 6/8=0.25$$

$$N_{all}-N_{diff}=8-6=2$$

F is 0.25 which is greater than 0.2 and $N_{all} - N_{diff}$ is 2.

To a project be common practice both F must be less than 0.2 and $N_{all} - N_{diff}$ must be greater than 3. Since $N_{all} - N_{diff}$ is less than 3, the proposed project activity is not a "Common Practice".²⁴

Outcome of Step4

The project activity is not regarded as "common practice", then the proposed project activity is additional.

B.5.1 Prior Consideration

NA

B.5.2 Ongoing Financial Need

Below you can find the electricity sales income, operational costs, carbon sales income and carbon certification expenses. They are all normalized to the net income (divided by net income).

For Crediting Period (15/11/2018-14/11/2025)	% to Net Income
Income	172.50
Costs	72.50
Net Income	100
Carbon Income	4.37
Carbon Costs	0.31

²⁴ Common Practice Analysis is available to the VVB.

Net Carbon Income	4.06
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Income occurring from electricity sales (sole income except carbon revenues) is 1.72 times the net income and overall expenses (including depreciation costs) make up to 0.72 times the net income. Revenues from carbon credit sales make 4.37 percent of net income. Carbon certification costs amount to 0.31 percent of the net income and net carbon sales income amount 4.06 percent of net electric sales income.

The project is not financially attractive. Therefore, carbon revenues are crucial for the project. The income of the GS VER is very important for the financial performance of the project. So, the results of the financial analysis still same for the project, with the decision to go ahead was made approximately 14 years ago, both with and without VER financing. This therefore indicates that in comparison to alternative investments, the Project was still financially unattractive in the absence of VER financing.

B.6. Sustainable Development Goals (SDG) outcomes

Relevant Target/Indicator for each of the three SDGs

Sustainable Development Goals Targeted	Most relevant SDG Target	SDG Impact
		Indicator (Proposed or SDG Indicator)
13 Climate Action (mandatory)	T:13.3. Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning	I:13.3.2 Number of countries that have communicated the strengthening of institutional, systemic and individual capacity-building to implement adaptation, mitigation and technology transfer, and development actions
7 Affordable and Clean Energy	T:7.2 By 2030, increase substantially the share of renewable energy in the global energy mix	I: 7.2.1 "Renewable energy share in the total final energy consumption
8 Decent Work and Economic Growth	T: 8.5 By 2030 achieve full and productive employment and decent work for all women and men T:8.8 Protect labour rights and promote safe and secure working	I: 8.5.2 Unemployment rate, by sex, age and persons with disabilities I.8.8.2 Increase in national compliance of labour rights

	environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment	(freedom of association and collective bargaining) based on International Labour Organization (ILO) textual sources and national legislation, by sex and migrant status. All employee will attend to the health and safety training once per during monitoring period.
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B.6.1 Explanation of methodological choices/approaches for estimating the SDG Impact

SDG 7: Affordable and Clean Energy

The baseline for the project is no project, thus leading to generation in the relevant grid which is dominated by fossil fuel. The clean energy generated by the project is calculated based on the amount of electricity generated by the project per annum. The electricity generation with the commissioning of the new 1 turbines expected to be 347,094.200 kWh²⁵. The average electricity generation value of Şah WPP's CP2 over the past 7 years (2018–2025) is 326,007 MWh, with a capacity factor of 35.4%. The addition of a 6.8 MWe turbine is expected to generate approximately 21,087.072 MWh on average. So the total expectation electricity generation value will be 347,094.200 MWh during the third crediting period-CP3 (15/11/2025-14/11/2032). PP can also use the 367,879.200 MWh electricity generation to calculate the reduce emission reduction according to GS design change rules and requirements. (%20 CAP). But, PP choose to be conservative side for the SDG7 and which is 347,094.200 MWh value.

Net Generation (MWh) = Electricity Supplied to the Grid (MWh)– Electricity Consumption from the Grid (MWh)

²⁵ 347,094.200 kWh is calculated 326,007 plus 21,087.072 (with additional 1 turbine) This calculation of these value also can be seen in ER Excel Sheet.

The net generation and internal consumption identified and approved by authorized EPIAS.

The project contributes to the following indicators 7.2.1 "Renewable energy share in the total final energy consumption" and following target: 7.2 "By 2030, increase substantially the share of renewable energy in the global energy mix."

SDG 8: Decent Work and Economic Growth

The project leads to employment opportunities which would not have been possible in the baseline scenario. The project provides employment to between 20 and 25 people during the operation phase.

The project contributes to the following indicators 8.5.2 "Unemployment rate, by sex, age and persons with disabilities" and following target: "8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value" The target will be monitored by the number of full-time employees with the SGK records during the verification process. Because of the social conditions of the project area, employment of woman and persons with disabilities is not possible.

The project contributes to the following indicators 8.8.2 Increase in national compliance of labour rights (freedom of association and collective bargaining) based on International Labour Organization (ILO) textual sources and national legislation, by sex and migrant status. All employee will attend to the health and safety training once per during monitoring period.

SDG13: Climate Action:

This Şah Wind Power Plant reduce the emission reduction by approximately 217,324 tCO₂ after design change with one turbine and during the CP3 crediting period.

The project contributes to the following indicators 13.3.2 "Number of countries that have communicated the strengthening of institutional, systemic and individual capacity-building to implement adaptation, mitigation and technology transfer, and development actions" and following target 13.3 "Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning".

The project's contribution is done through training and awareness raising of local people and setting good example by investing to the climate friendly technology.

As developing the baseline and calculation of the emission reductions for the proposed project activity are calculated according to "Tool to calculate the emission factor of an electricity system" version 07.0.

Ministry of Energy and Natural Resources have been published Operating, Build and Combined Margin Emission Factors. The Ministry has calculated the factors as using the "Tool to calculate the emission factor for an electricity system". Since it's the latest available data, published by the ministry, these factors have been considered.

Calculation of the Operating Margin Emission Factor

It's been published as 0.7108 tCO₂/MWh by the Ministry of Energy and Natural Resources²⁶

Calculation of the Build Margin Emission Factor

It's been published as 0.3721 tCO₂/MWh by the Ministry of Energy and Natural Resources.²⁷

Calculating of the Combined Margin Emission Factor

It's been published as 0.6261 tCO₂/MWh for the wind power plant by the Ministry of Energy and Natural Resources. The combined margin is calculated ex-post and has been fixed for the crediting period.²⁸

Emission Reductions

The emission reductions are calculated based on the below formula:

$$ER_y = BE_y - PE_y - LE_y$$

Where:

ER_y = Emission reductions in year y (tCO₂e/yr)

BE_y = Baseline emissions in year y (tCO₂/yr)

PE_y = Project emissions in year y (tCO₂e/yr)

²⁶https://enerji.gov.tr//Media/Dizin/EVCED/tr/ÇevreVeİklim/İklimDeğişikliği/TUESEmisyonFktr/Belgeler/Sebeke_EF_Bilgi_Formu_2022.pdf

²⁷https://enerji.gov.tr//Media/Dizin/EVCED/tr/ÇevreVeİklim/İklimDeğişikliği/TUESEmisyonFktr/Belgeler/Sebeke_EF_Bilgi_Formu_2022.pdf

²⁸https://enerji.gov.tr//Media/Dizin/EVCED/tr/ÇevreVeİklim/İklimDeğişikliği/TUESEmisyonFktr/Belgeler/Sebeke_EF_Bilgi_Formu_2022.pdf

LE_y = Leakage emissions in year y (t CO₂/y)

Project Emissions

As the proposed project activity is a new grid-connected wind power plant. For this reason, PE_y is considered as "0" in line with ACM0002 Version 22.0

$PE_y = 0$

Leakage

Leakage emission (LE_y) is considered as "0" as suggested in ACM0002 Version 22.0

$LE_y = 0$

Baseline Emissions

The baseline emissions are calculated as follows:

$BE_y = EG_{\text{facility},y} * EF_{\text{CO}_2,\text{grid},y}$

Where:

BE_y = Baseline emissions in year y (tCO₂/yr)

$EG_{\text{facility},y}$ = Net quantity of electricity generated and delivered to the grid by power facility in year y (MWh)

$EF_{\text{CO}_2,\text{grid},y}$ = CO₂ emission factor of the grid in year y (t CO₂/MWh)

B.6.2 Data and parameters fixed ex ante

SDG13

Data/parameter	$EF_{\text{CO}_2,\text{grid},y}$
Unit	tCO ₂ /MWh
Description	Combined margin CO ₂ emission factor for the project electricity system in year y
Source of data	Republic of Türkiye Ministry of Energy in Emission Factor 2022 ²⁹
Value(s) applied	0.6261

²⁹https://enerji.gov.tr//Media/Dizin/EVCED/tr/ÇevreVeİklim/İklimDeğişikliği/TUESEmisyonFktr/Belgeler/Sebeke_EF_Bilgi_Formu_2022.pdf

Choice of data or Measurement methods and procedures	Calculate baseline emission
Purpose of data	Calculation of baseline emissions - to demonstrate contribution to SDG7- 7.2.1 Renewable energy share in the total final energy consumption
Additional comment	

The CP2 registered PDD has included more than below ex ante parameter but now this is not necessary to add these because combined margin calculated by Republic of Türkiye Ministry of Energy and PP has used it.

B.6.3 Ex ante estimation of SDG Impact

SDG 7: Affordable and Clean Energy

The baseline for the project is no project, thus leading to generation in the relevant grid which is dominated by fossil fuel. The clean energy generated by the project is calculated based on the amount of electricity generated by the project per annum. The clean energy generated by the project is calculated based on the amount of electricity generated by the project per annum. the electricity generation with the commissioning of the new 1 The baseline for the project is no project, thus leading to generation in the relevant grid which is dominated by fossil fuel. The clean energy generated by the project is calculated based on the amount of electricity generated by the project per annum. The electricity generation with the commissioning of the new 1 turbines expected to be 347,094.200 kWh³⁰. The average electricity generation value of Şah WPP's CP2 over the past 7 years (2018–2025) is 326,007.128 MWh, with a capacity factor of 35.4%. The addition of a 6.8 MWe turbine is expected to generate approximately 21,087.072 MWh on average. So the total expectation electricity generation value will be 347,094.200 MWh during the third crediting period-CP3

³⁰ 347,094.200 kWh is calculated 326,007 plus 20,848.800 (with additional 1 turbine) This calculation of these value also can be seen in ER Excel Sheet.

(15/11/2025-14/11/2032). PP can also use the 367,879.200 MWh electricity generation to calculate the reduce emission reduction according to GS design change rules and requirements. (%20 CAP). But, PP choose to be conservative side for the SDG7 and which is 347,094.200 MWh value. So, the SDG7 value is average value of 7-year crediting period is 347,094.200 MWh.

Net generation will be calculated as below:

Net Generation (MWh) = Electricity Supplied to the Grid (MWh)– Electricity Consumption from the Grid (MWh)

SDG 8: Decent Work and Economic Growth

The project leads to employment opportunities which would not have been possible in the baseline scenario. The project provides employment to between 20 and 25 people during the operation phase and gives to the health and safety training once per during the monitoring period

SDG13: Climate Action:

The project contributes to the following indicators 13.3.2 Number of countries that have communicated the strengthening of institutional, systemic and individual capacity-building to implement adaptation, mitigation and technology transfer, and development actions” following target 13.3. Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.

This Şah Wind Power Plant WPP reduce the emission reduction by approximately 217,324 tCO₂ after the design change per year. And 217,324 tCO₂ value is average value of 7-year CP3 crediting period for SDG13.

Baseline emissions

As per ACM0002, the baseline emissions are calculated as the net electricity generated by the project activity, multiplied with the baseline emission factor for the project grid. Baseline emissions calculated as explained in section B.6.1 above are summarized as below.

$$BE_y = EG_{\text{facility},y} * EF_{\text{CO}_2,i,y}$$

Where,

BE_y = Baseline emissions in year y (tCO₂/yr)

$EG_{\text{facility},y}$ = Net quantity of electricity generated and delivered to the grid by facility in year y (MWh)

$EF_{\text{CO}_2,i,y}$ = CO₂ emission factor of fuel type i in year y (t CO₂/MWh)

Hence,

$$BE_y = 347,094.200 \text{ MWh/yr} * 0.6261 \text{ tCO}_2/\text{MWh}$$

$$BE_y = 217,324 \text{ tCO}_2\text{e}$$

Project emissions

The proposed project activity involves the generation of electricity by development of a large-scale wind power project. The generation of electricity does not result in greenhouse gas emissions and therefore:

$$PE_y = 0 \text{ tCO}_2/\text{year}$$

Leakage

The energy generating equipment is not transferred from or to another activity. Therefore, leakage does not have to be taken into account, and:

$$LE_y = 0 \text{ tCO}_2/\text{year}$$

Emission reductions

$$ER_y = BE_y - PE_y - LE_y$$

$$ER_y = BE_y$$

$$ER_y = 217,324 \text{ tCO}_2$$

B.6.4 Summary of ex ante estimates of each SDG Impact

SDG 7: Affordable and Clean Energy

The baseline for the project is no project, thus leading to generation in the relevant grid which is dominated by fossil fuel. The clean energy generated by the project is calculated based on the amount of electricity generated by the project per annum.

YEAR	BASELINE ESTIMATE	PROJECT ESTIMATE (MWh)	NET BENEFIT(MWh)
15/11/2025-31/12/2025	0	27,984.200	27,984.200
2026	0	347,094.200	347,094.200
2027	0	347,094.200	347,094.200
2028	0	347,094.200	347,094.200
2029	0	347,094.200	347,094.200
2030	0	347,094.200	347,094.200

2031	0	347,094.200	347,094.200
01/01/2032-14/11/2032	0	189,339.800	189,339.800
Total	0	2,429,659.397	2,429,659.397
Total number of crediting years	7		
Annual average over the crediting period	347,094.200		

SDG 8: Decent Work and Economic Growth

The project leads to employment opportunities which would not have been possible in the baseline scenario. The project has been provided employment between 20 and 25 people and one health and safety training per year.

This helps to achieve SDG 8 with indicators 8.5.2 "Unemployment rate, by sex, age and persons with disabilities" and following target: 8.5 "By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value".

This helps to achieve SDG 8 with indicators 8.8.2: Increase in national compliance of labour rights (freedom of association and collective bargaining) based on International Labour Organization (ILO) textual sources and national legislation, by sex and migrant status and following target: 8.8 Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment

SDG 13 Climate Action

The project contributes to the following indicators 13.3.2 Number of countries that have communicated the strengthening of institutional, systemic and individual capacity-building to implement adaptation, mitigation and technology transfer, and development actions" and following target 13.3. Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.

YEAR	BASELINE ESTIMATE (tCO2)	PROJECT ESTIMATE (tCO2)	NET BENEFIT (tCO2)
15/11/2025-31/12/2025	27,984	0	27,984
2026	217,324	0	217,324
2027	217,324	0	217,324
2028	217,324	0	217,324

2029	217,324	0	217,324
2030	217,324	0	217,324
2031	217,324	0	116,434
01/01/2032-14/11/2032	189,339	0	189,339
Total	1,521,268	0	1,521,268
Total number of crediting years	7		
Annual average over the crediting period	217,324		

B.7. Monitoring plan

B.7.1 Data and parameters to be monitored

SDG 7: Affordable and Clean Energy

7.2.1 Renewable energy share in the total final energy consumption

Data / Parameter	EG _{,facility,y}		
Unit	MWh/yr		
Description	Quantity of electricity generated and supplied by the project power plant to the grid in year y		
Source of data	Monthly electricity meter readings protocol		
Value(s) applied	347,094.200 MWh		
Measurement methods and procedures	The net electricity generation supplied to the grid will be measured continuously by TEAIS meters (both main and spare) and recorded monthly.		
Monitoring frequency	Continuous measurement and at least monthly recording. (Automatic meter reading system-OSOS)		
	The accuracy of meters is given as 0.2 class for TR-1 Transformer And TR-2 Transformer		
	TR-1 Transformer		
		Electricity Meter (Primary)	Electricity Meter (Spare Meter)
	Manufacturer	EMH	EMH
	Model	LZQJ-XC	LZQJ-XC

Serial number	9798640	9798641
Date of initial calibration	22/06/2020	22/06/2020
Date of installation	17/09/2020	17/09/2020
Date of TEIAS Test	12/08/2022	12/08/2022

TR-2 Transformer

	Electricity Meter (Primary)	Electricity Meter (Spare Meter)
Manufacturer	EMH	EMH
Model	LZQJ-XC	LZQJ-XC
Serial number	9798642	9798643
Date of initial calibration	22/06/2020	22/06/2020
Date of installation	17/09/2020	17/09/2020
Date of TEIAS Test	12/08/2022	12/08/2022

The test frequency is changed 2 years instead of 1 year.

Calibration frequency: According to the Article 9 of the relevant regulation³¹, periodical inspections of “gauges for electric, water, coal gas, natural gas and, current and voltage measuring transformers will be made once in 10 years”. This is in line with the monitoring plan and national requirements. TEIAS is deciding when to carry out the next calibration. The Project owner has no control over or access to the measurement devices and is not entitled to perform any type of maintenance or calibration.

Date of initial calibration: The calibration of the monitoring equipment was carried out according to the information provided in the PDD. The PDD mainly includes the following obligation for the calibration of the appropriate meters:

“TEIAS is responsible for calibration and maintenance of the devices. If any difference occurs between primary and secondary device TEIAS performs necessary calibration”

QA/QC procedures

- Measurements are undertaken using energy meters.
- Concerning metering system accuracy, project participant has to comply with relevant national legislation. The project must ensure that the metering devices are in line with the

³¹ “Measurement and Measuring Tools Inspection Regulation”, Date: 24/07/1994, Official Gazette Number: 22000 <https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=6381&MevzuatTur=7&MevzuatTertip=5>

	technical requirements which are set out by the Communiqué for Metering Devices to be used in the Electricity Market, which describes the minimum accuracy requirement the metering devices have to fulfil, which are categorized according to the installed capacity. • Maintenance and calibration of TEIAS meters have been carried out according to the System Usage Agreement. Since TEIAS meters are sealed by TEIAS the project proponent cannot intervene with the devices³². • The net electricity export/supplied to a grid is the difference between the measured quantities of the grid electricity export and the import. Data measured by meters (monthly electricity meter reading protocols-OSOS-OSF forms) will be crosschecked with the EPIAS records.
Purpose of data	Baseline/emission reductions calculations
Additional comment	-

SDG 8: Decent Work and Economic Growth

8.5.2. Unemployment rate, by sex, age and persons with disabilities

Data / Parameter	Number of employment generation
Unit	Number
Description	Number of people employed directly due to the project activity
Source of data	Social Security Official Records (SGK)
Value(s) applied	The project provides between 20 and 25 employments
Measurement methods and procedures	The total number of persons working in the plant would be calculated based on the SGK Records
Monitoring frequency	Once for each monitoring period

³² <http://www.mevzuat.gov.tr/MevzuatMetin/1.5.3516.doc>

QA/QC procedures	Social insurance registries of employees will be provided annually.
Purpose of data	-
Additional comment	-

8.8.2 Increase in national compliance of labour rights (freedom of association and collective bargaining) based on International Labour Organization (ILO) textual sources and national legislation, by sex and migrant status

Data / Parameter	Health and Safety Training Records
Unit	Number of people per monitoring period
Description	Number of people trained on health and safety issues during per monitoring period
Source of data	Training Records or Certificates
Value(s) applied	The project will provide health and safety training to employees at each monitoring period
Measurement methods and procedures	The total number of Health and Safety training based on Training Records or Certificates
Monitoring frequency	Once for period each monitoring
QA/QC procedures	Training records or certificates will be provided
Purpose of data	Monitoring the health and safety trainings of employees to demonstrate contribution to SDG8-8.8 Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment
Additional comment	n.a

SDG 13 Climate Action

13.3.2 Number of countries that have communicated the strengthening of institutional, systemic and individual capacity-building to implement adaptation, mitigation and technology transfer, and development actions” and following

Data / Parameter	ER _y
Unit	tCO ₂ /y
Description	Emission Reductions in year y (t CO ₂ /yr) As per ACM0002 V22.0, the baseline emissions (emission reductions) are calculated as the net electricity generated by the project activity, multiplied with the baseline emission factor for the project grid.
Source of data	Measured and calculated. (The emission reduction value the emission factor of the grid to which the project exports electricity (0.6261 tCO ₂ /MWh) and net electricity generated)
Value(s) applied	217,324 tCO ₂ ³³
Measurement methods and procedures	Please see B.6.2 for more detailed description of the monitoring plan.
Monitoring frequency	Once for each monitoring period
QA/QC procedures	Republic of Türkiye Ministry of Energy in Emission Factor 2022 ³⁴
Purpose of data	-
Additional comment	-

B.7.2 Sampling plan

³³ [This value will be changed according to net electricity generation value.](#)

³⁴ https://enerji.gov.tr//Media/Dizin/EVCED/tr/ÇevreVeİklim/İklimDeğişikliği/TUESEmisyonFktr/Belgeler/TUESEF_Bilgi_Formu.pdf

NA

B.7.3 Other elements of monitoring plan

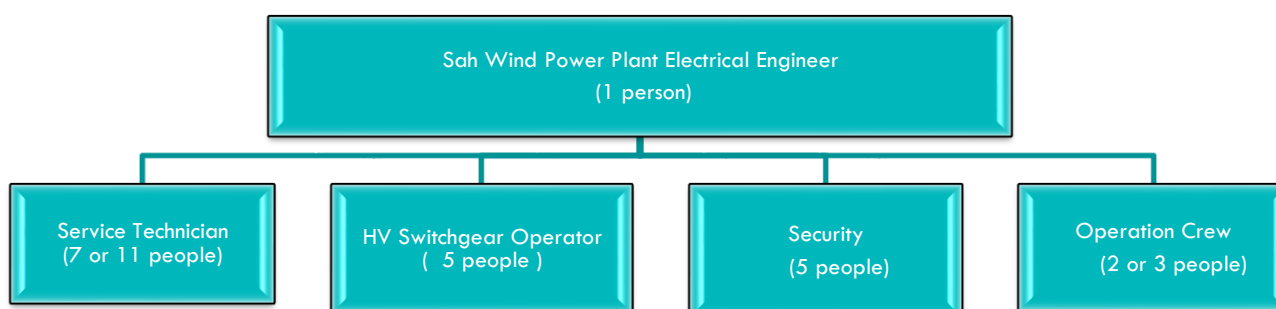
According to the Turkish Law and Regulations, the methods of monitoring the net electricity fed to the grid and quality control and assures are explained below:

Monitoring data is collected in accordance with the agreement done between the project owner and Turkish Electricity Distribution Company (TEIAS) which provides the infrastructure for the connection to the national grid. Connection Agreement has revised and signed on 14/05/2010 with TEIAS Turkish Electricity Distribution Company. The metering system is defined in the agreement as two groups: main meter and spare meter. The design of the metering system is checked and approved by TEIAS before commissioning of the plant. The technical specifications of the power meters should be in line with Measure and Metering Devices Regulation by Ministry of Industry and Trade. In addition, the Communiqué for Power Meters announced by Energy Market Regulations Authority (EMRA) requires all meters to be in line with either Turkish Standards Institution or International Electrotechnical Commissions Standards. The meters are placed at the point the electricity is fed to the grid and sealed on behalf of the both parties. This prevents any intervention and assures the accuracy and quality of the measurements. All requirements and specifications of the meters will be done according to Communiqué on the counter to be used in the Electricity Market by Energy Market Regulatory Authority on 22.04.2011.

Data has been stored electronically, during the crediting period and at least two years after the last issuance of credits for the wind power project activity in the concerning crediting period. The Project Participant will be responsible for storage of data received from the measuring devices.

The main and spare meter readings are recorded monthly and cross-checked whether calibration is required. The capacity of the transmission line connected is 154 kVA, the accuracy class for power meters have been defined in the Communiqué for Power Meters as 0.5s class. The calibration is implemented in accordance with the related standard procedures. The periodical maintenance is under the responsibility of TEIAS and has been fixed as once in 10 years.

The Project aims to create employment opportunities in the project region in a sustainable way. The Project proponent prefers to prioritize personnel from the project region, which is defined as a Gold Standard indicator to be verified for each monitoring period. It is between 20 and 25 employees permanent during the operation of the plant. Roles and responsibilities have been summarized in the following chart:



SECTION C. DURATION AND CREDITING PERIOD

C.1. Duration of project

C.1.1 Start date of project

15/05/2011³⁵

C.1.2 Expected operational lifetime of project

25 years and 0 months³⁶

C.2. Crediting period of project

C.2.1 Start date of crediting period

Starting date of the first crediting period: 15/11/2011

Starting date of the second crediting period: 15/11/2018

Starting date of the third crediting period: 15/11/2025

C.2.2 Total length of crediting period

7 years and 0 months, which is planned to be renewed twice. (21 years) The crediting period have been renewed now for the third and last crediting period.

Date of the third crediting period: 15/11/2025-14/11/2032

³⁵ The commissioning date of the first phase of project activity

³⁶ <https://cdm.unfccc.int/methodologies/PAMethodologies/tools/am-tool-10-v1.pdf>

SECTION D. SUMMARY OF SAFEGUARDING PRINCIPLES AND GENDER SENSITIVE ASSESSMENT

D.1 Safeguarding Principles that will be monitored

Relevant SDG	
Indicator/Safeguarding Principle	Safeguarding Principle 9.4: Release of pollutants
Data / Parameter	Water Quality and Quantity (Disposal of the waste water)
Unit	N/A
Description	During the construction and operation phases, domestic wastewater produced by workers collected in impermeable septic tanks. This wastewater is collected by vacuum trucks and disposed according to Regulation on Waste Water Control.
Source of data	Records of transfer of wastewater from power plant by vacuum truck
Value(s) applied	N/A
Measurement methods and procedures	N/A
Monitoring frequency	Once for each monitoring period
QA/QC procedures	N/A
Purpose of data	To monitor compliance to Safeguarding Principle 9.4 (Release of pollutants)
Additional comment	-

Relevant SDG	Principle 9.10 High Conservation Value Areas and Critical Habitats
Indicator/Safeguarding Principle	
Data / Parameter	Birds observation
Unit	N/A
Description	Ensuring that the project creates no disturbance to the regional habitat

Source of data	Regular site vetting for bird/bat nests and carcasses and recording on logbook by appointed personnel
Value(s) applied	There is no bird/bat nests and carcasses and recording on logbook by appointed personnel until now
Measurement methods and procedures	Observations around the project area will be done for monitoring birds and carcass
Monitoring frequency	Periodic
QA/QC procedures	Records of regular observations will be kept
Purpose of data	To monitor compliance to Safeguarding Principle 9.10
Additional comment	-

D.2. Assessment that project complies with GS4GG Gender Sensitive requirements

Question 1 - Explain how the project reflects the key issues and requirements of Gender Sensitive design and implementation as outlined in the Gender Policy?

As per Gold Standard Gender Policy (<https://globalgoals.goldstandard.org/101-1-g-gold-standard-gender-policy/>), p. 10 "Foundational gender - sensitive requirement - This strengthens Gold Standard's 'do no harm' approach and addresses safeguards to prevent or mitigate adverse impacts on women or men and girls and boys. Such action is mandatory for all projects seeking Gold Standard certification and includes compliance with the gender 'do no harm' safeguards, gender gap analysis and gender sensitive stakeholder consultations."

The project being a wind solar hybrid project is not gendering sensitive project. The project does not adversely impact women or men.

Question 2 - Explain how the project aligns with existing country policies, strategies and best practices

The project does not involve and is not complicit in any form of discrimination based on gender, race, religion, sexual orientation, or any other basis. Türkiye party to Convention on Discrimination since 1972 to prevent any form of discrimination. (<https://www.refworld.org/country,,CEDAW,,MKD,,514afed12,0.html>)

The Project shall complete the following gender assessment questions

(<https://globalgoals.goldstandard.org/101-4-gold-standard-for-the-global-goals-safeguarding-principles-requirements/>) below:

1. Is there a possibility that the Project might reduce or put at risk women's access to or control of resources, entitlements, and benefits? No, the Project is wind solar hybrid project does not reduce access to or control of resources for women.

2. Is there a possibility that the Project can adversely affect men and women in marginalised or vulnerable communities (e.g., potential increased burden on women or social isolation of men)? No, the Project beneficiaries in terms of employment and social upliftment of the area are common for both the gender. The project does not involve in any form discrimination in any kind of form.

3. Is there a possibility that the Project might not take into account gender roles and the abilities of women or men to participate in the decisions/designs of the project's activities (such as lack of time, childcare duties, low literacy or educational levels, or societal discrimination)? No, this project does not involve in any form discrimination in any kind of form.

4. Does the Project take into account gender roles and the abilities of women or men to benefit from the Project's activities (e.g., Does the project criteria ensure that it includes minority groups or landless peoples)? Yes, the project takes into account gender roles and abilities of women/men. Job profile is allocated based on the type of work to be carried out.

5. Does the Project design contribute to an increase in women's workload that adds to their care responsibilities or that prevents them from engaging in other activities? No, on the contrary the project leads to increased availability of electricity in the regional grid thereby uplifting the living standards.

6. Would the Project potentially reproduce or further deepen discrimination against women based on gender, for instance, regarding their full participation in design and implementation or access to opportunities and benefits? No, since the project

Question 3 - Is an Expert required for the Gender Safeguarding Principles & Requirements?

	is a renewable electricity generation project, thus it will not have discriminated against women. 7. Would the Project potentially limit women's ability to use, develop and protect natural resources, taking into account different roles and priorities of women and men in accessing and managing environmental goods and services? No, in fact, the project leads to improved electricity in the regional grid.
Question 4 - Is an Expert required to assist with Gender issues at the Stakeholder Consultation?	The project is applying for regular GS registration and the Stakeholder Consultation & Engagement Procedure Requirements has been done as explained below. The project owner has organized the complimentary stakeholder consultation meeting according to related requirements of GS4GG for Şah Wind Project in Türkiye. In developing a Project, "taking gender issues into account would require that local stakeholder consultation processes reach a wide range of community representatives in ways that ensure equal and effective participation of women and men in consultation, and that gender issues are fully factored into comprehensive social and environmental impact assessments." The stakeholders stated that they are in favour of the project and underlined the significant contribution of the project to regions sustainable image and stressed the importance of renewable and clean energy every time.

SECTION E. SUMMARY OF LOCAL STAKEHOLDER CONSULTATION

E.1 Summary of stakeholder mitigation measures

The documents including the non-technical project summary for design change and the Environmental and Social Impact questionnaire related with the Sustainable Development Indicators (SD Assessment) (according to GS4GG requirements) have been delivered to the stakeholders who have been selected as stakeholders to the project activity. The main communication method has been through e-mails and delivery of hard copies of the mentioned documents for those who don't have an email address (specifically the locals) to the mukhtar of Dedeoba village.

The feedback request for design change and revalidation process has started on 26/05/2025 with sending out the documents to the stakeholders officially, and

verbally-posters on the same day the mukhtar of Dedeoba village and no feedback has been received until 26/06/2025. The beginning of Complementary Stakeholder Feedback Round has been announced from the mukhtar's offices, mosques and coffee houses of the of Özlü and Alaçam villages. This public leaflet announcement, emails and documents contain information such as location of available these documents, the procedure to commit comments, timing, and the contact's details.

The stakeholders stated that they are in favour of the project and underlined the significant contribution of the project to regions sustainable image and stressed the importance of renewable and clean energy.

List of stakeholders invited to the Complementary stakeholder consultation for the design change:

Category code	Organisation (if relevant)	Name of invitee	Way of invitation	Date of invitation	Confirmation received? Y/N
C	Ministry of Environment and Urbanization	Mehrali Ecer	Via E-mail and phone mecer@cob.gov.tr 0 312 5863052	26/05/2025	Y
C	Ministry of Environment and Urbanization	General	Via E-mail and phone iklim@csb.gov.tr	26/05/2025	Y
B	Balıkesir and Bursa Regional Directorates of Forestry	General	Via E-mail bandirmaisl@ogm.gov.tr bursaobm@ogm.gov.tr	26/05/2025	Y
B	Balıkesir Assistant Governor	İsmail Demirhan	Via E-mail balikesir@icisleri.gov.tr	26/05/2025	Y
B	Bandırma District Governor	General	Via E-mail bandirma@icisleri.gov.tr	26/05/2025	Y
A	Mayor of Bandırma	General	Via E-mail belediye@bandirma.bel.tr	26/05/2025	Y

D	Bursa Chamber of Commerce and Endustry	General	Via E-mail and phone btso@btso.org.tr +90 (224) 275 16 00	26/05/2025	Y
D	Balıkesir Chamber of Commerce	General	Via E-mail and phone info@bato.org.tr (0266) 244 67 81	26/05/2025	Y
D	Balıkesir Chamber of Endustry	General	Via E-mail and phone bso@bso.org.tr +90 266 281 11 80	26/05/2025	Y
D	Balıkesir and Bursa Chamber of Electrical Engineers	Nazmi Kaçar and General	Via E-mail nazmi.kacar@emo.org.tr bursa@emo.org.tr	26/05/2025	Y
D	REC Regional Environmental Centre	Rıfat Unal Sayman	Via E-mail info@rec.org.tr / unal.sayman@rec.org.tr	26/05/2025	N
B	Bursa and Balıkesir Provincial Directorate of Conervation of Cultural Assets	General	Via E-mail bursakurul@kult.gov.tr balikesirkurul@kult.gov.tr	26/05/2025	Y
B	Bursa and Balıkesir Province Environment and Urban Director	İsmail Alaca and Günnur Berk	Via E-mail bursa@csb.gov.tr ismail.alaca@csb.gov.tr gunnur.berk@csb.gov.tr balikesir@csb.gov.tr	26/05/2025	Y
A	Balıkesir and Bursa F En management directorate	General	Via E-mail bandirmaisl@ogm.gov.tr	26/05/2025	Y
B	Balıkesir and Bursa Provincial Directorate of Food Agriculture and Livestock	General	Via E-mail balikesir@tarim.gov.tr bursa@tarim.gov.tr	26/05/2025	Y
A	Headman of Sahmelek Village	Ziya Aydemir	Via face to face	26/05/2025	Y

A	Headman of Dedeoba Village	Ali Yağdı	Via face to face	26/05/2025	Y
F	TEMA	Vedat Kırbaş	Via E-mail ve2003k@hotmail.com	26/05/2025	Y
F	Greenpeace	General	Via E-mail and phone bilgi.tr@greenpeace.org 0 212 292 76 19	26/05/2025	Y
F	WWF	General	Via E-mail info@wwf.org.tr 0212 528 20 30	26/05/2025	Y
E	Gold Standard Foundation	General	Via E-mail Gold Standard help@goldstandard.org	26/05/2025	N
F	REEP	Info	Via E-mail info@reeep.org	26/05/2025	N
F	MERCY CORPS	Dorothy McIntosh	Via E-Mail dmcintosh@uk.mercycorps.org	26/05/2025	N
F	Global Offset Research	Siddharth Yadav	Via E-Mail syadav@globaloffsetresearch.com	26/05/2025	N
F	myclimate	Thomas Finsterwald	Via E-Mail thomas.finsterwald@myclimate.org	26/05/2025	N
F	Concern Health Ghana	Isaac Ampomah	Via E-mail Isaac.ampomah34@gmail.com	26/05/2025	N
	Lean Management Systems Promotion Society	Raave Jain	Via E-mail Impsindore@gmail.com	26/05/2025	N

E.2 Final continuous input / grievance mechanism

Project's start generation date is 2011. The local stakeholder has given only positive comments until now by phone calls and verbally. There is no negative comment has been received by e-mail, by post nor by fax during these approximately 14-15 operational years.

The continuous input/grievance mechanism expression method and discussed with the locals which place is convenient for the grievance book (logbook) during the LSC meeting. As a result of discussion, the grievance book was given to the Headman of Dedeoba village. At the same time, the contact details of the project owner, consultant and the GS Managers were shared with the stakeholders. All of these details have been given in the logbook for stakeholders to make any comments they want to write. The PP has checked the comments in the book on a regular basis, and record responses. The grievance (logbook) book was checked and no complaints about the project until now. The PP are in a good relationship with the local stakeholders.

In addition, all these documents have been made available under the GS registry webpage as required by GS4GG.

METHOD	INCLUDE ALL DETAILS OF CHOSEN METHOD (S) SO THAT THEY MAY BE UNDERSTOOD AND, WHERE RELEVANT, USED BY READERS.
Continuous Input / Grievance Expression Process Book (mandatory)	The process book has been located at mukhtar of Dede villages because of the stakeholders' chosen place Justification: Project Participant is checking the comments in the book on a regular basis, and record responses. They are respectful to the views of stakeholders and suggest alternative solutions or compromises wherever possible. It is chosen as main mechanism.
GS Contact (mandatory)	help@goldstandard.org

Telephone access	Project Owner (Galata Wind Enerji A.Ş) Address: Burhaniye Mahallesi Kısıklı Caddesi No:65 Üsküdar İSTANBUL Tel: +90 (216) 556 94 24 Project Developer: Rüzgar Karbon ve Enerji Danışmanlık San.Tic. Ltd. Şti Tel: +90 216 355 09 68 Justification: This information has been explained to the local people and provided in the Continuous Input / Grievance Expression Process Book
Internet/email access	<u>Project Owner:</u> Ali@galatawind.com.tr <u>Project Developer:</u> cagla@ruzgardanismanlik.net <u>Gold Standard:</u> help@goldstandard.org Justification: This information explained at the LSC Meeting, and also provided in the Continuous Input / Grievance Expression Process Book and invitation.
Nominated Independent Mediator (optional)	N.A

APPENDIX 1 - SAFEGUARDING PRINCIPLES ASSESSMENT

SOCIAL SAFEGUARDING PRINCIPLES		
Reference requirement	Question	Response
P.1 Human Rights		
P.1.1.1 	Does the project developer, its representatives and the Project disrespect internationally proclaimed human rights?	☐ YES ☒ NO
P.1.1.1 	Is the project involved or complicit in violence or human rights abuses of any kind as defined in the Universal Declaration of Human Rights?	☐ YES ☒ NO
P.1.1.2 	Have local communities or individuals raised human rights concerns regarding the project (e.g., during the stakeholder engagement process, grievance processes, public statements)?	☐ YES ☒ NO
P.1.1.3 	Is there a risk that rights-holders (e.g., Project-affected stakeholders) do not have the capacity to claim their rights?	☐ YES ☒ NO
P.1.1.3 	Does this project undermine national or regional measures for the realisation of the right to development?	☐ YES ☒ NO
If the answer to any of the questions above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements. The Project is not in conflict with the economic livelihood or other issue of the local community. Thus, the Project does not cause any human rights abuse and respects internationally proclaimed human rights issue. Project activities are not expected to cause any human rights abuse. As a member of United Nations and part of UN Agreement on Human Rights, it is ensured by law in Türkiye that no action can be taken against human rights.³⁷		
Would the project potentially involve or lead to:		
P.1.1.1 	adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalised groups?	☐ YES ☐ POTENTIALLY ☒ NO
P.1.1.2 	inequitable or discriminatory impacts on affected populations, particularly people living in poverty or	☐ YES ☐ POTENTIALLY

³⁷ <https://www.resmigazete.gov.tr/arsiv/7217.pdf>

	marginalised or excluded individuals or groups, including persons with disabilities?	☒ NO
P.1.1.3 	restrictions in availability, quality of and/or access to resources or basic services, in particular to marginalised individuals or groups, including persons with disabilities?	☐ YES ☐ POTENTIALLY ☒ NO
P.1.1.3 	exacerbation of conflicts among and/or the risk of violence to project-affected communities and individuals?	☐ YES ☐ POTENTIALLY ☒ NO

Briefly describe below how the project incorporates a human rights-based approach.

For example, by describing how the project design:

- is informed by human rights analysis, including from UN human rights mechanisms (human rights treaty bodies, universal periodic review, special procedures)
- includes measures to assist the government to realise (respect, protect and fulfil) human rights under international law and to implement human rights-related standards in national law (whichever is higher)
- enhances the availability, accessibility and quality of benefits and services for potentially marginalised individuals and groups, and to increase their inclusion in decision-making processes that may impact them (consistent with the non-discrimination and equality human rights principle)
- provides reasonable accommodations to strengthen inclusivity and accessibility of project benefits and services to persons with disabilities.

As explained above

P.2 | GENDER EQUALITY AND WOMEN'S EMPOWERMENT

P.2.1.1 	Have women's groups/leaders raised gender equality concerns regarding the project, (e.g., during the stakeholder engagement process, grievance processes, public statements)?	☐ YES ☒ NO
P.2.1.2 	Does the project undermine the principles of non-discrimination, equal treatment, and equal pay for equal work?	☐ YES ☒ NO
P.2.1.2 	Does the project prevent men and women from having equal opportunities to participate in identified tasks and activities, whether through paid work, volunteer work, or community contributions, as appropriate?	☐ YES ☒ NO
P.2.1.2 	Does the project limit the participation of women or men based on pregnancy, maternity/paternity leave, or marital status?	☐ YES ☒ NO
P.2.1.2 	Is information about project objectives being communicated in a way that is inappropriate for the local context and not tailored to the methods of understanding of both women and men, which could hinder their participation?	☐ YES ☒ NO
P.2.1.3 	Has the project assessed gender risks without referencing the country's gender strategy or equivalent national commitment?	☐ YES ☒ NO
P.2.1.4 	Has expert stakeholder(s) been involved, and has their input been requested for the project design on gender equality and women's empowerment?	☐ YES ☒ NO

If the answer to any of the questions above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.

The Project does not disconsider gender roles and in fact actively engages both women and men. Community meetings are scheduled considering participation by both Men and Women. The project does not adversely affect men and women in marginalized or vulnerable communities because it creates stable jobs and incomes for local men and women. The project does not reduce or put at risk women's access to or control of resources, entitlements. Sah Wind Power Project, does not involve in any form discrimination in any kind of form. Türkiye ratified ILO 100 Equal Remuneration Convention and 111 Discrimination (Employment and Occupation) Convention.³⁸ Therefore, the safeguarding principle related to Gender Equality and Women's Rights is not triggered during the project design and implementation. The project does not have any scope to apply gender strategy.

Would the project potentially involve or lead to:	
P.2.1.1 	adverse impacts on gender equality and/or the situation of women and girls? ☐ YES ☐ POTENTIALLY ☒ NO
P.2.1.1 	exacerbation of risks of gender-based violence? For example, through the influx of workers to a community, changes in community and household power dynamics, increased exposure to unsafe public places and/or transport, etc. ☐ YES ☐ POTENTIALLY ☒ NO
P.2.1.2 	reproducing discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits? ☐ YES ☐ POTENTIALLY ☒ NO
P.2.1.2 	limitations on women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services? For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well-being. ☐ YES ☐ POTENTIALLY ☒ NO

Briefly describe below how the project is addressing any identified risk to gender equality and women's empowerment.

N/A

P.3 | COMMUNITY HEALTH AND SAFETY

P.3.1.1 	Does the project involve potential risks to the health and safety of affected communities during its life cycle? ☐ YES ☒ NO
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³⁸ http://www.ilo.org/dyn/normlex/en/f?p=1000:11200:0::NO::P11200_COUNTRY_ID:102893

P.3.1.2 	Does the project involve any potential risks to the workers' safety and health?	☐ YES ☒ NO
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If the answer to any of the questions above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.

The project owner is committed to the safe and healthy working conditions during all phases of the project. All employees will attend trainings health & safety. This issue is protected by Labor Law and regulations³⁹ and UN Agreement on Human Rights⁴⁰

Would the project potentially involve or lead to:

P.3.1.1 	construction and/or infrastructure development (e.g., roads, buildings, dams)?	☐ YES ☒ NO
P.3.1.2 	air pollution, noise, vibration, traffic, injuries, physical hazards, poor surface water quality due to runoff, erosion, sanitation?	☐ YES ☐ POTENTIALLY ☒ NO
P.3.1.2 	harm or losses due to failure of structural elements of the project (e.g., collapse of buildings or infrastructure)?	☐ YES ☐ POTENTIALLY ☒ NO
P.3.1.2 	risks of water-borne or other vector-borne diseases (e.g., temporary breeding habitats), communicable and noncommunicable diseases, nutritional disorders, mental health?	☐ YES ☐ POTENTIALLY ☒ NO
P.3.1.2 	transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g., explosives, fuel and other chemicals during construction and operation)?	☐ YES ☐ POTENTIALLY ☒ NO
P.3.1.2 	adverse impacts on ecosystems and ecosystem services relevant to communities' health (e.g., food, surface water purification, natural buffers from flooding)?	☐ YES ☐ POTENTIALLY ☒ NO

Briefly describe below how the project is addressing any identified risk related to community health and safety.

All the employees have been trained about health and safety issues during operation phase of the project.

P.4 | CULTURAL HERITAGE, INDIGENOUS PEOPLE, DISPLACEMENT AND RESETTLEMENT

P.4.1 | Sites of Cultural and Historical Heritage

P.4.1.1 	Does the project involve altering, damaging, or removing sites, objects, or structures of significant cultural heritage?	☐ YES
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³⁹ <https://www.mevzuat.gov.tr/MevzuatMetin/1.5.6331.pdf>

⁴⁰ <https://www.mevzuat.gov.tr/MevzuatMetin/1.5.6701.pdf>

		☒ NO
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If the answer to question above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.

During the construction and operation of the Şah Wind Power Plant have not been any damage, alteration or removal to the critical cultural heritage. Cultural and environmental heritage is protected against alteration, damage or removal by the law.⁴¹ The project does not involve any settlement areas. Thus, this project does not cause the physical or economic relocation of peoples. The project's area is forest area and all of them belongs to Ministry of Forestry. All official permit had realized by Forestry Directorate of Bursa and Balıkesir provinces.⁴² The project does not require any changes to land tenure arrangements or other rights. And this Şah Wind Power Plant is not involving land-use tenure. The Land for the project has been approved by the several local Authorities. No cultural heritage/ indigenous people are displaced due to the project.

Would the project potentially involve or lead to:

P.4.1.1 	activities adjacent to or within a cultural heritage site?	☐ YES ☐ POTENTIALLY ☒ NO
P.4.1.1 	significant excavations, demolitions, movement of earth, flooding or other environmental changes?	☐ YES ☐ POTENTIALLY ☒ NO
P.4.1.1 	alterations to landscapes and natural features with cultural significance?	☐ YES ☐ POTENTIALLY ☒ NO
P.4.1.1 	adverse impacts to sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g., knowledge, innovations, practices)? (Note: projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts)	☐ YES ☐ POTENTIALLY ☒ NO
P.4.1.2 	utilisation of tangible and/or intangible forms (e.g., practices, traditional knowledge) of Cultural Heritage for commercial or other purposes?	☐ YES ☐ POTENTIALLY ☒ NO
P.4.1.2 	If answer to question above is "YES" or "POTENTIALLY" - are the communities made aware of their right under the law,	☐ YES ☒ NO

⁴¹ "Law on Protection of Cultural and Environmental Assets"
<http://mevzuat.basbakanlik.gov.tr/Metin.Aspx?MevzuatKod=1.5.2863&MevzuatIliski=0&sourceXmlSearch=>

⁴² Project Introduction File of Bursa and Balıkesir.

	scope and nature of proposed development and its potential consequences?	☐ NA
P.4.1.3 	If answer to question above is "YES" - does the project provide equitable sharing of benefits from commercialisation of such knowledge, innovation, or practice, consistent with their customs and traditions?	☐ YES ☒ NO ☐ NA
P.4.1.4 	If answer to question above is "YES" - are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☒ NO ☐ NA
P.4.1.4 	If answer to question above is "YES", has project design been changed, modified, updated considering opinions and recommendations of an Expert Stakeholder?	☐ YES ☒ NO ☐ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

The project's area is forest land and belongs to Forestry Directorate.

[P.4.2 |Forced Eviction and Displacement](#)

P.4.2.1 	Does the project involve any risks related to involuntary relocation of people?	☐ YES ☐ NO
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If the answer to question above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.

The project does not involve any settlement areas. Thus, this project does not cause the physical or economic relocation of peoples. The Land for the project has been approved by the several local Authorities. The project's area is forest area and all of them belongs to Ministry of Forestry

Would the project potentially involve or lead to:

P.4.2.1 	risk of forced evictions or involuntary relocation of people?	☐ YES ☐ POTENTIALLY ☒ NO
P.4.2.2 	temporary or permanent and full or partial physical displacement (including people without legally recognisable claims to land)?	☐ YES ☐ POTENTIALLY ☒ NO
P.4.2.2 	economic displacement (e.g., loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	☐ YES ☐ POTENTIALLY ☒ NO
P.4.2.2 	If answer to question above is "YES" or "POTENTIALLY", - has the project developed Resettlement Action Plan or Livelihood Action Plan in consultation and agreement with affected individual, group or community? - has the project integrated Resettlement Action Plan or Livelihood Action Plan into the Project design?	☐ YES ☐ NO ☒ NA

P.4.2.3 	If answer to question above is "YES" - are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ NA
P.4.2.3 	If answer to question above is "YES", have project design been changed, modified, updated considering opinions and recommendations of an Expert Stakeholder?	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

N/A

[P.4.3 | LAND TENURE AND OTHER RIGHTS](#)

P.4.3.1 	Does the project involve any risks related to identifying and managing legitimate tenure rights that may be affected by the project?	☐ YES ☐ NO
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If the answer to question above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.

This Şah Wind Power Plant, Türkiye is not involving land-use tenure and does not require any changes to land tenure arrangements or other rights. Furthermore, there is not any uncertainties with regards land tenure, access rights, usage rights or land ownership. The land of the project had approved by the several local Authorities. The project's area is forest area and all of them belongs to Ministry of Forestry.

Would the project potentially involve or lead to:

P.4.3.1 	impacts on or changes to land tenure arrangements and/or community-based property rights/customary rights to land, territories and/or resources?	☐ YES ☐ POTENTIALLY ☒ NO
P.4.3.1 	uncertainties with regards to land tenure, access rights, usage rights or land ownership? Examples include, but are not limited to water access rights, community-based property rights and customary rights.	☐ YES ☐ POTENTIALLY ☒ NO
P.4.3.2 	Changes in legal arrangements, if yes, are the changes done in line with relevant laws and regulations?	☐ YES ☐ NO ☒ NA
P.4.3.2 	Changes in legal arrangements, if yes, are these changes agree with free, prior and informed consent of the involved stakeholders?	☐ YES ☐ NO ☒ NA
P.4.3.3 	Does some other entity (other than the project developer) hold uncontested land title for the entire Project Boundary?	☐ YES ☐ NO ☒ NA
P.4.3.4 	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ NA

P.4.3.4 	If answer to question above is "YES", have project design been changed, modified, updated considering opinions and recommendations of an Expert Stakeholder?	☐ YES ☐ NO ☒ NA
P.4.3.5 	Have project developer in consultation with stakeholders established a functioning mechanism to receive, process, resolve, communicate and record grievances?	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

As explained above.

[P.4.4 | INDIGENOUS PEOPLES](#)

P.4.4.1 	Does the project involve Indigenous People within the Project area of influence who may be affected directly or indirectly by the Project?	☐ YES ☒ NO
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If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

No cultural heritage/ indigenous people are displaced due to the project

Would the project potentially involve or lead to:

P.4.4.1 	affect areas where indigenous peoples are present (including project area of influence)	☐ YES ☐ POTENTIALLY ☒ NO
P.4.4.1 	affect areas, land and territory claimed by indigenous peoples?	☐ YES ☐ POTENTIALLY ☒ NO
P.4.4.1 	impacts (positive or negative) to the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples?	☐ YES ☐ POTENTIALLY ☒ NO
P.4.4.7 	If answer to above questions is "YES" or "POTENTIALLY", - Is it determined that the proposed project may affect the rights, lands, resources, or territories of indigenous people? - Has an "Indigenous People Plan" (IPP) or "Indigenous People Plan Framework" been elaborated and included in the project documentation? - Was the plan developed in accordance with the effective and meaningful participation of indigenous peoples and in accordance with UNDP Guidelines?	☐ YES ☐ NO ☒ NA
P.4.4.3 	risk of forcibly removing indigenous people from their lands and territories?	☐ YES ☐ POTENTIALLY ☒ NO
P.4.4.4 	utilisation and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?	☐ YES ☐ POTENTIALLY

	Consider, and where appropriate ensure, consistency with the answers under Principle 4.1 above	☒ NO
P.4.4.5 P.4.4.6 	If answer to question above is "YES" or "POTENTIALLY" - Did the project obtain free, prior and informed consent from indigenous people before taking their cultural, intellectual, religious, and/or spiritual property? - Does the project ensure that the indigenous people receive an equitable sharing of benefits resulting from the use of their traditional knowledge and practices? - Does the project ensure that the sharing of benefits resulting from the use of indigenous peoples' traditional knowledge and practices is culturally appropriate and inclusive? - Does the project ensure that the provision of equitable sharing of benefits does not impede land rights or equal access to basic services including health services, clean water, energy, education, safe and decent working conditions, and housing?	☐ YES ☐ NO ☒ NA
P.4.4.8 	Does the project lack appropriate feedback and grievance channels for Indigenous Peoples and their representatives?	☐ YES ☐ NO ☒ NA
P.4.4.8 	Has a grievance mechanism not been established at the beginning of programme or project implementation with due consideration given to customary dispute settlement mechanisms among the Indigenous Peoples concerned and will it remain operational throughout the project cycle?	☐ YES ☐ NO ☒ NA
P.4.4.9 	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ NA
P.4.4.9 	If answer to question above is "YES", have project design been changed, modified, updated considering opinions and recommendations of an Expert Stakeholder?	☐ YES ☐ NO ☒ NA
If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.		
N/A		

P.5 | CORRUPTION

P.5.1.1 	Does the project involve, or is it complicit in, contributing to or reinforcing corruption or corrupt projects?	☐ YES ☒ NO
P.5.1.1 	Does the project have a risk of encouraging bribery, kickbacks, or other unethical behavior?	☐ YES ☒ NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

Sah Wind Power Plant does not involve and is not complicit in any kind of corruption Türkiye has ratified UN Convention against Corruption and the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions.

ECONOMIC SAFEGUARDING PRINCIPLES

P.6 | ECONOMIC IMPACTS

P.6.1 | LABOUR RIGHTS AND WORKING CONDITIONS

P.6.1.1 	Does the project involve, facilitate, or condone forced labor, or pose a potential risk of forced labor?	☐ YES ☒ NO
P.6.1.1 	Does the project violate any labor or health and safety laws, international obligations, or ILO conventions?	☐ YES ☒ NO
P.6.1.2 	Does the project violate the principles of equal opportunity and fair treatment in its employment decisions?	☐ YES ☒ NO
P.6.1.3 	Does the project violate national laws, if available regarding non-discrimination in employment?	☐ YES ☒ NO
P.6.1.4 P.6.1.5 	Does the project allow child labor?	☐ YES ☒ NO
P.6.1.7 P.6.1.8 	Does the project have insufficient processes and measures in place to ensure the safety and health of project workers?	☐ YES ☒ NO
P.6.1.9 	Does the project have insufficient measures to safeguard and support vulnerable project workers, such as women, people with disabilities, migrant workers, and young workers, and to prevent any kind of harassment, abuse, bullying, or exploitation, including gender-based violence (GBV)?	☐ YES ☒ NO
P.6.1.10 	Does the project have no grievance mechanism available for workers to voice workplace concerns? Is information about this mechanism not provided to workers at the time of recruitment, or is it not easily accessible?	☐ YES ☒ NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

Galata Wind Enerji A.Ş and their subcontractors complying with all relevant national laws. Galata Wind Enerji A.Ş does not employ children in any shape or form for their works. Türkiye

has ratified ILO 138 Minumum Age Conventions and 182 Worst Forms of Child Labour Convention⁴³

Would the project potentially involve or lead to:

(NOTE: APPLIES TO BOTH PROJECT AND CONTRACTOR WORKERS)

P.6.1.1 	use of forced labour?	☐ YES ☐ POTENTIALLY ☒ NO
P.6.1.1 	working conditions that do not meet national labour laws and international commitments?	☐ YES ☐ POTENTIALLY ☒ NO
P.6.1.1 	working conditions that may deny freedom of association and collective bargaining?	☐ YES ☐ POTENTIALLY ☒ NO
P.6.1.1 	absence of documented working agreements with all individual workers <i>if such agreements do not exist, or do not address working conditions and terms of employment, the project developer shall provide reasonable working conditions and terms of employment.</i>	☐ YES ☐ POTENTIALLY ☒ NO
P.6.1.1 	use of migrant workers? <i>if engaged, the developer shall ensure that they are engaged substantially equivalent terms and conditions to non-migrant workers carrying out similar work.</i>	☐ YES ☐ POTENTIALLY ☒ NO
P.6.1.1 	having no arrangements for basic services ⁴⁴ for workers? <i>the project developer shall put in place and implement policies on the quality and management of the accommodation and provision of basic services in a manner consistent with the principles of non-discrimination and equal opportunity. Workers' accommodation arrangements should not restrict workers' freedom of movement or of association</i>	☐ YES ☐ POTENTIALLY ☒ NO
P.6.1.2 	any form of discrimination or harassment based on factors unrelated to job requirements, such as gender, race, nationality, ethnicity, social or indigenous origin, religion or belief, disability, age, or sexual orientation?	☐ YES ☐ POTENTIALLY ☒ NO

⁴³ http://www.ilo.org/dyn/normlex/en/f?p=1000:11200:0::NO::P11200_COUNTRY_ID:102893

⁴⁴ Basic services requirements refer to minimum space, supply of water, adequate sewage and garbage disposal system, appropriate protection against heat, cold, damp, noise, fire, and disease-carrying animals, adequate sanitary and washing facilities, ventilation, cooking and storage facilities and natural and artificial lighting, and in some cases basic medical services.

P.6.1.2 	any form of discrimination in any aspect of employment, such as recruitment, compensation, working conditions, training, job assignment, promotion, termination, or discipline?	☐ YES ☐ POTENTIALLY ☒ NO
P.6.1.2 	harassment, intimidation, and/or exploitation, especially in regard to women?	☐ YES ☐ POTENTIALLY ☒ NO
P.6.1.3 	discriminatory working conditions and/or lack of equal opportunity where national law provides provision to address non-discrimination in employment?	☐ YES ☐ POTENTIALLY ☒ NO
P.6.1.4 	use of child labour? (including third-party engaged workers)	☐ YES ☐ POTENTIALLY ☒ NO
P.6.1.4 	inadequate and verifiable mechanisms for age verification?	☐ YES ☒ NO
P.6.1.7 	no processes and measures in place for the safety and health of project workers?	☐ YES ☒ NO
P.6.1.7 	No provision of safety and health training provisions, including on the proper use and maintenance of personal protective equipment conducted by competent persons and the maintenance of training records?	☐ YES ☒ NO
P.6.1.7 	No provision to record and document accidents, diseases, incidents, and any resulting injuries, illnesses, or deaths?	☐ YES ☒ NO
P.6.1.8 	occupational health and safety risks due to physical, chemical, biological and psychosocial hazards (including violence and harassment) throughout the project life-cycle?	☐ YES ☒ NO
P.6.1.9 	No measures to protect vulnerable project workers from harassment, exploitation, and gender-based violence (GBV)? This includes women, people with disabilities, migrant workers, and young workers.	☐ YES ☒ NO
P.6.1.10 	No grievance mechanism available for workers to voice workplace concerns.	☐ YES ☒ NO
P.6.1.11 	No measures for due diligence and the establishment of policies and procedures to manage and monitor the performance of third-party employees in the project?	☐ YES ☒ NO

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

All the employees have been trained about health and safety issues during operation phase of the project. The project owner is committed to the safe and healthy working conditions all phases of the project. This issue is protected by Labor Law and regulations and UN Agreement on Human Rights Galata Wind Enerji A.Ş and appointed subcontractors have not involved in any form forced or compulsory labour Türkiye has ratified ILO 29 Forced Labour Convention

Furthermore, the Şah Wind Power Plant has a positive impact on the social and economic benefits.

P.6.2 | NEGATIVE ECONOMIC CONSEQUENCES

P.6.2.1	Is there a risk of project failure during implementation or after project certification due to a lack of financial resources?	☐ YES ☒ NO
P.6.2.2	Does the project have potential negative impacts or pose a risk to the local economy?	☐ YES ☒ NO
P.6.2.2	Are there any potential risks or negative impacts this project may have on vulnerable or marginalised social groups, despite the benefits it may bring?	☐ YES ☒ NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

The project has only one activity and it is producing electricity using wind energy. It provides the produced energy to the national grid. Other than providing clean energy to the nation, it has no negative impact on local economy during and after project implementation. Furthermore, it has positive impact by providing employment, to local people.

Would the project involve or lead to:

P.6.2.2	economic impacts (negative/detrimental) to the local economy?	☐ YES ☐ POTENTIALLY ☒ NO
P.6.2.2	negative economic consequences during and after project implementation, e.g., for vulnerable and marginalised social groups in targeted communities?	☐ YES ☐ POTENTIALLY ☒ NO

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

N/A

P.7 | CLIMATE AND ENERGY

P.7.1 | GHG EMISSIONS

P.7.1.1	Does the project have a risk of increasing greenhouse gas emissions over the Baseline Scenario?	☐ YES ☐ NO
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If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

The Project reduce the emission of 217,324 tCO₂e/year compared to the Baseline Scenario as it replaces electricity generated from fossil fuel fired power plants with zero emissions electricity from the wind power plant

Would the project involve or lead to:

P.7.1.1 	increase greenhouse gas emissions over the Baseline Scenario?	☐ YES ☐ POTENTIALLY ☒ NO
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If the answer is "yes" or "potentially" to the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

N/A

[P.7.2 | ENERGY SUPPLY](#)

P.7.2.1 	Does the project pose a risk to the availability and reliability of energy supply to other users?	☐ YES ☒ NO
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If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

The Project's purpose is to supply clean energy from the wind power plant to the national grid. It does not use energy from a local grid or power supply or fuel resource that provides for other local users.

Would the project involve or lead to:

P.7.2.1 	negative impact on the availability and reliability of energy supply to other users?	☐ YES ☐ POTENTIALLY ☒ NO
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If the answer is "yes" or "potentially" to the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

N/A

[P.8 | WATER](#)

[P.8.1 | IMPACT ON NATURAL WATER PATTERNS/FLOWS](#)

P.8.1.1 	Does the project increase water usage to a level that will not allow for the maintenance of environmental flows?	☐ YES ☒ NO
P.8.1.1 	Does the project result in the discharge of wastewater that does not meet the required standard for beneficial reuse and could therefore negatively impact the environmental flow?	☐ YES ☒ NO
P.8.1.1 	Does the project have the potential risk to exceed the rate of recharge for the groundwater source?	☐ YES ☒ NO
P.8.1.1 	Does the project involve any processes or activities that could contaminate the groundwater and render it unsuitable for use?	☐ YES ☒ NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

The project is wind power project thus there is no impact of water resources due to the project. Because, Şah Wind Power Plant operation does not consume surface or groundwater, or discharge wastewater containing heat of chemicals. Also , there is no surface or groundwater source (such as stream) near the project area. And the project owner and their

subcontractors complying with all relevant water national laws. This Sah Wind Power Plant does not impact of water resources due to the project. Staffs produce the insignificant amount of waste waters, and this wastewater has been collected in an impermeable septic tank and collected via vacuum trucks and disposed according to Regulation on Control of Water Contamination.

Would the project involve or lead to:

P.8.1.1 	affect the natural or pre-existing pattern of watercourses, groundwater and/or the watershed(s) such as high seasonal flow variability, flooding potential, lack of aquatic connectivity or water scarcity?	☐ YES ☐ POTENTIALLY ☒ NO
P.8.1.1 	Wastewater discharge of quality that does not meet the required standard for beneficial reuse?	☐ YES ☐ POTENTIALLY ☒ NO
P.8.1.1 	significant extraction, diversion of ground water? For example, construction of dams, reservoirs, river basin developments, groundwater extraction	☐ YES ☐ POTENTIALLY ☒ NO
P.8.1.2 	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

N/A

[P.8.2 | EROSION AND/OR WATER BODY INSTABILITY](#)

P.8.2.1 	Does the project have a risk of negatively impacting the catchment and has it been assessed and addressed?	☐ YES ☐ NO
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If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

The Project directly or indirectly does not cause additional erosion and/or water body instability or disrupt the natural pattern of erosion. The project is susceptible to decreased vulnerability to erosion, flooding, drought or water body instability.

Would the project involve or lead to:

P.8.2.2 	negatively impact on the catchment area?	
-		
P.8.2.5 	<i>If yes, Erosion prevention measures, including soil and slope protection measures, must be implemented before project commencement. These measures should involve natural terracing, infiltration strips, permanent ground cover, hedge and tree rows, and effective slope length assessment. Regular reassessment of these measures is necessary.</i>	☐ YES ☐ POTENTIALLY ☒ NO

P.8.2.6 	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ NA
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If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

N/A

P.9 | ENVIRONMENT, ECOLOGY AND LAND USE

P.9.1 | LANDSCAPE MODIFICATION AND SOIL

P.9.1.1 	Is there any risk of soil resource degradation or loss of ecosystem services provided by soils in the project?	
-		
P.9.1.3 	<i>If yes, the project shall maintain healthy soils by minimising negative impacts on soil health, productivity, structure, and water retention. Steps to minimise soil degradation include crop rotation, composting, using N-fixing plants, and reducing tillage and ecologically harmful substances.</i>	☐ YES ☒ NO

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

This Şah Wind Power Plant or any other wind project systems not affects the herbal life negatively, and there is no risk of soil resource degradation or loss of ecosystem services provided by soils in the project.

Would the project involve or lead to:

P.9.1.4 	production, harvesting, and/or management of living natural resources by small-scale landholders and/or local communities?	☐ YES ☐ POTENTIALLY ☒ NO
P.9.1.4 	if answer to above question "yes" or "potentially", does project adopt appropriate and culturally sensitive sustainable resource management practices?	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

N/A

P.9.2 | VULNERABILITY TO NATURAL DISASTER

P.9.2.1 	Does the project have any risks associated with natural or man-made hazards that could result from land use changes due to the project?	☐ YES ☒ NO
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If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

No, this Şah Wind Power Plantt does not have any risks associated with natural or man-made hazards that could result from land use changes due to the project.

Would the project involve or lead to:		
P.9.2.2 	any potential risks that require emergency preparedness and response planning?	☐ YES ☐ POTENTIALLY ☒ NO
P.9.2.2 	if answer to above question "yes" or "potentially", did the project developer disclose appropriate information about emergency preparedness and response to affected communities?	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

N/A

[P.9.3 | BIOSAFETY AND GENETIC RESOURCES](#)

P.9.3.1 	Does the project involve the transfer, handling, and use of genetically modified organisms/living modified organisms that may result in adverse effects on biological diversity?	☐ YES ☒ NO
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If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

N/A

Would the project involve or lead to:

P.9.3.1 	the transfer, handling and use of genetically modified organisms/living modified organisms (GMOs/LMOs) that result from modern biotechnology	☐ YES ☐ POTENTIALLY ☒ NO
P.9.3.1 	If answer to above question is "yes" has a risk assessment by a competent Expert stakeholder been carried out in accordance with Annex iii of the Cartagena protocol on biosafety to the convention on biological diversity?	☐ YES ☐ NO ☒ NA
P.9.3.2 	If answer to above question is "yes" has any risks identified in the risk assessment?	☐ YES ☐ NO ☒ NA
P.9.3.3 	Forestry (for example Afforestation/Reforestation) involving GMO planting? <i>Note - Forestry projects (for example Afforestation/Reforestation) involving GMO planting are not eligible for Certification under Gold Standard for the Global Goals.</i>	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

N/A

[P.9.4 | RELEASE OF POLLUTANTS](#)

P.9.4.1 	Does the project have a risk of releasing pollutants to air, water, and land in routine, non-routine, or accidental circumstances?	☐ YES ☒ NO
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If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

All wastes are disposed of according to related regulations.⁴⁵ The environment is also protected by several Laws and Regulations in Türkiye (Host Country). The purpose of the "Law on Environmental Protection" is to protect the environment with principles of sustainable development and environment. The wastewater has been collected in an impermeable septic tank and collected via vacuum trucks and disposed according to Regulation on Control of Water Contamination⁴⁶. Waste oil produced have been collected in an oil-proof container and disposed via accredited abatement companies.

Would the project involve or lead to:

P.9.4.1 	any potential risk of pollutant release that cannot be avoided?	☐ YES ☐ POTENTIALLY ☒ NO
P.9.4.3 	If answer to above question is "Yes" or "potentially", has the project identified all potential pollution sources that may degrade the quality of soil, air, surface, and groundwater in the project area?	☐ YES ☐ NO ☒ NA
P.9.4.2 	If answer to above question is "Yes" or "potentially", do the pollution prevention and control technologies and practices applied during the project life cycle align with national regulations or international best practices?	☐ YES ☐ NO ☒ NA
P.9.4.3 	If answer to above question is "Yes", is there a monitoring plan to ensure that mitigation measures are implemented, and resources are protected?	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

The management of all fractions of waste should be carried out in accordance with the legislation on waste and individual waste types.

[P.9.5 | HAZARDOUS AND NON-HAZARDOUS WASTE](#)

P.9.5.1 	Does the project involve the generation of waste materials (both hazardous and non-hazardous)?	☐ YES ☒ NO
P.9.5.3 	Does the project involve risk of release of hazardous materials resulting from their production, transportation, handling, storage, or use?	☐ YES ☒ NO

⁴⁵ Project Introduction File_page 70 of Bursa

⁴⁶ Official record document or invoice will be provided to the VVB during each monitoring period. <http://www.mevzuat.gov.tr/Metin.Aspx?MevzuatKod=7.5.7221&MevzuatIliski=0&sourceXmlSearch=Su%20Kirlil%20Kontrol%C3%BC%20Y%C3%B6netmeli%C4%9Fi>

P.9.5.5 	Does the project involve the use of any chemicals or materials subject to international bans or phase-outs?	☐ YES ☐ NO
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If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

The Project producing electricity from the wind plant to the national grid. Therefore, this WPP does not produce any chemicals or hazardous waste (NOx, SOx, VOC, mercury) quantity and just waste oil has been collected by accredited abatement companies.

Would the project involve or lead to:

P.9.5.1 	the generation and management of waste materials?	☐ YES ☐ POTENTIALLY ☒ NO
P.9.5.1 	treatment, destruction, or disposal of waste material?	☐ YES ☐ NO ☒ NA
P.9.5.1 	If answer to above question is "Yes", does the project involve an environmentally friendly method that includes appropriate control of emissions and residues resulting from the handling and processing of waste material?	☐ YES ☐ NO ☒ NA
P.9.5.3 	risk of release of hazardous materials resulting from their production, transportation, handling, storage, or use?	☐ YES ☐ NO ☒ NA
P.9.5.3 	If answer to above question is "yes", does project has measures in place to address health risks?	☐ YES ☐ NO ☒ NA
P.9.5.4 	Involve manufacture, trade, and use of chemicals and hazardous materials subject to international bans or phase-outs due to their high toxicity to living organisms, environmental persistence, potential for bioaccumulation, or potential for depletion of the ozone layer	☐ YES ☐ POTENTIALLY ☒ NO

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

N/A

[P.9.6 | PESTICIDES & FERTILISERS](#)

P.9.6.1 	Does the project involve the use of chemical pesticides?	☐ YES ☒ NO
P.9.6.5 	Does the project involve purchase, store, manufacture, trade or use products that fall in Classes IA (extremely hazardous) and IB (highly hazardous)	☐ YES ☒ NO
P.9.6.6 	Does the project use fertilisers, and if so, are measures being taken to minimise their use and nutrient losses to the environment?	☐ YES ☒ NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

The Project is generating electricity from the wind plant to the national grid. Therefore, the Project does not involve the application of pesticides and/or fertilizers.

Would the project involve or lead to:

P.9.6.1 	chemical pesticides use for pest management?	☐ YES ☐ POTENTIALLY ☒ NO
P.9.6.4 	If answer to question above is "yes" or "potentially", does project has documented Chemical Pesticides Policy in place?	☐ YES ☐ NO ☒ NA
P.9.6.5 	purchase, store, use, manufacture, or trade in Class II (moderately hazardous) pesticides?	☐ YES ☐ POTENTIALLY ☒ NO
P.9.6.5 	If answer to question above is "yes" or "potentially", does project has appropriate controls on manufacture, procurement, or distribution and/or use of these chemicals?	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

N/A

[P.9.7 | HARVESTING OF FORESTS](#)

P.9.7.1 	Does the project have a risk of unsustainable forest management, including timber harvesting?	☐ YES ☒ NO
P.9.7.1 	Does the project pose a risk of depleting biodiversity and ecosystem functionality in areas where improved forest management is undertaken?	☐ YES ☒ NO
P.9.7.1 	Does the project risk not meeting requirements for environment-friendly, socially beneficial, and economically viable plantations using native species whenever possible?	☐ YES ☒ NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

This is wind power project, so the project does not involve the harvesting of forests.

[P.9.8 | FOOD SECURITY](#)

P.9.8.1 	Does the project involve the risk of negatively influencing access to and availability of food for people affected?	☐ YES ☒ NO
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If the answer to the question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

The Project is generating electricity from the wind power plant to the national grid. Therefore, the Project does not modify the quantity or nutritional quality of food available such as through crop regime alteration or export or economic incentives.

Would the project involve or lead to:

P.9.8.1 	modification of the quantity or nutritional quality of food available such as through crop regime alteration or export or economic incentives?	☐ YES ☐ POTENTIALLY ☒ NO
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If the answer is "yes" or "potentially" to the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

N/A

[P.9.9 | ANIMAL WELFARE](#)

P.9.9.1 	Does the project involve any risks to animal welfare? Animal welfare shall be ensured by providing access to water and food, appropriate environment, humane treatment, and staff training. Evidence of mistreatment will be treated as an immediate non-conformity.	☐ YES ☒ NO
P.9.9.2 	Does the project involve any potential risk of excessive or inadequate use of veterinary medicines?	☐ YES ☒ NO
P.9.9.4 	Does the project involve the risk of administering synthetic growth promoters, including hormones?	☐ YES ☒ NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

The Project does not modify the involve animal husbandry.

Would the project involve or lead to:

P.9.9.1 	animal husbandry or harvesting of fish populations or other aquatic species? ⁴⁷	☐ YES ☐ NO ☒ NA
P.9.9.1 	limiting access for animals to basic needs like drinking water, adequate food, daylight, appropriate shelter etc.?	☐ YES ☐ POTENTIALLY ☒ NO
P.9.9.3 	inadequate measures to isolate sick animals and control the spread of disease, especially zoonotic diseases?	☐ YES ☐ NO ☒ NA
P.9.9.5 	inadequate low-stress methods, equipment, and facilities that facilitate calm animal movement.	☐ YES ☐ NO ☒ NA
P.9.9.6 	inadequate measures to ensure that animals are exposed to the least stress possible during transportation and slaughtering?	☐ YES ☐ NO ☒ NA

⁴⁷ 'Involve' means if the project mechanism and/or impact(s) are achieved via changing animal husbandry practices in some way.

P.9.9.7	inappropriate spacing per animal and stocking rates per land unit?	☐ YES ☐ NO ☒ NA
P.9.9.8	inadequate measures to address the specific needs of aquatic animals?	☐ YES ☐ NO ☒ NA
P.9.9.9 P.9.9.10	primary production of living natural resources such as animal husbandry, aquaculture, and fisheries? If the answer is yes, implement industry-standard sustainable management practices in line with to one or more relevant and credible standards and utilise available technologies.	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

N/A

[P.9.10 | HIGH CONSERVATION VALUE AREAS AND CRITICAL HABITATS](#)

P.9.10.1	Does the project have the risk of negatively impacting HCV areas and/or critical habitats?	☐ YES ☒ NO
P.9.10.2	Does the project in the project area or area of downstream impacts have risks to the following: native tree patches, individual native trees, freshwater resources (including rivers, lakes, swamps, temporary water bodies, and wells), habitats of rare, threatened, and endangered species, and biodiversity-enhancing areas?	☐ YES ☒ NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

The project does not affect or alter High Conservation Value (HCV) ecosystems, critical habitats, landscapes, key biodiversity areas or cultural sites. Since the proposed project includes only 36 turbines, it is not expected to create significant impacts on the local biological resources and wildlife in the project site. The project area is not a protected area related with the biodiversity, there are no sensitive genes, species and/or habitats existing within the project projects impact boundaries. Furthermore, the project area and project does not effect negatively organism, flora, fauna or GMOs. (also breeding or feeding areas and migration routes and the bats)⁴⁸

Would the project involve or lead to:

P.9.10.1	identified habitats as HCV areas and or Critical habitats?	☐ YES ☐ POTENTIALLY
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⁴⁸ Project Introduction Files_page 78 of Balikesir one and pages 68-70 of Bursa one.

		☒ NO
P.9.10.1 	If answer to above question is "yes", does the project have any risks that could negatively impact the catchment, project success, and surrounding HCV and ecological assets, as well as any measurable adverse impacts on the criteria or biodiversity values for which the critical habitat was designated, and on the ecological processes supporting that biodiversity?	☐ YES ☐ NO ☒ NA
P.9.10.1 	If answer to above question is "yes", is a robust, appropriately designed, and long-term Habitats and Biodiversity Action Plan absent which will make the project unable to achieve net gains of those biodiversity values for which the critical habitat was designated?	☐ YES ☐ NO ☒ N/A
P.9.10.2 	Does the project area or area of downstream impacts have native tree patches, individual native trees, freshwater resources (including rivers, lakes, swamps, temporary water bodies, and wells), habitats of rare, threatened, and endangered species, and biodiversity-enhancing areas?	☐ YES ☐ POTENTIALLY ☒ NO
P.9.10.2 	If the answer to the above question is "yes", will the project have any adverse effects on these areas?	☐ YES ☐ No ☒ NA
P.9.10.3 	If the answer to above question is "yes", does the project has opportunities to minimise unwarranted conversion or degradation of the habitat and to enhance the habitat as part of its development?	☐ YES ☐ No ☒ NA
P.9.10.4 	Is the project applying Land Use & Forest Activity Requirements and managing a minimum 10% of the project area to protect or enhance the biological diversity of native ecosystems following HCV approach as per the given requirements?	☐ YES ☐ No ☒ NA
P.9.10.5 	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

The PP has already to implemented measure detailed monitoring which aims to further inspect, control, and record the potential impact of wind solar power plants especially on birds and bats including before the implantation phase. Furthermore, the fauna and flora inventories in the project area are prepared and as a result it was seen that here is no endangered flora or fauna in the region. The Regular site vetting for bird/bat nests and carcasses and recording on logbook by appointed personnel during the all these years.

[P.9.11 |ENDANGERED SPECIES](#)

P.9.11.1 	Does the project lead to the reduction or negative impact on any recognised Endangered, Vulnerable or Critically Endangered species?	☐ YES ☒ NO
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If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

The project activity is not expected either potentially impact other areas where endangered species may be present through transboundary affects. The Project does not result in noticeable degradation of natural habitat. The physical location of the project is described in above principle. There are no endangered species identified as potentially being present the project boundary.

Would the project involve or lead to:

P.9.11.2	distortion of habitats of endangered species?	☐ YES ☐ POTENTIALLY ☒ NA
P.9.11.2	If answer to the above question is "yes", does the project plan to protect and enhance them?	☐ YES ☐ POTENTIALLY ☐ NO ☒ N/A
P.9.11.2	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

The project takes a precautionary approach regarding environmental challenges and is not complicit in practices contrary to the precautionary principle. The environment is protected by several Laws and Regulations in Türkiye. The purpose of the "Law on Environmental Protection" is to protect the environment with principles of sustainable development and environment. The project owner also follows necessary procedures for environmental safety at the project site at international standard (such as Bern Convention).⁴⁹

[P.9.12 | INVASIVE ALIEN SPECIES](#)

P.9.12.1	Does project introduce any alien species (not currently established in the country or region of the project) into new environments?	☐ YES ☒ NO
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If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

N/A

Would the project involve or lead to:

⁴⁹ Project Introduction File_page 70 of Bursa

P.9.12.1	risk of introducing any alien species with a high risk of invasive behaviour regardless of whether such introductions are permitted under the existing regulatory framework?	☐ YES ☐ POTENTIALLY ☒ NO
P.9.12.1	risk of potential accidental or unintended introductions including the transportation of substrates and vectors (such as soil, ballast, and plant materials) that may harbour alien species.	☐ YES ☐ POTENTIALLY ☒ NO
P.9.12.2	risk of spreading alien species into areas in which they have not already been established?	☐ YES ☐ POTENTIALLY ☒ NO

If the answer is "yes" or "potentially" to any of the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

N/A

APPENDIX 2 - CONTACT INFORMATION OF PROJECT DEVELOPER(S)

Organization name	Galata Wind Enerji A.Ş.
Registration number with relevant authority	
Street/P.O. Box	Burhaniye Mahallesi, Kısıklı Caddesi
Building	No:65 Üsküdar
City	ISTANBUL
State/Region	Marmara Region
Postcode	34676
Country	Türkiye
Telephone	+90 (216) 556 90 00
E-mail	Alig@galatawind.com.tr
Website	https://www.galatawindenerji.com
Contact person	
Title	COO & Head of Business Development
Salutation	Mr.
Last name	Gürpınar
Middle name	
First name	Ali
Department	Management
Mobile	na
Direct tel.	+90 (216) 556 90 00
Personal e-mail	na
Organization name	Rüzgar Karbon ve Enerji Danışmanlık Sanayi ve Ticaret Limited Şirketi

Registration number with relevant authority	
Street/P.O. Box	Göztepe Mah. Avcı Sok.
Building	Nursaray Apt.No:1 D:22
City	Kadıköy Istanbul
State/Region	n.a.
Postcode	34720
Country	Türkiye
Telephone	+90 216 355 09 68
E-mail	cagla@ruzgardanismanlik.net
Website	www.ruzgardanismanlik.net
Contact person	
Title	Manager
Salutation	Mrs.
Last name	Balcı Eriş
Middle name	-
First name	Çağla
Department	Management
Mobile	-
Direct tel.	+90 532 220 85 43
Personal e-mail	-

APPENDIX 3 - LUF ADDITIONAL INFORMATION

NA

APPENDIX 4 - DESIGN CHANGES

A4.1. Details of proposed or actual design change

The main purpose of this project activity is to generate electricity from a Wind Power Plant and supply of power generated to the Turkey national grid. Galata Wind Enerji A.S. has installed Sah WPP with 105 MWm/105 MWe installed capacity in Bandirma district of Balikesir and Karacabey district of Bursa, Turkey. Sah Wind Power Plant has 35 turbines of which 24 turbines are in Balikesir province, and 11 turbines are in Bursa province, each having an output of 3.0 MW. The total electricity production of the project is estimated as 306,566 MWh/year.

The connection of the project to the National Electricity System is done via 35 km transmission line to the 154 kV Gobel Transformer Station. The project operational lifetime is 49 years.

The project replaces anthropogenic emissions of greenhouse gases (GHG's) estimated to be approximately 171,828 tCO₂e per annum for the second crediting period, thereon displacing 306,566 MWh/year amount of electricity from the generation- mix of power plants connected to the electricity grid, which is mainly dominated by thermal/fossil fuel based power plant. The project leads to reduction in GHGs and achieve sustainable development of the host country.

In the beginning phase, 31 turbines were fully commissioned. After the completion of the construction works and commissioning, the project was taken over by Doğan Enerji Yatırımları San. ve Tic. A.Ş. in June 2012. In the further stages of the project, the company decided to increase the total installed capacity of the project to 105 MWm/105 MWe with additional 4 Vestas V90 / 3000 kWe type wind turbines. The total estimation annual electricity generation of the project is calculated as 341,275 MWh/yr with 35 turbines-105 MWe according to Wind Assesment Report.

But in the years between 2011 and 2017, the average annual net electricity export to the grid was only approximately 293,479 MWh/yr. And the same WPP had produced annual average of 306,566 MWh between years 2015 and 2017 with 35 turbines. So the PP uses the amount of 306,566 MWh as electricity generation average value and approximately 171,828 tCO₂e as emission reduction value for the second crediting

period. (15/11/2018-14/11/2025). And expected total of reduction of 1,521,268 tCO₂-eq over the second 7 year crediting period.

Sah WPP will be installing one another turbine with 6.8 MWm/6.8 MWe and the total capacity will be 111.8 MWm/111.8 MWe during the CP3. The average electricity generation value of Sah WPP's CP2 over the past 7 years (2018–2025) is 326,007 MWh, with a capacity factor of 35.4%. The addition of a 6.8 MW turbine is expected to generate approximately 21,087.072 MWh on average. So the total expectation electricity generation value will be 347,094.200 MWh and approximately 217,324 tCO₂e as emission reduction value during the third crediting period-CP3 (15/11/2025-14/11/2032).

Additional one turbine expectation electricity generation value can be calculated as below:

One turbine: $6.8 \times 24 \times 365 \times 0.354 = 21,087.072$ MWh

Total expectation electricity generation value will be 347,094.200 MWh during the third crediting period-CP3.:

$SDG7 = 326,007.128 + 21,087.072 = 347,094.200$ MWh

Reintroducing the project regarding the capacity increase of emission reductions resulting from the project, receiving opinions about the project and discussing sustainable development and environmental impacts are part of the design change of the "GS4GG-Gold Standard For Global Goals" process

A4.2. Describe the impacts of design change on the following

a. Additionality

Additionality is still valid after design change as explained above detailly.

In the registered Sah WPP's PDD (former PDD), the additionality demonstrated by "Tool 01, Tool for the demonstration and assessment of additionality, version 07.0.0". The "Tool 01, Tool for the demonstration and assessment of additionality, version 07.0.0" is still valid after the project design change.

Additionality Analysis consists of 5 steps (including step 0), that can be seen below:

- a) Step 0 Demonstration whether the proposed project activity is the first-of-its-kind;
- b) Step 1 Identification of alternatives to the project activity;
- c) Step 2 Investment analysis;
- d) Step 3 Barriers analysis;
- e) Step 4 Common practice analysis

The differences between current PDD and project design change PDD are given table 1:

	Former PDD	Project Design Change PDD	Changes
Step 0	Not Applied	Not Applied	----
Step 1	Applied	Applied	No changes
Step 2	Applied	Applied	- Benchmark value recalculated⁵⁰ - Main Financial Indicators are updated⁵¹ - IRR value is updated according to the project design change⁵² - Sensitivity analysis is updated⁵³
Step 3	Not Applied	Not Applied	----
Step 4	Not Applied	Applied	Common Practice Analysis is added to the PDD ⁵⁴

Investment Analysis is updated by applying the following formula:

IRR is updated with the updated financial indicators and recalculated as 12.16% and seen that IRR is far below than benchmark. Afterwards sensitivity analysis is updated and shown that IRR stays below benchmark even the financial key values are changed.

Common practice analysis has been updated to take into account the current situation of the dissemination of wind power in Türkiye. It clearly demonstrated that the carbon

⁵⁰ See Section B.5 Demonstration of Additionality – Step 2 Investment Analysis- Sub-step 2b: Option III. Apply benchmark analysis

⁵¹ See Section B.5 Demonstration of Additionality – Step 2 Investment Analysis - Sub-step 2c: Calculation and comparison of financial indicators.

⁵² See section B.5 Demonstration of Additionality – Step 2 Investment Analysis - Sub-step 2c: Calculation and comparison of financial indicators.

⁵³ See section B.5 Demonstration of Additionality – Step 2 Investment Analysis - Sub-step 2d: Sensitivity Analysis

⁵⁴ See section B.5 Demonstration of Additionality – Step 4 Common Practice Analysis

market plays a crucial role in promoting wind power in Türkiye, and that all but very few projects are relying on the additional VER income to be feasible

b. Applicability of methodology and other methodological regulatory documents with which the project activity has been certified

The project applies CDM-EB approved "ACM0002: Grid-connected electricity generation from renewable sources - Version 22.0"⁵⁵

Project type: Type I – Renewable Energy Projects

Category: D – Electricity generation for a system

Sectoral Scope: 01 Energy industries (renewable - / non-renewable sources) as per 'Sectoral scopes related approved methodologies.

The methodology refers to:

- "Tool 01, Tool for the demonstration and assessment of additionality", Version 07.0.⁵⁶
- "Tool 02, Combined tool to identify the baseline scenario and demonstrate additionality", Version 07.0⁵⁷
- "Tool 03, Tool to calculate project or leakage CO2 emissions from fossil fuel combustion", Version 03.0⁵⁸
- "Tool 07, Tool to calculate the emission factor for an electricity system", Version 07.0.⁵⁹
- "Tool 10, Tool to determine the remaining lifetime of equipment", Version 01⁶⁰
- Tool 27, Methodological tool Investment analysis Version 14.0⁶¹
- Tool 24, Methodological tool Common Practise v3.1⁶²
- Tool 11 "Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period" Version 3.0.1⁶³

⁵⁵ <https://cdm.unfccc.int/UserManagement/FileStorage/R0IJ1X9LQ7W2GOYHSMBFCPE3VKZ685>

⁵⁶ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-01-v7.0.0.pdf>

⁵⁷ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-02-v7.0.pdf>

⁵⁸ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-03-v3.pdf>

⁵⁹ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-07-v7.0.pdf>

⁶⁰ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-10-v1.pdf>

⁶¹ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-27-v14.0.pdf>

⁶² <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-24-v1.pdf>

⁶³ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-11-v3.0.1.pdf>

c. Compliance with the monitoring plan of the applied methodology

It has still complied with the monitoring plan of the applied methodology and it has not been changed

d. Level of accuracy and completeness in the monitoring of the project activity compared with the requirements contained in the registered monitoring plan

Same

e. Scale of the project activity

Large

f. Stakeholder consultation

The documents including the non-technical project summary for design change and the Environmental and Social Impact questionnaire related with the Sustainable Development Indicators (SD Assessment) (according to GS4GG requirements) have been delivered to the stakeholders who have been selected as stakeholders to the project activity. The main communication method has been through e-mails and delivery of hard copies of the mentioned documents for those who don't have an email address (specifically the locals) to the mukhtar of Dedeoba village.

The feedback request for design change has started on 26/05/2025 with sending out the documents to the stakeholders officially, and verbally-posters on the same day the mukhtar of Dedeoba village and no feedback has been received 26/06/2025. The beginning of Complementary Stakeholder Feedback Round has been announced from the mukhtar's offices, mosques, and coffee houses of the Alaçam ve Özlü villages. This public leaflet announcement, emails and documents contain information such as location of available these documents, the procedure to commit comments, timing, and the contact's details.

The stakeholders stated that they are in favour of the project and underlined the significant contribution of the project to regions sustainable image and stressed the importance of renewable and clean energy.

g. Sustainable development criteria

The intended capacity extension is not expected to have any impact on Sustainable Development Assessment for the following reasons:

- i. Another 1 turbine will be installed on an area which is covered by the land use rights obtained already while developing the initial project.
- ii. 1 turbine will be added to the project is not located closer to residential buildings than any of the existing 35 turbines.

Summarizing, the design changes are likely to improve the project's Sustainable Development Criteria or leave them unchanged. Thus, there is no indication of changes in the registered Sustainable Development Monitoring Plan, as the latter already incorporates appropriate arrangements for mitigation measures. As a further conclusion, the PP has also taken comments from stakeholders as consultation activities, and they are agreed with that.

h. Safeguarding assessment

The design changes are likely to improve the project's safeguarding assessment or leave them unchanged. Thus, there is no indication of changes in the registered Safeguarding assessment Monitoring Plan, as the latter already incorporates appropriate arrangements for mitigation measures. As a further conclusion, the PP has also taken comments from stakeholders as consultation activities, and they are also agreed with that.

i. Compliance with applicable legislation

The design changes have been approved by EPDK, which has issued the revised electricity production license. Regarding other approvals like e.g. environmental approval or land use rights, the capacity extension is within the scope of the existing approvals obtained for the initial project design.

j. Only for LUF Projects: Transparent summary of all approved changes in Project Area, Eligible Area and accompanying changes in ex-ante emissions removals.

NA

DOCUMENT HISTORY

Version	Date	Remarks
1.5	29 June 2023	Editorial changes to match V2.1 of the Safeguarding Principles Requirements
1.4	21 June 2023	Editorial changes to match V2.0 of the Safeguarding Principles Requirements
1.3	14 April 2023	Integrated the design change memo as annex of the document. Editorial changes
1.2	14 October 2020	Hyperlinked section summary to enable quick access to key sections Improved clarity on Key Project Information Inclusion criteria table added Gender sensitive requirements added Prior consideration (1 yr rule) and Ongoing Financial Need added Safeguard Principles Assessment as annex and a new section to include applicable safeguards for clarity Improved Clarity on SDG contribution/SDG Impact term used throughout Clarity on Stakeholder Consultation information required Provision of an accompanying Guide to help the user understand detailed rules and requirements
1.1	24 August 2017	Updated to include section A.8 on 'gender sensitive' requirements
1.0	10 July 2017	Initial adoption