Gold Standard
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TEMPLATE

KEY PROJECT INFORMATION & PROJECT DESIGN DOCUMENT (PDD)

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VERSION **v. 1.5**

RELATED SUPPORT

- TEMPLATE GUIDE Key Project Information & Project Design Document

This document contains the following sections

KEY PROJECT INFORMATION

GS ID of Project	GS576
Title of Project	Kuyucak 25.6 MW Wind Farm Project, Turkey
Time of First Submission Date	18/06/2024
Date of Design Certification	15/04/2011 CP1 16/06/2023 CP2
Version number of the PDD	0.4
Completion date of version	02/09/2024
Project Developer	Alize Enerji Elektrik Üretim A.Ş.
Project Representative	Rüzgar Karbon ve Enerji Danışmanlık Sanayi Ticaret Limited Şirketi
Project Participants and any communities involved	Alize Enerji Elektrik Üretim A.Ş
Host Country (ies)	Turkey
Activity Requirements applied	☐ Community Services Activities ☒ Renewable Energy Activities ☐ 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 21.0
Product Requirements applied	☒ GHG Emissions Reduction & Sequestration ☐ Renewable Energy Label ☐ N/A
Project Cycle:	☒ Regular ☐ Retroactive

Table 1 – Estimated Sustainable Development Contribution

Sustainable Development Goals Targeted	SDG Impact (defined in B.6.)	Estimated Annual Average	Units or Products
13 Climate Action (mandatory)	Emission Reduction	48,116 tCO2/year VERs	
7 Affordable and Clean Energy	Generating Clean Energy	74,163.059 MWh	
8 Decent Work and Economic Growth	Employment	8 people	

SECTION A. DESCRIPTION OF PROJECT

A.1 Purpose and general description of project

The Kuyucak 25.6 MW Wind Farm Project, Turkey, hereafter referred to as the project, involves a grid-connected onshore wind farm project in the Demirtaş village, Kırkağaç-Kuyucak district of Manisa Province. The project consists of 12 wind turbines with an installed capacity of 2000 kW (E70) each and 2 wind turbines with an installed 800 kW (E44) each. With a total installed power generation capacity of 25.6 MW, the project is estimated to supply grid as 112,763 MWh and 71,578 tCO2-eq per annum during the first 7-year crediting period and 74,006.983 MW and expected annual emission reductions of the project is approximately 48,015 tCO2 during for this 2nd crediting period.

The Project aims to generate electricity from wind energy and feed it to the national electricity grid.

The project is estimated to supply grid as is 74,163.059 MWh[1] and expected annual emission reductions of the project is approximately 48,116 tCO2/year during for this 3rd and last crediting period.

The average production is 74,006.983 and it is around 25% lower than estimated value when you compare according to first CP1's PDD. Therefore, carbon revenues are crucial for the project. The income of the GS VER is very important for the financial performance of the project.

The Project Proponent has been granted a 49-year generation license by the Turkish Energy Market Regulatory Authority for the proposed Project under the provisions of Law No. 4628 governing the electricity market in the Republic of Turkey.

[1] The average value of Alize Kuyucak WPP's electricity generation between 2011 and 2023. (13 years). The related excel file has been provided to the VVB

The purpose of the project activity is to produce renewable electricity using wind as the power source and to contribute to Turkey is growing electricity demand through a sustainable and low carbon technology. The project displaces the same amount of electricity generated by the grid dominated with fossil fired power plants.

The project activity produces positive environmental and economic benefits through the following aspects:

- Displacing the electricity generated by fossil fuel fired power plants by utilising the renewable resources to avoid environmental pollution and GHG emissions,
- Contributing the economic development of the region by providing sustainable energy resources,
- Increasing the income and local standard of living by providing job opportunities for the local people.
- Production of pillar and other equipment in Turkey indirectly cause the know-how transfer and empower the local industry.

The project area belongs to the Ministry of Environment and the proposed project activity has been the installation of a grid-connected renewable power plant/unit. 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.

The project's capacity was increased to 50.1 MW in 2017 as a capacity extension. Accordingly, PP can use only 25.6 MW capacity's electricity generation for the purpose of emission reduction calculations. For this, the ratio between the electricity generations of 25.6 MW and of 50.1 MW capacities; namely, the ratio between the actual electricity generation of the initial (existing) capacity against the electricity generation of the total capacity should be calculated:

The net electricity supplied by the Wind Farm (including the existing and additional capacity) to the national grid is measured by TEİAŞ metering devices. As well, the electricity generation of each wind energy converter (wind turbine) under Kuyucak 25.6 MW Wind Farm Project (the existing capacity and added capacity) has been measured continuously with a SCADA system. Using the SCADA data, the total amount of electricity generated from the existing capacity under the proposed project activity and the added capacity has been measured on monthly basis and has been used to calculate the ratio of electricity generation. The PP can use the ratio for monitoring.
By applying this ratio to net electricity amount supplied to the national grid, the emission reduction project GS576 under the project activity will be calculated.

Formulation: The following equation will be used to calculate the the quantity of net electricity generation supplied to the grid by the project plant that has been added under the project activity:

$EG_{PJ,y} = EG_{facility,y} * EG_{RATIO,y}$

Where:

$EG_{PJ,y}$ = Design Certified Quantity of net electricity generation supplied to the grid in year y by the project plant/units that has been used under the 25.6 MW project activity (MWh/yr)

$EG_{facility,y}$ =Quantity of total net electricity generation supplied to the grid in year y by the facility [the Project Activity's existing capacity (50.1 MW) and capacity addition (24.5MW)] and measured by the TEİAŞ meters (MWh/yr)

$EG_{RATIO,y}$=Ratio between electricity generation of the plans/units of the Project Activity (25.6MW) and the total gross generation of the 50.1MW facility in year y (%) calculated as per SCADA.

Time schedule of the project activity may be seen in in table 6 as followed:

Table 2: Time schedule of the project activity

Event	Actual / Expected	Date
Commissioning date of the T8,T12,T13 and T14 wind turbines (8 MW=4*2.0 MW)*	Actual	11/11/2010
Commissioning date of the T1 to and T11 wind turbines (17.6 MW=8*2.0 MW+2*0.8 MW)*	Actual	9/12/2010
Start and end of first crediting period (CP1)	Actual	11/11/2010-10/11/2017
Gold Standards registration of Project Activity	Actual	15/04/2011
First Monitoring Period	Actual	11/11/2010-31/12/2011
Second Monitoring Period	Actual	01/01/2012-31/12/2012
Third Monitoring Period	Actual	01/01/2013-31/03/2014
Commissioning date of the T19to T24 wind turbines (15,1 MW=12*0.3 MW +5*2,3 MW)	Actual	12/09/2015
Commissioning date of the T15 and T18 wind turbines (4,7 MW=2*2.35 MW)	Actual	27/07/2017
Commissioning date of the T16 and T17 wind turbines (4,7 MW=2*2.35 MW)	Actual	25/08/2017
Start and end of Second crediting period (CP2)	Actual	11/11/2017-10/11/2024*
Fourth Monitoring Period	Actual	08/10/2022-29/02/2024
Start and end of Third crediting period (CP3)	Actual	11/11/2024-10/11/2031

* PP can claim credits only between 08/10/2022 and 11/11/2024 from CP2 according to GS4GG rules and requirements; also approved decision by SC and GS.

A.1.1. Eligibility of the project under Gold Standard

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

- The project applies methodology ACM0002 Version 21.0, 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 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 Turkey. Hence, the project contributes to the Gold Standard vision and mission.

- Wind 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, As discussed above, the project type is eligible.

Project Location: The project is in Demirtaş village, Kırkağaç-Kuyucak district of Manisa province, Turkey. Thus, the project is eligible.

Project scale: The project activity is a 25.6 MWm/25.6 MWe Wind power plant and thus qualifies under large scale projects.

Host Country Requirements: The project owner has not applied for emission reduction credits or labels under any other schemes other than GS. If the Turkey (host country) has the possibility to trade emissions that include the scope of the project and if a such risk of double counting exists, the project developer commits to retire eligible units equal to the quantity of GS VERs.

Contact Details: Contact details of the project participants, Alize Enerji Elektrik Üretim Anonim Şirketi and Rüzgar Karbon ve Enerji Danışmanlık Sanayi Ticaret Limited Şirketi have been included in the Appendix 1 of this GS PDD.

Legal Ownership and Other Rights: The project participant is Alize Enerji Elektrik Üretim Anonim Şirketi is the legal owner of the project and has the legal rights for the credits. Rüzgar Danışmanlık act as carbon consultants for the Project. Contact details are provided in Annex 1.

No public funds or ODA (Official Development Assistance) is involved in this project activity

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 Alize Enerji Elektrik Üretim A.Ş. is the legal owner of the project and has the legal rights for the credits.

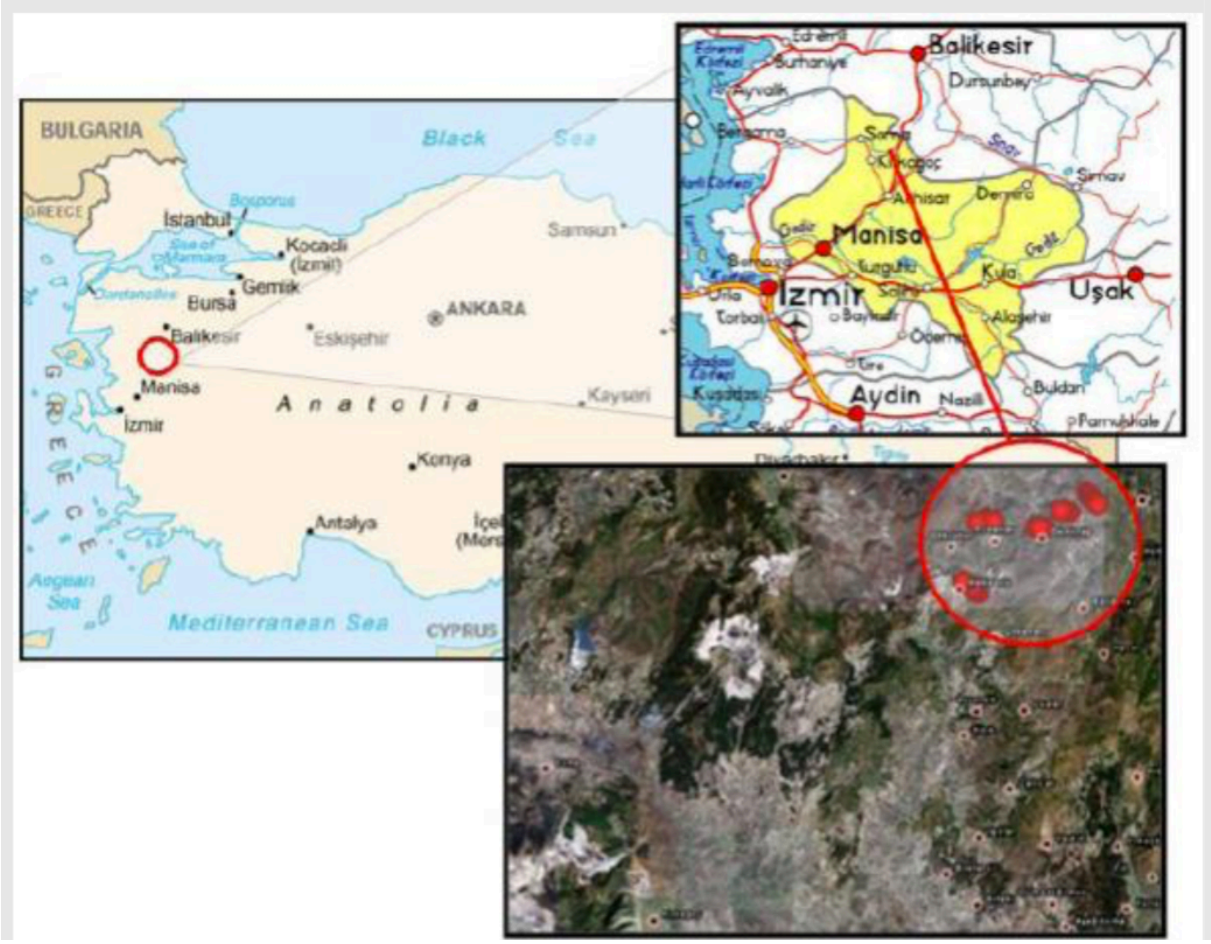
Rüzgar Danışmanlık act as carbon consultants for the Project. Contact details are provided in Annex 1.

A.2 Location of project

The Kuyucak 25.6 MW Wind Farm Project, Turkeyis located in Demirtaş village, Kırkağaç-Kuyucak district of Manisa province, Marmara Region. The geographical location of the Project covers an area around 39o 17’ N, 27 o 53’ E approximately.

Please see below the maps showing the location of the project activity in Turkey

Figure 1 The location of the project activity in Turkey



The nearest place is Demirtaş village 1.5 km from Kuyucak 25.6 MW Wind Farm Project.

Table 3 Turbine Coordinates[2]

	E	N	E	N
Turbine Nr	UTM Coordinates		Longitude / Latitude	
T1	580524	4351573	27° 56' 02"	39° 18' 35"
T2	580612	4351382	27° 56' 06"	39° 18' 29"
T3	581936	4352619	27° 57' 02"	39° 18' 09"
T4	582033	4352407	27° 57' 05"	39° 19' 02"
T5	582174	4352226	27° 57' 12"	39° 18' 56"
T6	582315	4352010	27° 57' 17"	39° 18' 49"
T7	582446	4351920	27° 57' 23"	39° 18' 46"
T8	575661	4347256	27° 52' 38"	39° 16' 17"
T9	579189	4350599	27° 55' 06"	39° 18' 04"
T10	579009	4350576	27° 54' 59"	39° 18' 03"
T11	578880	4350549	27° 54' 53"	39° 18' 03"
T12	575551	4347387	27° 52' 33"	39° 16' 21"
T13	575434	4347540	27° 52' 28"	39° 16' 26"
T14	575230	4347589	27° 52' 20"	39° 16' 28"

Please find below the 9 turbine coordinates which is unregistered turbine for the Kuyucak 25.6 MW WPP for CP2. The electricity generation values of these turbines have not been included during the monitoring periods of CP2 and CP3.

Table 4 Unregistered Turbine Coordinates for CP2 and CP3

T15	580007	4351633
T16	575795	4347704
T17	580170	4350635
T18	579394	4350964
T19	576045	4346915
T20	576127	4347321
T21	574833	4347489
T22	574784	4347743
T23	574699	4347960

A.3 Technologies and/or measures

The Project Activity involves the generation of renewable energy from wind. It thereby displaces grid electricity that is partly generated from fossil fuel fired power plants. The wind-driven blades are connected to an electricity generator, which produces electrical energy and supplies it to the grid without storage. 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.

Enercon, a German turbine manufacturer, has been selected as technology provider due to the quality of its products in terms of high reliability, grid friendliness, low

[2] Generation License

maintenance requirements and low noise levels. The turbines have been delivered from Germany to the project site. Blades and masts have been produced in Turkey.

The Project have been composed of gearless, variable speed, variable pitch control wind turbines with a total installed capacity of 25.6 MW. The Project includes 12 units of E70 turbines with an output of 2000 kW and a rotor diameter of 71 m and 2 E44 unit with an output of 800 kW.

This Kuyucak WPP has been connected to the 154 kV high-voltage transmission lines to the Soma transformer station. The metering has been done at substation before electricity is fed into the grid.

The Project reduces greenhouse gas emissions by displacing electricity from grid connected fossil fuel fired power plants, thereby contributing to climate change mitigation along with other environmental benefits. The lifetime of the project activity has been supposed as 25 years.

The main equipment used in the Project is wind turbines with the following specifications.

Table 5: Technical specifications of the Enercon E44- E70 turbines[3]

Parameter	Value
Rated Power	800 kW-E 44
Rotor Diameter	44 m
Number of blades	3
Swept Area	1,521 m^2
Rotational speed	14.0 - 33.1 rpm
Cut in wind speed	2.5 m/s
Cut out wind speed	34 m/s
Remote monitoring:	Enercon SCADA

Parameter	Value
Rated Power	2,000 kW-E 70
Rotor Diameter	71 m
Number of blades	3
Swept Area	3,959 m^2
Rotational speed	6.0 - 20.5 rpm
Cut in wind speed	2.5 m/s
Cut out wind speed	34 m/s
Remote monitoring	Enercon SCADA

[3] https://en.wind-turbine-models.com/turbines/827-enercon-e-70-e4-2.000
https://www.enercon.de/fileadmin/Redakteur/Medien-Portal/broschueren/EC_Datenblaetter_WEA_en_082019.pdf

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.

PLF in case of wind energy has been calculated as follows:
In case of past period: The data such as actual power geerated in a year and the capacity of a particular wind mill will determine the PLF.

Plant Load Factor is the ratio of the actual output of a power plant over a period of time and it's output if it had operated a full capacity of that time period.

Plant Load Factor = Gross Generation / (Installed Capacity * Number of Hours) For this project, plant load factor is %33.00 as below:

PLF= 74,163.059/ (25,600*8,760) *100=%33.07

All requirements and specifications of the meters have been done according to Communique on the counter to be used in the Electricity Market by Energy Market Regulatory Authority on 22/04/2011.

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.

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 21.0"[4]
The methodology refers to:

- "Tool for the demonstration and assessment of additionality", Version 07.0.[5]
- "Combined tool to identify the baseline scenario and demonstrate additionality", Version 07.0[6]

[4] https://cdm.unfccc.int/UserManagement/FileStorage/ZPFJL01OU2RYC6N3HASIXV7K84QBG9
[5] https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-01-v7.0.0.pdf
[6] https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-02-v7.0.pdf

- "Tool to calculate project or leakage CO2 emissions from fossil fuel combustion", Version 03.0[7]
- "Tool to calculate the emission factor for an electricity system", Version 07.0.[8]
- "Tool to determine the remaining lifetime of equipment", Version 01[9]
- Tool 11 "Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period" Version 3.0.1[10]

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 21.0. is applicable.

The choice of methodology ACM0002/Version 21.0 is justified as the proposed project activity meets relevant applicability criteria

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

Table 6: Applicability of ACM0002 Version 21.0

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); c) Involve a retrofit of (an) existing operating plants/units; d) Involve a rehabilitation of (an) existing plant(s)/unit(s); or	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 activity is a greenfield project activity.[11]

[7] https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-03-v3.pdf
[8] https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-07-v7.0.pdf
[9] https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-10-v1.pdf
[10] https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-11-v3.0.1.pdf

[11] EMRA Generation License

e) Involve a replacement of (an) existing plant(s)/unit(s).	
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 photovoltaic[12] 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).	The Kuyucak WPP does not involve the integration of a BESS. Hence this criterion is not applicable to the project activity.
The project activity may include renewable energy power plant/unit of one of the following types: hydro power plant/unit with or without reservoir, wind power plant/unit, geothermal power plant/unit, wind power plant/unit, wave power plant/unit or tidal power plant/unit.	The project activity is the installation of 14 wind turbine generators (WTGs) and the capacity is 25.6 MW. Hence, meets this criterion.
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.	The project activity does not involve capacity additions, retrofits, rehabilitations, or replacements. Hence this criterion is not applicable to the project activity.

[12] 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.

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.[13]
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 generation	The project activity is not a hydro power plant. Hence this applicability criterion is not relevant to the project activity.

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

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.	
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.
Applicability Condition	Justification
This methodology is applicable to project activities that: f) Install a Greenfield power plant;	The project activity involves installation of a power plant at a site where there was no renewable energy power plant operating prior

g) Involve a capacity addition to (an) existing plant(s); h) Involve a retrofit of (an) existing operating plants/units; i) Involve a rehabilitation of (an) existing plant(s)/unit(s); or j) Involve a replacement of (an) existing plant(s)/unit(s).	to the implementation of the project activity. The proposed project activity is a greenfield project activity.[14]
The project activity may include renewable energy power plant/unit of one of the following types: hydro power plant/unit with or without reservoir, wind power plant/unit, geothermal power plant/unit, wind power plant/unit, wave power plant/unit or tidal power plant/unit.	The project activity is the installation of 14 wind turbine generators (WTGs). Hence, meets this criterion.
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.	The project activity does not involve capacity additions, retrofits, rehabilitations or replacements. Hence this criterion is not applicable to the project activity.
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	This condition is not applicable to the project activity as it does not involve the installation of a hydro power plant.[15]

[14] EMRA Generation License

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

(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.	
In the case of integrated hydro power projects, project proponent shall: (c) Demonstrate that water flow from upstream power plants/units spill directly to the downstream reservoir and that collectively constitute to the generation capacity of the integrated hydro power project; or (d) 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.	The project activity is not a hydro power plant. Hence this applicability criterion 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 21.0 "Grid connected electricity generation from renewable sources".

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

Applicability Conditions of "Tool to Calculate The Emission Factor For an Electricity System" for Kuyucak 25.6 Wind Farm Project 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.

The project activity also meets the applicability conditions given in "Tool for the demonstration and assessment of additionality".

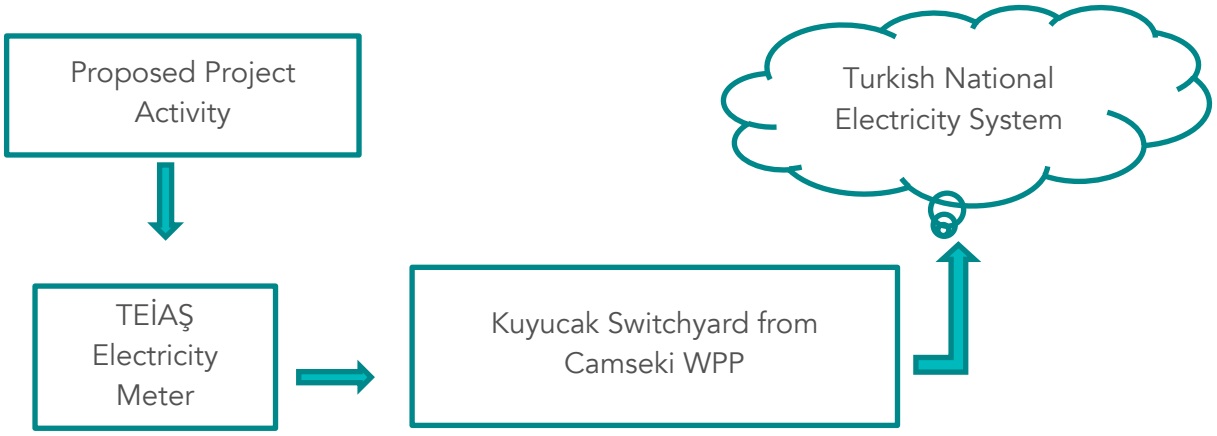
The project activity also meets the applicability conditions given in "Tool to determine the remaining lifetime of equipment" This tool is used to determine the remaining lifetime of baseline or project equipment. Average lifetime of turbines is assumed as 25 years.

Other tools mentioned in the methodology are not applicable for this project activity

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 Kuyucak 25.6 MW Wind Farm Project, Turkey is as demonstrated in the figure below:

Figure 2: Project Boundary



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

Table 7: The greenhouse gases and emission sources

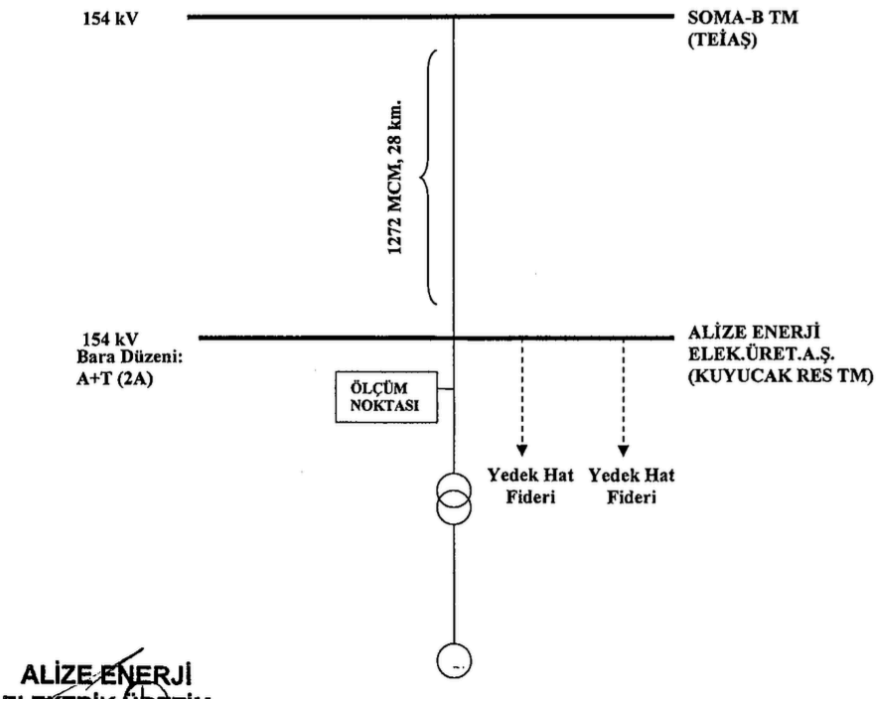
Source		GHGs	Included?	Justification/Explanation
Baseline	CO_2 emissions from electricity generation in	CH_4	No	The major source of emissions in the baseline
		N_2O	No	The minor emission source in the baseline.

	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 CO2, therefore CO2 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_2O	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 21.0, such emissions do not need to be taken into account.

The following figure represents the line diagram of the project activity:

Figure 3 Line Diagram of Kuyucak 25.6 MW Wind Farm Project



The scheme shows the connection points of Kuyucak 25.6 MW Wind Farm Project with the national grid. The wind farm is connected to Soma-B transformer station on 154 kV high voltage level. Two electricity meters are installed at Kuyucak 25.6 Wind Farm project. These meters are working in parallel.

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 (currrent 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.

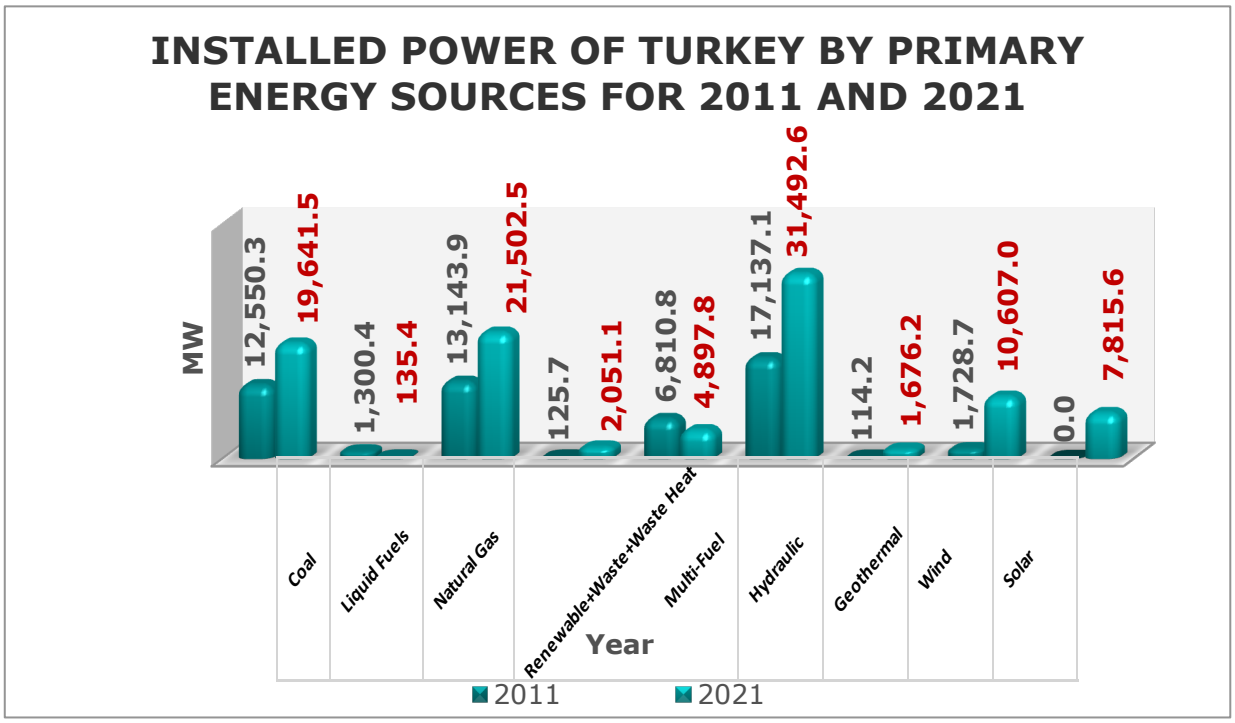
Step 1.2: Assess the impact of circumstances

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

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 5[16].

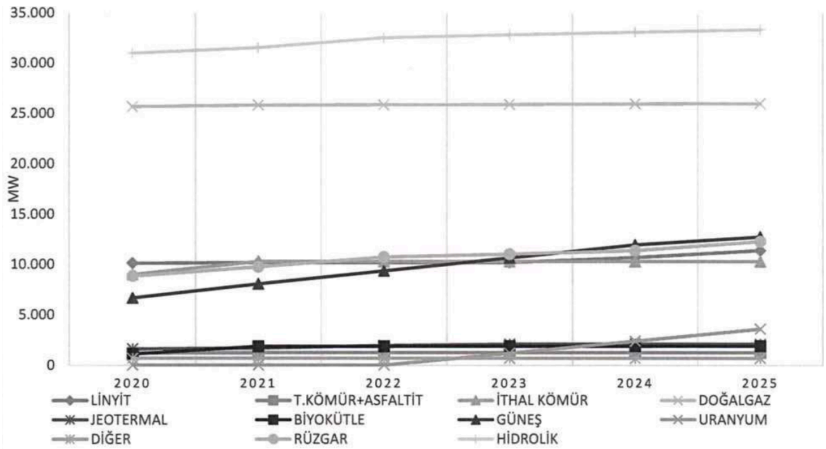
[16] https://www.teias.gov.tr/tr-TR/turkiye-elektrik-uretim-iletim-istatistikleri

Figure 4: The share of resources in the electricity generation



As per the 5-year capacity projection of TEIAS (Turkish Electricity Transmission Company), it is obvious that fossil fuels would continue being the main sources for electricity generation (approximately 62% in 2024). High growth rate of energy demand is forecasted to continue over coming decade. Fossil fuels will be dominant in the electricity generation mix, with an expected share of 62% in 2024. Renewables including wind energy would have a limited share of then 38 %. For this reason, main part of the new capacity will be fossil fuel based.

Figure 5 Capacity projection, 2021-2025[17]



[17] https://www.teias.gov.tr/tr-TR/ilgili-raporlar

Turkey 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 Turkey, especially the abundance of economically accessible lignite.

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 grid-connected electricity generation from renewable sources. 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 in not applicable.

The technicahal lifetime of turbine is 25 years and 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 conform to the provisions of the latest version of the

approved applicable methodology to the project activity namely: ACM0002 version 21.0, "Large-scale Consolidated baseline methodology for grid-connected electricity generation from renewable sources".

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 0.6488.

B.5. Demonstration of additionality

The local stakeholder consultation meeting was organized on 22/05/2008 in Kırkagac Municipality Hall before as it is before the construction of the plant. In addition to this, during the financial analysis done for the investment decision, the VER revenue has been taken into account. Everything is still same as registered capacity project related with additionality assessment during the CP renewal process. Because the increase capacity has not added in the project boundary.

The project activity consists of the installation of a new grid-connected renewable power plant. The respective baseline scenario would be the generation of grid-connected power, which 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"v01.1.

The project activity is a green field investment, which does not modify or retrofit any existing electricity generation facility. The emission factors are calculated with the recent data available at the date of PDD compilation. The additionality methodology consists of the following steps;

- Identification of alternatives to the project activity;
- Investment analysis to determine that the proposed project activity is either: 1) not the most economically or financially attractive, or 2) not economically or financially feasible;
- Barriers analysis; and
- Common practice analysis

STEP 1. Identification of alternatives to the project activity consistent with current laws and regulations

This step involves the definition of realistic and credible alternatives to the project activity that can be part of the baseline scenario.

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

The Project involves the generation of electricity and sales of VER credits. It will help Turkey to stimulate and commercialise the use of grid connected renewable energy technologies and markets. The two alternatives identified to the project activity are;

Alternative A. The proposed project activity will be undertaken without the generation and sale of VER credits.

➢ The Project Owner's experience and knowledge is focused on wind energy only. The Project Owner has no alternative plan, e.g. hydro or fossil-fuel fired power plants that it would realize as an alternative option. The Project owner has no such power plant under its ownership, no intention or any license or permit application regarding such alternatives. Therefore the Project activity is the only scenario that the Project owner can realize. The revenues derived from the sale of voluntary emission reductions have been included in the financial feasibility analysis and preliminary negotiations with the bank, and the investment decision relies upon carbon trading. Since the project is not feasible for project participants without the sales of VER credits due to its low IRR, the Project will not be realized and this alternative cannot be considered as the baseline scenario. These statements will be further elaborated within the framework of a barrier analysis in this section.

Alternative B. Continuation of the current situation: The project activity is not realized and investors do not take any actions.

➢ In this alternative, the same amount of electricity to be produced by the project activity will be generated by other power plants connected to grid, where the energy mix is dominated by fossil fuel fired power plants.

No realistic and credible alternative scenarios to the proposed project activity can be identified that deliver electricity with comparable quality, properties and application areas. The national grid is already increasing its installed capacity through expansion of existing power plants and constructing new power plants. As similar activities, only wind farms are identified, since organisational, technical, economical and sustainability aspects of other renewable energy technologies (e.g. hydropower, geothermal, solar etc.) are not directly comparable to wind energy. Hydropower plants are not directly comparable to wind farms, since a specific HEPP that provides the same amount of energy can have much lower or higher plant load factors (i.e. installed capacity and capital expenditure) than the Project activity, making it difficult to compare them on an economical basis. Environmental and social aspects of HEPPs also vary widely (some having serious negative impacts while others can have mitigated low impacts), therefore it would not be correct to suggest that HEPPs provide the same product (clean energy) as the Project does. Furthermore, several HEPPs in Turkey require additional revenues from carbon credits, therefore they should not be regarded as alternatives to the Project. For these reasons, hydropower technology cannot be considered as an alternative to the Project activity. There is no specific HEPP project by any investor that is known to be planned as an alternative to the Project activity. Other technologies like PV, solar thermal, geothermal or biomass are also not plausible alternatives, because economic incentives are not high

enough in Turkey to make them economically viable and financially feasible. In the host country, electricity generated from these resources are priced the same as hydro, wind or thermal, and these technologies have not reached maturity to compete with them on the price basis. Only a few biogas or geothermal power plants exist in Turkey, which are carbon projects. Commercial solar plants do not exist at all, showing that these are not alternatives to the Project either.
There is no indication (i.e. power generation license, relevant permits etc.) that another specific investor is or would be planning a specific renewable energy or thermal power plant in the host country as an alternative to the Project activity (that would be built in case the Project is not built)11. Thus, continuation of the current situation, with the electricity generated by the operation of grid connected power plants and by the addition of new generation sources in the Turkish National Grid can be considered as a realistic alternative for the project activity and no other alternatives other than both above mentioned alternatives have been considered as potential baseline scenarios.

Outcome of Step 1a: Identified realistic and credible alternative scenario(s) to the project activity

Alternative B is identified as the baseline scenario, since Alternative A is not "applicable, which have been further elaborated in Section B.5. According to the baseline scenario, the electricity delivered to grid has been continued to be fed by a power plant portfolio, which is highly fossil fuel dependent and CO2 intensive (see figures below).

Figure 6 Electricity generation mix in Turkey[18]

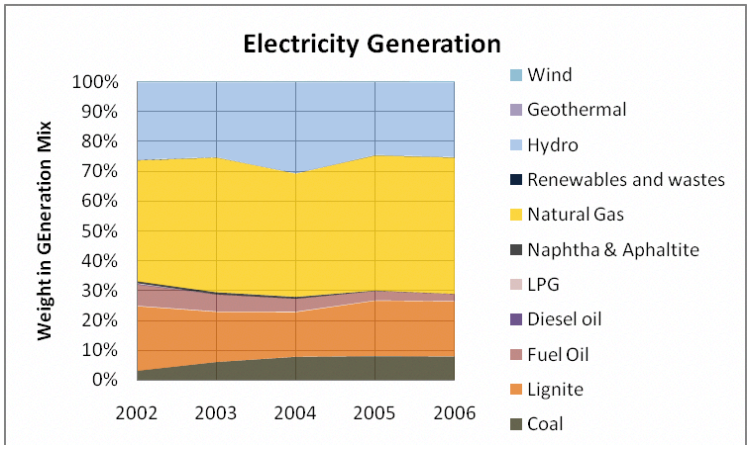
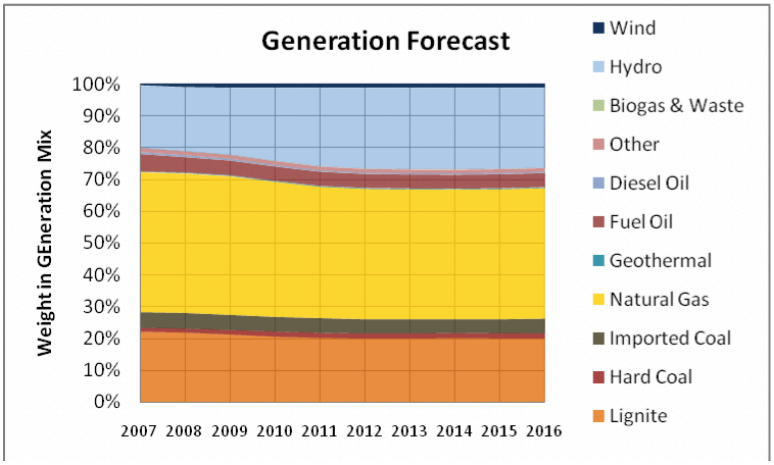


Figure 6 shows the current practice of electricity generation in Turkey; the weight of fossil fuels in electricity generation has been around 70-75% for the last five years and is not expected to change much in the future as highlighted in Figure 7.

Figure 7 Electricity Generation Forecasts[19]

[18] Based on TEIAS data, http://www.teias.gov.tr/istatistik2005/39.xls, http://www.teias.gov.tr/ist2006/36(06).xls .

[19] TEIAS capacity projection 2007-2016,p.30.(http://www.teias.gov.tr/projeksiyon/projeksiyon%20Temmuz2007.pdf)



The official forecasts as displayed in Figure 6 suggest that in the future power generation in Turkey will be dominated by fossil fuel sources covering more than 70% of the overall electricity supply. In this framework, the continuation of the current situation (Alternative B) would mean carrying on this fossil fuel dominated trend.

The same forecasts show that wind energy is expected to cover around 1% of Turkey's electricity demand during 2007-2016. Thus, wind farm projects most likely will not become business as usual in the near future.

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

Both alternatives as well as the project activity are subject to the following laws;

Relevant Laws	Number / Enactment Date
Electricity Market Law	Nr. 4628 / 03.03.2001
Energy Efficiency Law	Nr. 5627 / 02.05.2007
Law on Utilization of Renewable Energy Resources for the Purpose of Generating Electrical Energy	Nr. 5346 / 18.05.2005
Environmental Law	Nr. 2827 / 11.08.1983

There are various regulations in connection with these laws as well. The mandatory preliminary permits have been obtained for the project activity, showing that it is in compliance with the current laws and regulations. Turkey did not ratify the Kyoto Protocol and has no national legal binding emission reduction goals for power plants. Hence, both alternatives, A and B, are consistent with the applicable legislation.

Outcome of Step 1b: As mentioned above, if the project activity is not feasible and will not be realized, the project participant does not have an alternative investment plan that would generate electricity with a comparable quality and similar amount. Alternative A cannot be considered as a plausible scenario because of financial, investment, technological and prevailing practice barriers that would prevent the project activity from being implemented, which will be further elaborated below.

Therefore, the only plausible baseline scenario to the Project is Alternative B: the continuation of the current situation without realization of the proposed Project Activity.

For the demonstration of additionality, a barrier analysis or an investment analysis, or both can be conducted. Barrier analysis is applied.

STEP 2. Investment Analysis

The Investment Analysis is not applied.

STEP 3. Barrier Analysis

This analysis determines whether the proposed project activity faces barriers that:

- Prevent the implementation of this type of proposed project activity; and
- Do not prevent the implementation of at least one of the alternatives

Sub-step 3a. Identify barriers that would prevent the implementation of the proposed project activity:

Investment -, technical -, prevailing practice - and other barriers are explained below for the scenario identified as Alternative A, which assumes that the project activity being implemented without consideration of revenues from VER credits;

(a) Investment barriers

o Lack of Infrastructure: Legally TEIAS is required to construct the 154 kV HV transmission line to connect the Project site to the national grid, since the Project is located in a relatively remote location. Thus, project participants are required to pre-finance the 28 km-long transmission line in advance, putting further difficulties in finding funding for the already high initial investment budget. Although associated costs are later "compensated" by TEIAS, the official internal price tariffs are structured such that this compensation is not based on actual up to date costs, resulting in a significant loss on behalf of the project participant.

o As of PDD development date, no similar wind energy project has been taken into operation without VER credits in Turkey.

o Access to finance: Although being one of the leading and credited wind energy companies in Turkey, the project participants have experienced some difficulties in securing the finance for the Project because of the following reasons;

- Transmission Fee: The transmission line system usage fee, depends on the project location and can differ significantly. It constitutes a significant operating cost item for the Project, since this fee is the second highest7 among 23 distribution grids in Turkey, reducing the feasibility of this Project in particular. Furthermore, the expected privatization process of these distribution networks contains the risk of distribution fee increases.

- Equipment Selection: The Enercon wind turbines, which are chosen for the Project, have higher prices than comparable turbines. This choice is justified by their high quality, reliability, extensive technical support, grid friendliness, low maintenance requirements and low noise. However, it amplifies the investment volume, thus posing another barrier.
- After the recent credit crunch and the related global financial crisis, the international and the local financial sector is having a wide range of challenges. With several banks gone bankrupt or taken over by governments/competitors, the financial world has shifted its focus more to internal difficulties rather than financing projects. Nowadays, several banks have stopped new loans and even started calling their loans back before maturity. Project developers in Turkey are also facing the same difficulties, adding very significant barriers to the feasibility of the Projects. The Project proponents are not sure anymore whether financial institutions will be able to supply loans for the Projects with comparable conditions as before.

  The Turkish financial market is experiencing such high difficulties that some commercial Turkish banks are even exercising their "call back" option for their loans, which means that banks take extreme measures to ensure their survival. This, on the other hand, leaves companies in very difficult positions. Turkish banks have lately been criticized by the government for acting too much on their behalf without paying attention on their customers, and these arguments have been accepted even by the Turkish Banks' Association. In this environment, companies have very serious financial problems and new projects are having various challenges for finding finance. These developments leave no doubts about the financial additionality of the Projects under validation.

  As a result of these changes, the ongoing loan discussions with the bank have been halted abruptly by the bank until February 2009. Further discussions revealed that the bank's loan conditions are not attractive for the Project Owner and the talks have been stopped in December 2009. The Project Owner has initiated talks with another commercial bank in January 2010 and has signed the loan agreement as of February 2010. The delay in securing finance clearly demonstrates the financial barriers faced.

(b) Other Barriers

- Insititutional Capacity: A significant portion of the required technology and know how must be imported. The former wind farm projects of the same Project proponents have resulted in the formation of a joint venture for wind turbine blade manufacturing, demonstrating the know how transfer caused by similar projects. As of today, this JV is selling blades to internal and external buyers. Moreover, the selected Enercon wind turbines for the Project activity are grid friendly units, allowing further expansion capacity of wind power plants in the grid, which is an additional benefit of the Project. However, TEIAS prefers to limit the wind power capacity at each transformer station without differentiating between different wind turbine specifications. Therefore, the Project had to apply for a generation license with a lower installed capacity.

o Legal and bureaucratic difficulties: Apart from the rigorous permit process, the history of the licensing process is summarized below:

Date	Action
29.12.2003	EMRA[15] is applied for the electricity generation license
05.01.2004	EMRA requested additional information
09.01.2004	Requested information is submitted to EMRA
13.01.2004	EMRA requested construction planning
21.01.2004	Requested documentation is submitted to EMRA
04.03.2004	EMRA requested the payment of the license fee in order to start with assessment
12.03.2004	License fee is paid and EMRA is informed
31.05.2006	EMRA requested for additional documents (after 2 years)
14.09.2006	Requested documentation is gathered and submitted
22.08.2007	EMRA forwards Alize Enerji TEİAŞ's request to connect to Soma transformer station
24.08.2007	The request is accepted
12.09.2007	EMRA takes board decision to grant the license
15.10.2007	The currently valid license is obtained by Alize Enerji.

o As seen from above, the license could only be obtained after nearly 4 years following the first application. Beside time issues, the costs associated with the whole process have been at significant levels. Moreover, there have been several challenges during the permit process as well, which are not included in the list. This clearly shows legal and bureaucratic barriers which have been gone through.

Outcome of Step 3a: The identified barriers are sufficient grounds for demonstration of additionality since they prevent potential project proponents from carrying out the proposed project activity undertaken without being registered as a VER project activity. The barriers mentioned above prevent the realization of Alternative A (the proposed Project Activity undertaken without VER credits).

Sub-step 3b. Show that the identified barriers would not prevent the implementation of at least one of the alternatives (except the proposed project activity)

Identified barriers explained in Sub-step 3a would not prevent the implementation of the Alternative B, which is mainly the continuation of fossil fuel and hydro power plant construction because of the following reasons:

• Investment Barriers: Investment barriers partly affect ongoing power plant investments; however as the current practice of financial institutions also shows, fossil fuel powered power plant investments often face considerably lower investment barriers as a result of:

o Smaller initial investment volumes compared to similar-capacity renewable energy projects: The Project's technology has a higher investment volume per

MW compared to fossil fuel fired power plants. The Project had a very hard time accessing finance and loan discussions have taken a long time. Therefore Project's alternatives (i.e. mostly fossil-fuel fire power plants) are not affected by the same financial and institutional barriers.

o Familiarity of financiers, investors and authorities: The Project had to apply for a lower capacity (as MW) because of the insufficient institutional capacity of relevant public bodies (please refer to "institutional capacity" barrier for details). Fossil fuel fired power plants are very well known by public authorities and financial institutions as they dominate electricity generation of Turkey. Only licensing, apart from other permits, took about 4 years. Therefore the barriers do not apply to the alternatives.

•Technological Barriers: Large hydro - and fossil fuel fired thermal power plants, which constitute a big portion in the installed capacity forecasts, utilize conventional technologies, which are well known and mature. In Turkey there are technically competent equipment suppliers, technical planners, contractors, maintenance staff etc. regarding such investments. Therefore the continuation of the current situation does not involve any identifiable technological barriers.

• Prevailing Practice: This alternative already involves the current practice and is therefore not applicable.

• Other Barriers: In general, there is an oversupply of imported natural gas in Turkey because of Turkey's international take-or-pay purchase contracts. Therefore, the national energy policy supports the expansion of natural gas networks stimulating the demand. Furthermore, the Turkish energy policy is based on a strategy acting as an energy bridge between the Eastern and the Western oil and gas markets, thereby securing its own fossil fuel supply and gaining strategic position in the global energy market. This strategy prioritizes fossil fuels at political levels, whereby renewable resources and their strategic importance are seen as secondary. In terms of licensing procedure, renewable energy investors are faced with additional permit bureaucracy (e.g. wind farm license applications are not being accepted by EMRA as of the date of GS application, HEPP applications are thoroughly reviewed by DSI (State Hydraulic Works) in terms of their technical design and feasibility, projects on overlapping areas need to pay additional fees or settle with other project applicants etc.), which thermal power plant projects are not faced with, since such conventional projects do not require to be set up on natural resources).

These reasons stated above prevent Alternative B being affected by the barriers, whereas these barriers seriously affect the Alternative A.

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 (10/11/2017-10/11/2024)	**% to Net Income**
Income	147.25
Costs	47.25
Net Income	100

Carbon Income	0
Carbon Costs	0.11
Net Carbon Income	-0.11

Income occurring from electricity sales (sole income except carbon revenues) is 1.47 times the net income and overall expenses (including depreciation costs) make up to 0.4725 times the net income. Revenues from carbon credit sales make zero of net income. Carbon certification costs amount to 0.11 percent of the net income and net carbon sales income amount -0.11 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 and GSVERs price has been increased. So, the results of the financial analysis still same for the project, with the decision to go ahead was made 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. PP has started performance review of period between 08/10/2022 to 29/02/2024.

B.6. Sustainable Development Goals (SDG) outcomes

B.6.1 Explanation of methodological choices/approaches for estimating the SDG Impact

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	I: 8.5.2 Unemployment rate, by sex, age and persons with disabilities

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 project is expected to generate 74,163.059 MWh[20] of clean energy per annum.Net generation will be as below.

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

The source of internal consumption of the plant from the grid. The net generation calculated that, internal consumption from the grid (MWh) can deduct from electricity supplied amount to the grid (MWh) and these are approved by official authority which is TEIAS and EPIAS in Turkey.

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 8 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"

[20] The average value of Alize Kuyucak WPP's electricity generation between 2011 and 2023 (13 years).

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 8.5.2 "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.

SDG13: Climate Action:

The project leads to mitigation of 48,116 tCO_2 per annum.

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.

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)
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 21.0

$PE_y=0$

Leakage
Leakage emission (LE_y) is considered as "0" as suggested in ACM0002 Version 21.0

$LE_y=0$

Baseline Emissions
The baseline emissions are calculated as follows:

$BE_y=EG_y * EF_{CO2,i,y}$
Where:

BE_y = Baseline emissions in year y (tCO_2/yr)
$EG_{m,y}$ = Net quantity of electricity generated and delivered to the grid by power unit m in year y (MWh)
$EF_{CO2,i,y}$ = CO2 emission factor of fuel type i in year y (t CO2/MWh)

According the "Tool to Calculate the Emission Factor for an Electricity System v 07.0.0". Option 1 has been selected.

Option 1

A delineation of the project electricity system and connected electricity systems published by the DNA or the group of the DNAs of the host country(ies), In case a delineation is provided by a group of DNAs, the same delineation should be used by all the project participants applying the tool in these countries.

Operating, Build and Combined Margin Emission Factors have been published by the Ministry of Energy and Natural resources. 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 0.7424 tCO2/MWh by the Ministry of Energy and Natural Resources.[21]

Calculation of the Build Margin Emission Factor

It's been used as 0.368 tCO2/MWh which is used for CP2 and also same published value by the Ministry of Energy and Natural Resources for 2020.

[21] https://enerji.gov.tr//Media/Dizin/EVCED/tr/%C3%87evreVe%C4%B0klim/%C4%B0klimDe%C4%9Fi%C5%9Fikli%C4%9Fi/TUESEmisyonFktr/Belgeler/2020_Sebeke_EF.pdf

Calculating of the Combined Margin Emission Factor

It's been published as 0.6488 tCO2/MWh by the Ministry of Energy and Natural Resources. The combined margin is calculated ex-post and has been fixed for the crediting period. And this calculated CM= 0.75xOM+0.25xBM. This national EF published by Turkish Republic Ministry of energy.[22]

B.6.2 Data and parameters fixed ex ante

I: 7.2.1 "Renewable energy share in the total final energy consumption"

Data/parameter	$EF_{CO2,grid,y}$
Unit	tCO_2/MWh
Description	Combined margin CO2 emission factor for the project electricity system in year y
Source of data	Republic of Turkey Ministry of Energy in Emission Factor 2020[23]
Value(s) applied	0.6488
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

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 project is expected to generate 74,163.059 MWh of clean energy per annum. Net generation will be as below.

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

[22]https://enerji.gov.tr//Media/Dizin/EVCED/tr/%C3%87evreVe%C4%B0klim/%C4%B0klimDe%C4%9Fi%C5%9Fikli%C4%9Fi/TUESEmisyonFktr/Belgeler/2020_Sebeke_EF.pdf
[23]https://enerji.gov.tr//Media/Dizin/EVCED/tr/%C3%87evreVe%C4%B0klim/%C4%B0klimDe%C4%9Fi%C5%9Fikli%C4%9Fi/TUESEmisyonFktr/Belgeler/2020_Sebeke_EF.pdf

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 to8 people during the operation phase.

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.
The project leads to mitigation of 48,116 tCO_2 per annum.

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.
$BE_y = EG_{m,y} * EF_{CO2,i,y}$

Where,
BE_y = Baseline emissions in year y (tCO2/yr)
$EG_{m,y}$ = Net quantity of electricity generated and delivered to the grid by power unit m in year y (MWh)
$EF_{CO2,i,y}$ = CO2 emission factor of fuel type i in year y (t CO2/MWh)
Hence,

BE_y = 74,163.059 MWh/yr * 0.6488 tCO_2/MWh

BE_y = 48,116tCO_2e

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:
PEy = 0 tCO_2/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:

LEy = 0 tCO_2/year

Emission reductions

ERy = BEy – PEy- LEy

ERy = BEy

ERy = 48,116tCO_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)
11/11/2024-31/12/2024	0	10,362.510	10,362.510
2025	0	74,163.059	74,163.059
2026	0	74,163.059	74,163.059
2027	0	74,163.059	74,163.059
2028	0	74,163.059	74,163.059
2029	0	74,163.059	74,163.059
2030	0	74,163.059	74,163.059
01/01/2031-10/11/2031	0	63,800.549	63,800.549
Total	**0**	519,141.413	519,141.413
Total number of crediting years	**7**		
Annual average over the crediting period	**0**	**74,163.059**	**74,163.059**

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 8 people.

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".

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	Project estimate	Net benefit (tCO_2e)
11/11/2024-31/12/2024	6,723	0	6,723
2025	48,116	0	48,116
2026	48,116	0	48,116
2027	48,116	0	48,116
2028	48,116	0	48,116
2029	48,116	0	48,116
2030	48,116	0	48,116
01/01/2031-10/11/2031	41,393	0	41,393
Total	**336,812**	**0**	**336,812**
Total number of crediting years	**7**		
Annual average over the crediting period	**48,116**	**0**	**48,116**

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	$EG_{PJ,grid,y}$
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
Value(s) applied	74,163.059

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 0.2s active and 0.5s reactive class

OLD METERS

	Electricity Meter(Primary)	Electricity Meter (Secondary)
Manufacturer	ELSTER	ELSTER
Model	A 1500	A 1500
Date of old meter serial number	401681	401680
Date of installation	12/11/2010	12/11/2010
The accuracy of meters	0.2s active 2 re-active	0.2s active 2 re-active

The primary meter has changed as with 8923676 serial number on 27/10/2019 and secondary meter has changed as with 8923677 serial number on 14/12/2019. All official documents related with meters have been provided to the VVB during the site visit.

	Electricity Meter(Primary)	Electricity Meter (Secondary)
Manufacturer	EMH	EMH
Model	LZQJ-XC-P2FB	LZQJ-XC-P2FB
Serial number	8923676	8923677
Date of installation	27/10/2019	14/12/2019
Date of initial calibration	20/08/2019	20/08/2019
Date of last test by TEIAS	07/08/2021	07/08/2021
The accuracy of meters	0.2s active 0.5 re-active	0.2s active 0.5 re-active

Calibration frequency: According to the Article 9 of the relevant regulation[24] , periodical inspections of "gauges for electric, water, coal gas, natural gas and, current and voltage measuring transformers will be made once in 10 years"[25]. 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

[24] https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=6381&MevzuatTur=7&MevzuatTertip=5

[25] https://www.resmigazete.gov.tr/eskiler/2016/06/20160629-22.html

	entitled to perform any type of maintenance or calibration. The test frequency of the meters is every two years. **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 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 will be carried out according to the System Usage Agreement. Since TEIAS meters are sealed by TEIAS the project proponent cannot intervene with the devices[26]. • 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 will be crosschecked with the EPIAS records. Also, SCADA can use for checking this kind of data's if VVB wants to check them.
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 8 employments

[26] http://www.mevzuat.gov.tr/MevzuatMetin/1.5.3516.doc

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

Relevant SDG Indicator	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	tCO2/y
Description	Emission Reductions in year y (t CO2/yr)

	As per ACM0002 V 21.0, 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 (0.6488 tCO_2/MWh) and net electricity generated)
Value(s) applied	48,116 tCO_2[27]
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 Turkey Ministry of Energy in Emission Factor 2020[28]
Purpose of data	-
Additional comment	-

B.7.2 Sampling plan
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:

Data processing and archiving: Monitoring data is collected in accordance with the agreement done between the project owner and TEIAS Electricity Distribution Company (TEIAS) which provides the infrastructure for the connection to the national grid. The metering system is defined in the agreement as two groups: main meter and secondary 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 Communique for Power Meters announced by Energy Market Regulations Authority (EMRA) requires all meters to be in line with either Turkish Standards Institution or International Electro Technical Commissions Standards. The meters are placed at the point the electricity is fed to the grid and sealed on behalf of 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 Communique on the counter to be used in the Electricity Market by Energy Market

[27] This value will be changed accordig to net electicity generation value.

[28] https://enerji.gov.tr//Media/Dizin/EVCED/tr/%C3%87evreVe%C4%B0klim/%C4%B0klimDe%C4%9Fi%C5%9Fikli%C4%9Fi/TUESEmisyonFktr/Belgeler/2020_Sebeke_EF.pdf

Regulatory Authority on 22/04/2011. The Enercon SCADA system also stores various data (e.g. electricity generated by each turbine, energy supplied etc.) electronically.

Data has been stored electronically, during the crediting period and at least two years after the last issuance of credits for the wind farm project activity in the concerning crediting period. The project participants also archived a hardcopy of meter reading protocols, scanned them, and stored them. The invoices are kept by the Project owner as hardcopies. Furthermore, the EPIAS system stores the reports electronically, which is accessible to the Project owner whenever necessary.

The project's capacity was increased to 50.1 MW from 25.6 MW but monitoring is very easy. The project's capacity was increased to 50.1 MW in 2017 as a capacity extension. Accordingly, PP can use only 25.6 MW capacity's electricity generation for the purpose of emission reduction calculations. For this, the ratio between the electricity generations of 25.6 MW and of 50.1 MW capacities; namely, the ratio between the actual electricity generation of the initial (existing) capacity against the electricity generation of the total capacity should be calculated:

The net electricity supplied by the Wind Farm (including the existing and additional capacity) to the national grid is measured by TEİAŞ metering devices. As well, the electricity generation of each wind energy converter (wind turbine) under Kuyucak 25.6 MW Wind Farm Project (the existing capacity and added capacity) has been measured continuously with a SCADA system. Using the SCADA data, the total amount of electricity generated from the existing capacity under the proposed project activity and the added capacity has been measured on monthly basis and has been used to calculate the ratio of electricity generation. The PP can use the ratio for monitoring.
By applying this ratio to net electricity amount supplied to the national grid, the emission reduction project GS576 under the project activity will be calculated.

Formulation: The following equation will be used to calculate the the quantity of net electricity generation supplied to the grid by the project plant that has been added under the project activity:

$EG_{PJ,y} = EG_{facility,y} * EG_{RATIO,y}$

Where:

$EG_{PJ,y}$ = Quantity of net electricity generation supplied to the grid in year y by the project plant/units that has been used under the 25.6 MW project activity (MWh/yr)

$EG_{facility,y}$ =Design Certified Quantity of total net electricity generation supplied to the grid in year y by the facility [the Project Activity's existing capacity (50.1 MW) and capacity addition (24.5MW)] and measured by the TEİAŞ meters (MWh/yr)

$EG_{RATIO,y}$=Ratio between electricity generation of the plans/units of the Project Activity (25.6MW) and the total gross generation of the 50.1MW facility in year y (%) calculated as per SCADA.

QA/QC procedures: The main and secondary meter readings are recorded monthly and cross-checked whether calibration is required. The capacity of the transmission line connected is to 154 kV, the accuracy class for power meters have been defined in the Communiqué for Power Meters. The calibration frequency of the meters is 10 years. It is under the responsibility of TEIAS. Since TEIAS meters are sealed by TEIAS, the project proponent cannot intervene with the devices.[29] 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 will be crosschecked with the EPIAS records.

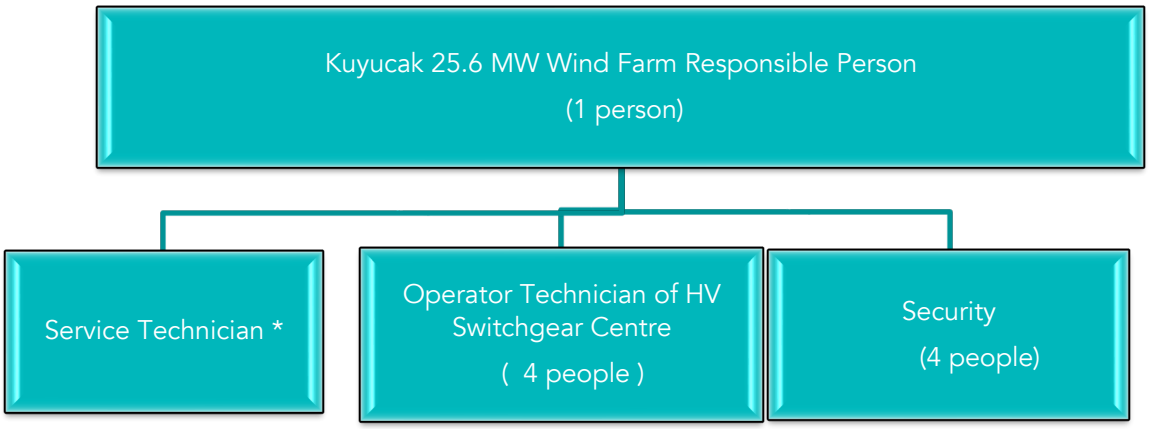
Only 12 units of E70 turbines with an output of 2000 kW and a rotor diameter of 71 m and 2 units E44 turbines with an output of 800 kW are used for GS claimable (25.6 MW) and non-GS another capacity of 24.5 MW turbines. The outputs will be measured for the operation hours and electricity output. The total for the claimable GS WTGS shall be used to compare with the ratio between the electricity generations of 25.6 MW and of 50.1 MW capacities. The lower electricity recorded will be applied for ER calculations.

Roles and responsibilities: The authority and responsibility for registration, monitoring, measurement, reporting and reviewing of the data rests with the project proponent. PP proposed the following structure for data monitoring, collection, data archiving and calibration of equipment's for this project activity.

Plant engineer is responsible for the information flow and monitoring procedures in the name of the Project owner. These responsibilities include proper implementation of the monitoring plan, ensuring the information flow between the Project owner company and the VVB and management of the monitoring and verification procedures. The Electrical Engineer of Kuyucak WPP, responsible for monitoring issues on site.

The internal control procedures maintain the reliability and accuracy in the data transfer and calculations. The plant personal records the data on regular basis from both meters and compares the values for consistency. The responsible engineer performs regular checks of this procedure each month and controls the monthly data of main and second meters. If any difference occurs between the two meters, TEIAS has to be informed for further actions. Reliability and accuracy of monthly values is reached by comparative readings both from the project participant and TEIAS, where high accuracy is guaranteed and needed by the requirements of billing purposes.

[29] https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=6381&MevzuatTur=7&MevzuatTertip=5



*The Service Technician can be changed according to their work schedule. And Alize Enerji Elektrik Üretim A.Ş. has only responsible of wind farm electrical engineer, HV Switchgear Operators, Security personals and forest officer. (8 people).

SECTION C. DURATION AND CREDITING PERIOD

C.1. Duration of project

C.1.1 Start date of project

The investment decision is met by ordering the wind turbines on 30/09/2008 which is starting date of the Project activity as per the registered PDD for CP1

C.1.2 Expected operational lifetime of project

25 years and o months

C.2. Crediting period of project

Renewable crediting period is chosen for the Kuyucak 25.6 MW Wind Farm Project, Turkey

C.2.1 Start date of crediting period

Start and end date of the first crediting period: 11/11/2010-10/11/201.

Start and end date of the second crediting period: 11/11/2017-10/11/2024.

Start and end date of the third crediting period: 11/11/2024-10/11/2031.

C.2.2 Total length of crediting period

7 years and 0 months, which is planned to be renewed. (21 years) The crediting period is second crediting period.

Dates of the third crediting period: 11/11/2024-10/11/2031

SECTION D. SUMMARY OF SAFEGUARDING PRINCIPLES AND GENDER SENSITIVE ASSESSMENT

D.1 Safeguarding Principles that will be monitored

A completed Safeguarding Principles Assessment is in Appendix 1, ongoing monitoring is summarised below.

Principles	Mitigation Measures added to the Monitoring Plan
Principle 9.4 Release of pollutants	The all wastes are disposed of according to related regulations. The methods are categorized for all materials. The employees produce the insignificant amount of waste waters during the operation of the proposed project activity. This wastewater has been collected in an impermeable septic tank and collected via vacuum trucks by aydın municipality and disposed according to Regulation on Control of Water Contamination[30]. The details can be seen in section B.7.1
Principle 9.10 High Conservation Value Areas and Critical Habitats	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. No mass migration has been observed in the project site and its immediate surroundings. But regular site vetting for bird/bat nests and carcasses and recording on logbook by appointed personnel.

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 are collected by vacuum trucks of the Manisa Municipality and disposed according to Regulation on Waste Water Control.
Source of data	Records of transfer of waste water from power plant by vacuum truck
Value(s) applied	N/A

[30] 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%20Kirlili%C4%9Fi%20Kontrol%C3%BC%20Y%C3%B6netmeli%C4%9Fi

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 4.3.4 (Release of pollutants)
Additional comment	-

Relevant SDG Indicator/Safeguarding Principle	Principle 9.10 High Conservation Value Areas and Critical Habitats
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	N/A
Measurement methods and procedures	Observations around the project area will be done for monitoring birds and carcass
Monitoring frequency	Once for each monitoring period
QA/QC procedures	Records of regular observations will be kept
Purpose of data	To monitor compliance to Safeguarding Principle 9.10
Additional comment	-

Data and parameters that won't be monitored in CP3:

This Kuyucak WPP includes Enercon wind turbines, which have the unique feature of gearless power transmission. This not only results in less heat generation, but it also means less waste oil and less noise because of lower friction. Furthermore, during the last 12 years, local people from the near village has not complaint about noise. VVB has already interviewed with the villager about noise and during the site visit and confirmed this situation. Therefore, noise emissions of the project do not affect local people negatively. So, there is no need to monitor the noise emission for this CP renewal crediting period.

The solid waste on site has been generated by the personnel, and not from processes. This domestic solid waste has been stored in closed containers on site and disposed of properly. This is not important issue for local area so, there is no need to monitor for this CP renewal crediting period.

Regarding the waste oil used as lubricant in the turbines, national legal disposal requirements have been applied. Licensed private companies have collected the waste oil on site and dispose it properly. The selected Enercon turbines have minimal moving components and can operate for years without oil change. The turbines are also equipped with oil absorption systems which prevent any leaks, thereby minimizing the risk of spillage and soil contamination. The Enercon type turbines' average oil

consumption is a very low value. These values were negligible during the operation years so, there is no need to monitor the waste oil for this CP renewal crediting period.

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

Question 1 - Does the project reflect the key issues and requirements of Gender Sensitive design and implementation as outlined in the Gender Policy? Explain how.	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 power project is not gender sensitive project. The project does not adversely impact women or men.
Question 2 - Does the project align with existing country policies, strategies and best practices? Explain how.	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. Turkey is party to Convention on Discrimination since 1972 to prevent any form of discrimination. (https://www.mfa.gov.tr/convention-on-the-elimination-of-all-forms-of-discrimination-against-women.en.mfa)
Question 3 - Does the project address the questions raised in the Gold Standard Safeguarding Principles & Requirements document? Explain how.	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 power 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 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 - Does the project apply the Gold Standard Stakeholder Consultation & Engagement Procedure Requirements? Explain how.	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 Kuyucak 25.6 MW Wind Farm Project, Turkey. 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 general outcome of the stakeholder consultation interview was positive verbally and mukhtar of the Demirtaş village has given their comment with a letter. (This letter has been provided to the DOE for renewal crediting (re-validation) process.) That's why there is no need to make physical local stakeholder consultation meeting for renewal crediting period. 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 stakeholders to the project activity was defined jointly by the project owner and Rüzgar Danışmanlık, who is the consultant to the GS project cycle, taking into account the characteristics and possible impacts of the project activity.

Complementary Stakeholder Consultation

The documents including the non-technical project summary for renewal crediting period 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 chosen representative person of Demirtaş village.

The feedback request for renewal crediting period has started on 12/03/2024 with sending out the documents to the stakeholders officially, and verbally on the same day the chosen representative person of village and it will be finished until 12/04/2024. The beginning of Complemantary Stakeholder Feedback Round has been announced from the muckhtar's offices, mosques and coffe houses of the Demirtaş village. 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 renewal of crediting period:

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	12/03/2024	Y
C	Ministry of Environment and Urbanization	General	Via E-mail and phone iklim@csb.gov.tr 0 312 5863167	12/03/2024	Y
B	Manisa Provincial Directorate of Environment and Urban Planning	General	Via E-mail and phone manisa@csb.gov.tr 0236 233 84 42	12/03/2024	Y
B	Manisa Forest Regional Directorate	General	Via E-mail and phone manisaobm@ogm.gov.tr 0236 2323639	12/03/2024	Y

B	Manisa Provincial Directorate of Food, Agriculture and Livestock	General	Via E-mail and phone manisa@tarimorman.gov.tr 0 236 2314605	12/03/2024	Y
B	Mayor of Manisa	Cengiz Ergün	Via E-mail and phone manisabsb@hs01.kep.tr 0236 2314580	12/03/2024	Y
D	Manisa Chamber of Commerce and Endustry	General	Via E-mail and phone info@manisatso.org.tr 0236 2311045	12/03/2024	Y
D	REC Regional Environmental Centre	Rıfat Unal Sayman	Via E-mail info@rec.org.tr/ unal.sayman@rec.org.tr	12/03/2024	Y
A	Chosen Representative person of Demirtaş Village	İksan Ablak	Via face to face	12/03/2024	Y
F	Greenpeace	General	Via E-mail and phone bilgi.tr@greenpeace.org 0 212 292 76 19	12/03/2024	Y
F	WWF	General	Via E-mail info@wwf.org.tr 0212 528 20 30	12/03/2024	Y
E	Gold Standard Foundation-Sustain Cert	General	Via E-mail help@sustain-cert.com	12/03/2024	Y
F	REEP	Info	Via E-mail info@reeep.org	12/03/2024	Y
F	MERCY CORPS	Brian	Via E-Mail dmcintosh@uk.mercycrops.org	12/03/2024	Y

E.2 Final continuous input / grievance mechanism

Comments apart from the meetings

The Kuyucak WPP has started to generate electricity and there is no comments from the invited stakeholders apart from the meetings have been received, neither by phone calls, by e-mail, by post nor by fax during these 14 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 chosen representative person (owner of local market) of Demirtaş village. At the same time, the contact details of the project owner, consultant and the GS Manager's were shared with the stakeholders. All of these details have been given in the log book 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 (log

book) book was checked and no complaints about the project until now. The PP are in a good relationship with the local stakeholders.

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 local market of Demirtaş village because of the stakeholders' chosen place and person. 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@sustain-cert.com
Other	Project Owner (Alize Enerji Elektrik Üretim A.Ş.) Address: Mazhar Osman Sok. No:9/1 Feneryolu Kadıköy İSTANBUL Tel: +90 (216) 336 42 23 E-Mail: gokhan.ulug@demirerholding.com Project Representative: Çağla Balcı Eriş-Rüzgar Danışmanlık Tel: +90 216 355 09 68 E-Mail: cagla@ruzgardanismanlik.net Justification: This information has been explained to the local people and provided in the Continuous Input / Grievance Expression Process Book

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

APPENDIX 1 - SAFEGUARDING PRINCIPLES ASSESSMENT

SOCIAL SAFEGUARDING PRINCIPLES		
Reference	Question	Response
P.1 |HUMAN RIGHTS		
P.1.1.1	Does the Project Developer, its representatives and the Project respect internationally proclaimed human rights and are they complicit in violence or human rights abuses of any kind as defined in the Universal Declaration of Human Rights?	☐ YES ☒ NO

P.1.1.1	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.1.1.2	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 realization 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 Turkey that no action can be taken against human rights.[31]

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 marginalized groups?	☐ YES ☐ POTENTIALLY ☒ NO
P.1.1.1	inequitable or discriminatory impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups, including persons with disabilities?	☐ YES ☒ POTENTIALLY ☐ NO
P.1.1.2	restrictions in availability, quality of and/or access to resources or basic services, in particular to marginalized 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:

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,	☐ YES ☒ NO

[31] https://www.resmigazete.gov.tr/arsiv/7217.pdf

	whether through paid work, volunteer work, or community contributions, as appropriate?	
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 diconsider 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. Kuyucak 25.6 MW Wind Farm Project, Turkey does not involve in any form discrimination in any kind of form. Turkey ratified ILO 100 Equal Remuneration Convention and 111 Discrimination (Employment and Occupation) Convention.[32] 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

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

Briefly describe below how the project is addressing any identified risk to gender equality and women's empowerment.
There is no possibility of adverse effect because of this project. The project does not decrease women´s access to or control of resources. The project does not discriminate on basis of gender, caste or religion.

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
P.3.1.2	Does the project involve any potential risks to the workers' safety and health?	☐ 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 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 regulations[33] and UN Agreement on Human Rights[34] .

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 will be trained about health and safety issues during operation phase of the project.

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

[33] https://www.mevzuat.gov.tr/MevzuatMetin/1.5.6331.pdf

[34] https://www.mevzuat.gov.tr/MevzuatMetin/1.5.6701.pdf

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 ☒ NO
If the answer to question above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.		
During the operation of the Kuyucak 25.6 MW Wind Farm Project, Turkey has not be any damage, alteration or removal to the critical cultural heritage[35]. Cultural and environmental heritage is protected against alteration, damage or removal by the law[36] .		
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, scope and nature of proposed development and its potential consequences?	☐ YES ☐ NO ☒ 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

[35] Project Introductory Document (PID) page 33

[36] https://kvmgm.ktb.gov.tr/TR-43249/law-on-the-conservation-of-cultural-and-natural-propert-.html

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 majority area is forest land and most of them belongs to Forestry Directorate[37]		
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
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 will be approved by the several local Authorities.		
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		

[37] Project Introductory Document (PID) page 30

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

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

This Kuyucak 25.6 MW Wind Farm Project, Turkeyis 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.

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

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 |	areas where indigenous peoples are present (including project area of influence)	☐ YES ☐ POTENTIALLY ☒ NO
P.4.4.1 |	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 |	utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples? Consider, and where appropriate ensure, consistency with the answers under Principle 4.1 above	☐ YES ☐ POTENTIALLY ☒ 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	☐ YES ☐ NO

	mechanisms among the Indigenous Peoples concerned and will it remain operational throughout the project cycle?	☒ NA
P.4.4.9 |	Are opinions and recommendations of an Expert Stakeholder(s) 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.

NA

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.

Kuyucak 25.6 MW Wind Farm Project, Turkeydoes not involve and is not complicit in any kind of corruption Turkey has ratified UN Convention against Corruption and the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions.[38]

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	☐ YES ☒ NO

[38] https://www.mevzuat.gov.tr/MevzuatMetin/1.5.3628.pdf

	prevent any kind of harassment, abuse, bullying, or exploitation, including gender-based violence (GBV)?	
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.

Alize Enerji Elektrik Üretim A.Ş. and their subcontractors complying with all relevant national laws. Alize Enerji Elektrik Üretim A.Ş. does not employ children in any shape or form for their works. Turkey has ratified ILO 138 Minumum Age Conventions and 182 Worst Forms of Child Labour Convention[39]

Would the project involve or lead to or lack of:
(NOTE: APPLIES TO 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 |	documented working agreements with all individual workers 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.	☐ YES ☐ POTENTIALLY ☒ NO
P.6.1.1 |	use of migrant workers? if engaged, the developer shall ensure that they are engaged substantially equivalent terms and conditions to non-migrant workers carrying out similar work.	☐ YES ☐ POTENTIALLY ☒ NO
P.6.1.1 |	making arrangements for basic services[40] for workers? If yes, 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	☐ 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

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

[40] 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 |	measures to prevent and address 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 |	adequate and verifiable mechanisms for age verification?	☐ YES ☒ NO
P.6.1.7 |	implementation of processes and measures for the safety and health of project workers?	☒ YES ☒ NO
P.6.1.7 |	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 |	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 |	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 |	grievance mechanism available for workers to voice workplace concerns.	☒ YES ☐ NO
P.6.1.11 |	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[41] and UN Agreement on Human Rights[42]

Alize Enerji Elektrik Üretim A.Ş. and appointed subcontractors will not involve in any form forced or compulsory labour Turkey has ratified ILO 29 Forced Labour Convention[43] Furthermore, the Kuyucak WPP has a positive impact on the social and economic benefits.

[41] https://www.mevzuat.gov.tr/MevzuatMetin/1.5.6331.pdf
[42] https://www.mevzuat.gov.tr/MevzuatMetin/1.5.6701.pdf

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

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.

NA

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

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 52,703 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 plan

Would the project involve or lead to:

P.7.1.1 |	increase greenhouse gas emissions over the Baseline Scenario?	☒ 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.

NA

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

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
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.		
NA		
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, natural or pre-existing pattern of watercourses, groundwater and/or the watershed due to the project. This Kuyucak Wind Power Project will 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 by municipality 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
ERROR! REFERENCE SOURCE NOT FOUND.	Are opinions and recommendations of an Expert Stakeholder(s) 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

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 | - P.8.2.5 |	negatively impact on the catchment area? 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.	☐ 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

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.
NA

P.9 |ENVIRONMENT, ECOLOGY AND LAND USE

P.9.1 |LANDSCAPE MODIFICATION AND SOIL

P.9.1.1 | - P.9.1.3 |	Is there any risk of soil resource degradation or loss of ecosystem services provided by soils in the project? If yes, the project shall maintain healthy soils by minimizing negative impacts on soil health, productivity, structure, and water retention. Steps to minimize soil degradation include crop rotation, composting, using N-fixing plants, and reducing tillage and ecologically harmful substances.	☐ 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 project activity is to generate electricity from wind. It does not involve the use of land and soil for production of crops or other products. The project area has been rented from the Ministry of Forestry (Provincial Directorate of Environment and Forestry) The land of the project had approved by the several local Authorities.[44]
Would the project involve or lead to:

[44] Project Introductory Document (PID) pages 71 and 72

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.

NA

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

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

The project is not susceptible to decreased vulnerability to wind, earthquakes, subsidence, landslides, erosion, flooding, drought or other extreme conditions.

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.

NA

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

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

NA

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? *Note - Forestry projects (for example Afforestation/ Reforestation) involving GMO planting are not eligible for Certification under Gold Standard for the Global Goals.*	☐ 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.

NA

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

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. The environment is also protected by several Laws and Regulations in Turkey (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 by Manisa municipality and disposed according to Regulation on Control of Water Contamination.[45]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.

[45] 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 i%C4%9Fi%20Kontrol%C3%BC%20Y%C3%B6netmeli%C4%9Fi

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
P.9.5.5 |	Does the project involve the use of any chemicals or materials subject to international bans or phase-outs?	☐ 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 producing electricity from the wind power 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.

NA

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 power 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.		
NA		
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 |	modification of the quantity or nutritional quality of food available such as through crop regime alteration or export or economic incentives?	☐ YES ☒ NO
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

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.
NA

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?[46]	☐ 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
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

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

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 14 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.[47]		
Would the project involve or lead to:		
P.9.10.1 |	identified habitats as HCV areas and or Critical habitats?	☐ YES ☐ POTENTIALLY ☒ 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 those biodiversity? Is there a robust, appropriately designed, and long-term Habitats and Biodiversity Action Plan in place to achieve net gains of those biodiversity values for which the critical habitat was designated?	☐ YES ☐ NO ☒ NA
P.9.10.1 |	in 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

[47] Project Introductory Document (PID) pages between 35 and 47; Kuyucak WPP Ornithology Report 2015 page 106

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) 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 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.[48]

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

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.[49]

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 ☐ NO ☐ NA
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 ☐ POTENTIALLY ☒ 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

[48] Kuyucak WPP Ornithology Report 2015 page 13

[49] Kuyucak WPP Ornithology Report 2012 pages 18 and 19; Kuyucak WPP Ornithology Report 2015 page 106 Project Introduction Document pages between 35 and 47

several Laws and Regulations in Turkey. 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).[50]

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

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

NA

Would the project involve or lead to:

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.

NA

[50] Project Introduction Document pages 33 and 34

APPENDIX 2- CONTACT INFORMATION OF PROJECT PARTICIPANTS

Organization name	Alize Enerji Elektrik Üretim A.Ş.
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APPENDIX 3 - LUF ADDITIONAL INFORMATION

NA

APPENDIX 4 - DESIGN CHANGES

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