Validation report form for renewal of GS4GG Project Activities

(Gold Standard for the Global Goals)

BASIC INFORMATION	
Title and GS reference number of the project activity (PA)	Akbük Wind Farm Project, Turkey GS 436
Time of First Submission Date	30/06/2008
Date of Design Certification	17/03/2009
Version number of the validation report for RCP	2.3
Completion date of the validation report for RCP	14/02/2024
Version number and date of PDD to which this report applies	Version 15 10/02/2024
Project Developer	Ayen Enerji A.S.
Project Representative	Life İklim ve Enerji Ltd.Şti.
Host Party	Turkey/Aydin
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
Applied methodologies and standardized baselines	01 - ACM0002 – Grid-connected electricity generation from renewable sources, v. 21.0
Product Requirements applied	☒ GHG Emissions Reduction & Sequestration ☐ Renewable Energy Label ☐ N/A
Mandatory sectoral scopes	Sectoral Scope 1: Energy Industries (Renewable)
Conditional sectoral scopes, if applicable	NA

Estimated amount of annual average GHG emission reductions	79,453 tCO2e
SDG Outcomes	SDG 06. Clean water and Sanitation SDG 07. Affordable and Clean Energy SDG 08. Decent Work and Economic Growth SDG 13. Climate Action
Name and UNFCCC reference number of the VVB	Earthood Services Private Limited E-0066
Name, position and signature of the approver of the validation report	 Managing Director Dr. Kaviraj Singh

SECTION A. Executive summary

The Project Activity "Akbük Wind Farm Project, Turkey" a Wind Firm project which aims to utilize the wind energy in turkey and compensate the energy requirement through a sustainable, environmental and cost effective way. The project developer is Ayen Enerji A.S. and is located in Aydın. The project involves the installation of 15 turbines with an estimated annual electricity generation capacity of 122,461.80 MWh.The Wind farm project was commissioned in 19/03/2009.

The project aims at utilizing the wind energy in turkey and compensate the energy requirement through a sustainable environmental and cost-effective way which would have been otherwise was produced from fossil fuels causing greenhouse gases. The project thus is replacing the GHG emissions such as CO2, CH4 and other pollutants SOx, NOx and particulate matter which would have occurred from the production of the grid electricity.

The electricity generated from the project would be transmitted Akbük Transformer Center of 154 kV and hence will displace the electricity which would have been produced by the fossil fuel. The current crediting period of the project activity is 19/03/2023 to 18/03/2030 and the estimated emission reduction for the crediting period are 79,453 tCO2e

Scope of Validation

The scope of the services provided by Earthood Services Private Limited for the project activity is to perform certification renewal of the project. The project has also been registered under CDM and is now seeking certification renewal of the project after the registration under GS. The scope of validation is to assess the claims and assumptions made in the project design document (PDD)/5/ against the GS4GG Principles and Requirements version 1.2/1/ and GS4GG VVB requirements /2/ ,including but not limited to, CDM PA PS/3/, CDM PA VVS/4/, applied methodology/9/ and other relevant rules and requirements established for CDM project activities.

Validation Process

The validation process is undertaken by validation team that involves the following:

- The desk review of documents and evidences submitted by the project participant in context of the reference GS4GG rules and guidelines.
- Undertaking site visit, interview or interactions with the representative of the project participant,
- Reporting audit findings with respect to clarification and non-conformities and the closure of the findings as appropriate.
- Preparing a draft validation report for renewal of GS4GG programme of activities period complying with the GS4GG principles and requirements.

An independent Technical Review team reviews the validation report prepared by the validation team. The final validation report that is accepted by Technical Reviewer is then approved on behalf of Earthood Services Private Limited and processed further as per GS4GG procedures.

Conclusion

The review of the PDD, supporting documentation and subsequent follow up actions have provided ESPL with sufficient evidence to determine the fulfilment of stated criteria. Earthood is of the opinion that the project activity, " Akbuk Wind Farm Project, Turkey " meets all the CDM as well as the GS4GG requirements and the host country criteria and has correctly applied the methodology ACM0002 – Grid-connectedelectricity generation from renewable sources, v. 21.0 /9/. Therefore, the project is being recommended to GS4GG for request for its renewal of GS4GG project activities period.

SECTION B. Validation team, technical reviewer and approver

B.1. Validation team member

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)	Involvement in			
						Desk/document review	On-site inspection* /	Interview(s)	Validation findings
1.	Team Leader	IR	Sharma	Riya	Central Office	Y	Y	Y	Y
2.	Methodological Expert	IR	Guleria	Shifali	Central Office	Y	Y	Y	Y
3.	Technical Expert (TA 1.2)	IR	Guleria	Shifali	Central Office	Y	Y	Y	Y
4.	Local Expert	IR	Atabek	Fikriye Seda	Central Office	Y	Y	Y	Y
5.	GS approved auditor	IR	Guleria	Shifali	Central Office	Y	Y	Y	Y
6.	Trainee	IR	Sarkar	Rahi	Central Office	Y	Y	Y	Y

***Remote audit has been conducted for this assessment**

B.2. Technical reviewer and approver of the validation report for RCP

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)
1.	Technical reviewer	IR	Mahala	Deepika	Central Office
2.	TA expert to TR(TA 1.2)	IR	Mahala	Deepika	Central Office
3.	Approver	IR	Singh	Kaviraj	Central Office

SECTION C. Means of validation

C.1. Desk/document review

The validation for the renewal of project activity is performed primarily as a document review of the project design document version 12 dated 27/01/2023 /5/.

The desk/document review consists of –

1. cross checks between information provided in the PDD and information from sources other than those used, if available,
2. the validation team's sectoral or local expertise and, if necessary,
3. independent background investigations.

The complete list of documents/evidence assessed by validation team is included under Appendix 3.

C.2. On-site inspection

Duration of on-site inspection: NA				
No.	**Activity performed on-site**	**Site location**	**Date**	**Team member**
1.	NA	NA	NA	NA

As per the para 3.2.1 of GS Site visit and remote audit requirements/10/, "A physical site visit by VVB is not mandatory at the validation (Design Certification or Design Certification Renewal) of a project".

However, the validation team, has conducted remote audit on 23/02/2023 to discuss the re-validation of the project activity, on-going financial needs, monitoring parameters and other aspects of project. The remote audit includes the interview with the PD representative and local stakeholders. Under the scope of remote site visit, photographic evidence of project /11/ activity implementation on given location and plant monitoring records were shared with the validation team a part of the assessment.

C.3. Interviews

No.	Interviewee			Date	Subject	Team members
	Last name	First name	Affiliation			
1.	Arikan	Dogukan	Life Enerji	23/02/2023	Implementation of project activity, baseline scenario, on-going financial need, monitoring parameters, SDGs parameters, local stakeholder meeting details, any changes to	Shifali Guleria, Riya Sharma, Fikriye Seda Atabek, Rahi Sarkar
2.	Hakan	Demir	Life Enerji	23/02/2023		
3.	Akay	Erdnic	Plant Manager	23/02/2023		
4.	Demir	Hakan	Carbon Responsible	23/02/2023		

					project since CDM Renewal and Transition from CDM to GS4GG	
5.	Yarımkaya-Akyeni	Ahmet	Village Head	23/02/2023	Impacts due to the project activity, grievance mechanism	Shifali Guleria, Riya Sharma, Fikriye Seda Atabek, Rahi Sarkar
6.	Araz-Akyeni	Ibrahim	Village Resident	23/03/2023		

C.4. Sampling approach

No sampling approach was applied as project activity is a wind power plant project and did not require a sampling plan. 100% of data related to wind power plants were presented in the PD and estimated ER sheet was reviewed.

C.5. Clarification requests (CLs), corrective action requests (CARs) and forward action requests (FARs) raised

Area of validation findings	No. of CL	No. of CAR	No. of FAR
General description of Project Activity	-	-	-
Compliance with PDD form		-	-
Description of project activity	CL#03	CAR#02	FAR#01
Technologies and/or measures	CL#01	-	-
Funding sources of project	-	CAR#01	-
Eligibility criteria under Gold Standard	-	-	-
Eligibility criteria under applied methodology	-	-	-
Project boundary, sources and GHGs	-	-	-
Validation of baseline scenario	-	-	-
Demonstration of Additionality	-	-	-
Ongoing financial need	-	-	-
Sustainable Development Goals targeted by the project activity	CL#02 CL#04 CL#05	-	-
Estimation of emission reductions	-	-	-
Monitoring plan	-	-	-
Start date, crediting period and duration	-	-	-
Safeguarding principle and SDG outcome assessment	-	-	-
Safeguarding principles assessment	-	-	-
Gender sensitive assessment	-	-	-
Local Stakeholder Consultation	-	-	-
Local stakeholder consultation conducted during validation	-	-	-
Grievance mechanism for continuous input	-	-	-
Internal quality control	-	-	-
Validation opinion	-	-	-
Total	05	02	01

SECTION D. Validation findings

D.1 General Description of Project activity

D.1.1 Compliance with PDD form

Means of validation	The PDD form template used for the project activity "Akbuk wind firm project, Turkey" is GS4GG Key Project Information & Project Design Document v.1.2 /5/ /6/, which is a valid version available at the time of validation. All the sections of the aforesaid form were filled as per the Key Project Information & Project Design Document v.1.2 template guidelines /12/ and all the relevant details were provided in the form.
Findings	No findings were raised
Conclusion	The PDD version 12 /5/ has been found to be completed using the valid version of the PDD form template. All the information transferred to the current version of PDD is same with the registered PDD and no inconsistencies were found and is also in line with the GS4GG principles & requirements version 1.2 /6/.

D.1.2. Description of project activity

Means of validation

The purpose of the Wind Firm project is to utilize the wind energy of Turkey and convert it to Electrical energy to compensate the energy requirements of Turkey which would have been otherwise produced by fossil fuels and other sources. The project developer is Ayen Enerji A.S and the type of project is Wind which was verified through transition annex /24/. The Implementation of the project activity is in between the province of Mugla and Aydin in Turkey . The nearest settlements to the project site are Denizköy town and and Fevzipaşa town which has been verified through the EIA and the Feasibility study report /15/ /13/. The Geographical Locations of the WPP are as follows

Wind Turbine No.	Latitude I	Longitude (N)
T1	53 33 10	41 45 247
T2	53 34 85	41 45 221
T3	53 36 59	41 45 190
T4	53 38 29	41 45 139
T5	53 39 98	41 45 093
T6	53 41 74	41 45 074
T7	53 43 50	41 45 075
T8	53 47 25	41 45 076
T9	53 47 00	41 45 060
T10	53 48 78	41 45 045
T11	53 50 43	41 44 984
T12	53 52 93	41 44 651
T13	53 54 57	41 44 584
T14	53 56 28	41 44 548
T15	53 57 99	41 44 499

	Latitude and Longitude of the physical site for the Project activity has been included appropriately in the PDD/5/, which was checked via generation license/14/, location of the turbines were verified and found to be appropriate. The project is a large-scale project with a total installed capacity of 31.5Mw which according to para 3.3.2 renewable energy requirement document /7/ falls into large scale category. The implementation of the project documents was reviewed, verified and found to be correct and valid. The project developer received the license to operate the project on 18/01/2007 /14/. Other documents such as EIA report /15/ , feasibility report/13/ and provincial acceptance document /16/ werereviewed and the details provided in the latest PDD was checked. The electricity of the proposed project is to be sold to the Turkey National Grid. The project is expected to reduce the GHG emissioncaused by the fossil fuel based power plants by 79,453 tCO2e per year during the 7 year crediting period. The project has not been registered under any other registry other than GS. To avoid double counting PD has provided the declaration /17/ regarding the same.
Findings	CL#03 was raised and resolved CAR#02 was raised and resolved FAR#01 was raised to be addressed by next VVB.
Conclusion	The information provide in the GS PDD were compared with the registered PDD and project documents including provisional acceptance document, feasibility report were reviewed. The validation team confirmsthat the project description provided in the registered accepted PDD /8/ and GS PDD /5/ are materially the same.

D.1.3 Technologies and/or measures

Means of validation

The technical description of the project activity has been validated by assessing the revised feasibility report and provisional acceptance document /16/.
Remote site visit was done and the monitoring system at the project site was checked as well as photographic evidences were provided /11/ . The Akbuk Wind Firm Project consists of 15 WTGs of Suzlon Brand, S88, with 2.1MW power. It was further confirmed that the PD has not installed any new WTGs in the project site and no capacity addition was done on the project site

The technical description of the Wind turbines as assessed in detail areas follows:

Description	Specification	Means of validation
Technical Description of Suzlon S88 – 2.1 MW wind turbines:		
Rated power	2,100 KW	Checked from Generation License /14/ and technical feasibility study /13/
Rated Wind speed	4m/s	Checked from technical feasibility study/13/ and Suzlon S88 – 2.1 MW technical overview /20/.
Cut out wind speed	25m/s	Checked from technical feasibility study/13/ and Suzlon S88 – 2.1 MW

			technical overview /20/.
	Rotational speed	15.1-17.7 rpm	Checked from technical feasibility study/13/ and Suzlon S88 – 2.1 MW technical overview /20/.
	Rotor Diameter	88m	Checked from technical feasibility study/13/ and Suzlon S88 – 2.1 MW technical overview /20/.
	Swept area	6,082m^2	Checked from technical feasibility study/13/ and Suzlon S88 – 2.1 MW technical overview /20/.
	No of Blade(s)	3	Checked from technical feasibility study/13/ and Suzlon S88 – 2.1 MW technical overview /20/.
	Type of blade	AE43	Checked from technical feasibility study/13/ and Suzlon S88 – 2.1 MW technical overview /20/.
	Generator frequency	50/60 Hz	Checked from technical feasibility study/13/ and Suzlon S88 – 2.1 MW technical overview /20/.
	The evidences provided by the PD of the installed WTG, generator and electricity meter were checked and were found to be consistent with the Suzlon S88-2.1MW technical overview document /20/		
Findings	CL#1 was raised and resolved		
Conclusion	The VVB has accepted and validated the technology/measure applied in the project. The technology involved in the project is described in the GS PDD /5/ with sufficient details and clarity. The accuracy of the project description was determined based on the interview with the PD as part of validation audit, review of supporting documents (as mentioned in Appendix 3), and project site photographs/11/.		

D.1.4 Funding sources of project

Means of validation	The project does not have any Public or Official Development Assistance (ODA) funding and is funded completely by the project owner (Ayen Enerji A.S)
Findings	CAR#01 was raised and resolved
Conclusion	No ODA declaration was provided and reviewed and it was found that no ODA or public funding was received by the Project developer

D.2. Eligibility criteria under Gold Standard

Means of validation	The eligibility under gold standard has been discussed as per the section 3.1.1 of GS4GG Principles & Requirements v1.2 /6/ below:	
	Eligibility Criteria	**Assessment**
	Type of Project	The type of the project is Wind and it involves the installation of renewable energy generating wind plant which supplies the energy to the national grid as described in the PDD. Thefollowing has been verified from Generation License/14/, Theactivity meets the eligibility criteria as per para 2.1.2 of Renewable energy Requirements

		/7/
	Location of Project	The project is located in Turkey, The correct location of the project is described in the PDD, Generation license/14/ and Geo-coordinates
	Project Area, Project Boundary and scale	The project is a large scale project as er para 119 of CDM PS for PA/3/.The project is implemented in between Mugla and Aydin province Turkey.
	Host Country Requirements	The project is in compliance with applicable Turkey's legal, environmental, ecological and social regulations, which has been verified through EIA Report /15/.
	Contact Details	All the contact details which are provided are found to be consistent with the GS PDD/5/ registered PDD/8/ and GS transition annex/21/ provided by the PD
	Legal Ownership and other rights	The legal rights of the carbon credits are owned by the Project developer, which is Ayen Enerji A.S. This has been verified through Generation licence /14/
	ODA Declaration	As discussed in section D.1.4
	The project is full filling all the eligibility requirements set by the GS under section 3.1.1 of GS4GG principle and requirements /1/. Hence, theproject is eligible for Renewal of crediting period under gold standard.	
Findings	No Findings were raised.	
Conclusion	The VVB has accepted and validated that the project activity meets the eligibility conditions of in accordance with GS4GG principles and requirements version 1.2 /6/ and Renewable Activity requirements version 1.4 /7/ as follows: • The scope of this report is renewal of crediting period for the project activity "Akbuk Wind Farm Project, Turkey" which is already listed in GS (project GS ID: 436) /8/. • The project activity falls under the eligible project type as per the Renewable Activity requirements version 1.4 /7/. • The project is generating electricity from renewable source i.e., wind and supplying it to the national grid of turkey. • The project activity replaces fossil fuel-based power generation and thus contributing to the sustainable development goals of thehost country.	

D.3. Eligibility criteria under applied methodology

Means of validation	The project is a renewable energy project, and the project activityemploys the latest version of the approved methodology ACM0002: Grid-connected electricity generation from renewable sources, version 21.0 /9/. The following tools are applicable to this project: TOOL07 – Tool to calculate the emission factor for an electricity system (Version 07.0.0) /23.a/

TOOL01 – Tool for the demonstration and assessment of additionality (Version 07.0.0) /23.b/

TOOL10 – Tool to determine the remaining lifetime of equipment (Version 01.0.0) /23.c/

TOOL11 – 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) /23.d/

The validation of the applied methodology criteria is given below:

Ref.	Eligibility criteria	Justification from PD	Means of validation
1.	This methodology is applicable to grid-connected renewable energy power generation 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 plant(s)/unit(s); (d) Involve a rehabilitation of (an) existing plant(s)/unit(s); or (e) Involve a replacement of (an) existing plant(s)/unit(s).	(a) Akbük WFP is a grid-connected renewable power generation project activity that install a new wind power plant at a site where no renewable power plant was operated prior to the implementation of the project activity (Greenfield plant); (b) NA (c) NA (d) NA (e) NA	The project activity is a greenfield renewable energy activity with an installation capacity of 31.5 Mw, as verified from the generation license /14/. Therefore, the applicability criterion is met.

	2.	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 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).	There is no BESS in the project.	The Project activity doesn't involve integration of a Battery Energy Storage System (BESS) in the project. Therefore, this is not applicable.
	3.	The methodology is applicable under the following conditions: (a) Hydro power plant/unit with or without reservoir, wind power plant/unit, geothermal power plant/unit, solarpower plant/unit, wave power plant/unit or tidal power plant/unit; (b) In the case of capacity additions,	The project is wind power plant.	The proposed activity is a wind farm project. Therefore, the criteria is met.

			retrofits, rehabilitations or replacements (except for wind, solar, 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 implementationof the projectactivity; (c) In case of Greenfield project activities applicable under paragraph 5 (a) above, the project participants shall demonstrate that the BESS was an integral part of the design of the renewable energy project activity (e.g. by referring to feasibility studies or investment decision documents); (d) The BESS should be charged with electricity generated from the associated renewable energy power plant(s). Only during exigencies may the BESS be charged with electricity from the		

		grid or a fossil fuel electricity generator. In such cases, the corresponding GHG emissions shall be accounted for as project emissions following the requirements under section 5.4.4 below. The charging usingthe grid or using fossil fuel electricity generator should not amount to more than 2 per cent of the electricity generated by the project renewable energy plant during a monitoring period. During the time periods (e.g. week(s), months(s)) when the BESS consumes more than 2 per cent of the electricity for charging, the project participant shall not be entitled to issuance of the certified emission reductions for the concerned periods of the monitoring period.		
	4.	In case of hydro power plants, one of the following conditions shall apply: (a) The project activity is implemented in existing single or multiple reservoirs, with no change in the volume of any of the reservoirs; or (b) The project activityis implemented in existing single or	The project isnot a hydro power plantproject.	The proposed project activity is a wind farm project. Therefore, this criterion is not applicable.

			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 equalto 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.		
5.	In the case of integrated hydro power projects, project participants shall: (a) Demonstrate that water flow from upstream power plants/units spill directly to the downstream reservoir and that collectively constitute to the generation capacityof the integrated hydro power project; or (b) Provide an analysis of the water balance covering the water fed to power units, with allpossible combinations of reservoirs and withoutthe construction of reservoirs. The purpose of water balance is to demonstrate the requirement of specific combinationof 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	The projects is not an integrated hydro power plant project.	The proposed project activity is a wind farm project. Therefore, this criterion is not applicable.

		balance will take into account seasonal flows from river, tributaries (if any), and rainfall for minimum of fiveyears prior to the implementation of the CDM project activity.		
	6.	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.	(a) Akbük WFP is a grid-connected renewable power generation projectactivity that install a new wind power plant at a site where no renewable power plant was operated prior to the implementation of the project activity (Greenfield plant); (b) The projectis not biomass fired power plant.	The project activity is a wind farm project and does not involve switching of fossil fuels or involvementof biomass fired power plants/units. Therefore, this criterion is not applicable.
	7.	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	There is no retrofit, rehabilitation, replacement or capacity addition.	The project activity is a greenfield grid connected wind power plant. This eligibility criteria talks about retrofits, rehabilitations, replacements, or capacity additions. Thus, this condition is

		identification of baseline scenario, is "the continuation of the current situation, that is to use the power generation equipment that was already in use priorto the implementation ofthe project activity and undertaking business as usual maintenance".		not applicable.
Findings	No findings were raised.				
Conclusion	The project activity was found in accordance with the applied methodology ACM0002: Grid-connected electricity generation from renewable sources, version 21.0 /9/. The validation team confirms that: • The selected methodology ACM0002 /9/ for the GS project activity is applicable. • The applicability condition listed in the applied methodology has been addressed in GS PDD /5/ • The methodology was found to be in accordance with the applicable requirements of the CDM project standard for project activities and GS4GG principles and requirements/1/				

D.4. Project boundary, sources and GHGs

Means of validation	As per para 22 of the applied methodology /9/, "*The spatial extent of the project boundary includes the project power plant/unit and all power plants/units connected physically to the electricity system that the CDM project power plant is connected to*." The project boundary includes Akbuk Wpp to be connected physically to the electricity system that supplies the electricity to the Turkish grid. The project activity has a 60KV power generator in case of emergencyhowever as per para 37 of ACM0002 /9/ it allows the emissions fromsuch generators to be neglected. The validation team conducted a desk review of the project to conform the project boundary. It has been confirmed that the PD has included all the appropriate GHG emission sources required in GHG emission sourcesthat is needed to be in the methodology in the GS-PDD /5/. It was assessed that there will be no emission sources related to the project activity that will cause any deviation from the applicability of the methodology or accuracy of the emission reduction
Findings	No Findings were raised.
Conclusion	The project boundary is completely depicted in the GS-PDD /5/ and is validated by the validation team. Also, according to the validation team the sources and gases that are accounted are found to be appropriate according to the project activity. As per the remote site visit assessment: • The project boundary is found to be in-line with the registered and accepted PDD /8/ and correctly reported in GS-PDD /5/ • The sources, gases that are accounted are justified in context of

	the project activity.

D.5. Validation of baseline scenario

Means of validation	The current scope of the assessment is the renewable of the crediting period for the project activity. The total capacity of Akbukwind firm is 31.5 Mw and it is a large scale project. The project incorporates CDM approved Methodology ACM0002 V21.0 /9/ As per para 15 of applied methodology, it has referred to Tool 11: Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period . The tool is used to assess the continued validity of the baseline and to update the baseline at the renewal of a crediting period. The tool consists of two steps. The first step provides an approach to evaluate whether the current baseline is still valid for the next crediting period. The second step provides an approach to update the baseline in case that the current baseline is not valid anymore for the next crediting period. The project replaces energy generation from thermal power plants to energy generation from renewable source of energy. The electricity generated will be supplied to the Turkish national grid. As described in the GS-PDD /5/, thermal power plants are the most used type in electrical energy production in Turkey and produces carbon emission. The implementation of project activity is expected to reduce the carbon emission by 79,453 tCO_2e/ year. Through independent research, VVB has concluded that the current baseline complies with all the mandatory national and sectoral policies/ Law. Some of the Laws that Project complies with are: 1. Electricity Market Law (Nr. 4628/03.03.2001) 2. Law on utilization of Renewable energy Resources for the purpose of generating electricity energy (Nr. 5346/18.05.2005) 3. Environment Law (Nr. 2872/17.07.2008) 4. Energy Efficiency Law (Nr. 5627/02.05.2007) Turkish production capacity projection report /25/ was reviewed to check the predicted increased demand of electricity. The number of thermal power plants would increase to meet the electricity demand in theabsence of project activity. The graph in the PDD section B.4 predicted that the electricity demand would increase in the years 2022-2031 /5/. The assessment team hereby ascertains that the GS-PDD /5/ has established baseline scenario in line with the applied methodology /9/ and it is confirmed that PD has correctly validated the original/current baseline scenario as per methodology tool /24/.
Findings	No findings were raised.
Conclusion	The validation team based on the description provided above with regards to the assessment of the requirements confirms that: • All the data used by PD for the project are listed in GS PDD /55/ its annexures including their references and sources. • The approved methodology has been correctly applied to identify the baseline scenario and the most plausible situation that would

	occur in the absence of the project activity. • All the relevant national policies and circumstances were considered in the project The validation team confirms that it has taken other steps and other sources of information used to cross-check the information contained in the GS-PDD /5/, wherever applicable, as listed above. The baseline re-assessment has been done in line with the applied methodology ACM0002, V21.0 /9/ and Tool 11: Assessment of the validity of the original/ current baseline and update of baseline at the renewal ofcrediting period /24/.

D.6. Demonstration of additionality

Means of validation	According to GS4GG Principles and Requirements version 1.2 /6/ para 5.1.14 Design Certification Renewal follows the same process as Validation and Design Review (Design Certification) though the scope of assessment is limited to: (a) Changes in the Project as related to the General Eligibility Criteria (b) Incorporation of any relevant updates to the Gold Standard Requirements (c) Re-definition of Baseline Scenario and any impact of change on the Eligibility Principles, Criteria and Requirements (d) Any Gold Standard activity, product and methodology-specific Requirements (e)Demonstration of Ongoing Financial Need, where relevant – see Ongoing Financial Need Therefore, additionality assessment is not performed for this project activity as the scope of the assessment is renewal of crediting period.
Findings	No findings were raised.
Conclusion	According to the GS4GG principles and requirements /6/, additionality of the project is not required to reassess at the time of renewal of the crediting period.

D.7. Ongoing Financial Need

Means of validation	The project has demonstrated as per para 4.1.52 of Gold Standard for the Global Goals, Principles and Requirements – Version 1.2 /6/, Ongoing financial need shall be demonstrated at design certification renewal. The validation team checked the documents and demonstration ofsection B.5.2 of PDD/5/ and confirms that the carbon credits revenue is also required in the 2nd CP to sustain the project activity. Therefore, the ongoing financial need derived from GS certification is necessary to reduce unattractiveness of the project and enhance the project's GS4GG-PA-RCPV-FORM Version 03.0 Page 21 of 58 operation in the 2nd crediting period. The PD has taken a significant amount of bank loan for implementing the project, the amount received from GS finance received from this certification helps in repayment of the loan. Thus, the validation team is of the opinion that the ongoing financial need is necessary for operation and maintenance of the project throughout the

	crediting period. This has been confirmed from GS project homepage /22/. The carbon revenue generating from the project activity enabling PD to deliver clean and renewables source of energy, achieve its sustainable development goals and project objectives
Findings	No findings were raised.
Conclusion	Ongoing financial need has been demonstrated in the GS PDD /5/. The validation team has confirmed from the GS project homepage and found correct.

D.8. Sustainable Development Goals targeted by the project activity

Means of validation

The SDG outcome assessment is as follows –

SDG Parameters to be monitored	SDG Target	SDG Impact	Assessment/Observations
SDG 6: Clean Water and Sanitation	6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally	Avoided wastewater discharge in m^3 6.3.1 Proportion of domestic and industrial wastewater flows safely treated.	The project activity replaces thermal electricity generation, which causes GHG emissions. By replacing the consumption of these fuels, it contributes to reduction in wastewater discharge and conservation of water. The expected avoidance of wastewater discharge is 3,188,395.61 m^3/year. The validation team confirms that SDG outcome has been addressed by the project activity in accordance with the applicable SDGs targets.
SDG 7: Affordable and clean energy	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix	MWh of renewable energy generated. 7.2.1 Renewable energy share in the total final energy consumption	The project activity involves production of electricity though WPP and evacuate it to the Turkish national grid. This reduces consumption of fossil fuel-based power generation and thereby helps in increasing utilisation of renewable energy. The expected electricity generation from this project activity is 122,461.80 MWh. Thevalidation team confirms that SDG outcome has been addressed by the project activity in accordance with the applicable SDGs targets.

	SDG 8: Decent work and economic growth	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	Number of employments, Number of trainings 8.8.2 Level of national compliance with labour rights (freedom of association and collective bargaining) based on International Labour Organization (ILO) textual sources and national legislation, by sex and migrant status	The project activity plans to provide employment to 10 employees and and one training to each employee per monitoring period. Some of the training which are being given includes first aid, rescue, firefighting, electricity and handling of weight. Training records/29/ has been reviewed to confirm the number of employees and trainings imparted by the project activity according to the applicable SDG targets
	SDG: 13 Climate action	13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning	Emission Reductions 13.3.1 Extent to which (i) global citizenship education and (ii) education for sustainable development are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment	The project activity involves production of electricity though WPP and evacuate it to the Turkish national grid. This parameter is used to monitor the amount of GHG emission reduction annually. The expected emission reductions achieved from the project activity is 79,453 tCO_2e/year. The validation team confirms that SDG outcome has been addressed by the project activity is in accordance with the applicable SDGs targets.
Findings	CL#02, CL#04, CL#05 were raised and resolved			
Conclusion	The validation team confirms that the SDG outcomes undertaken by the project activity has been addressed in line with the applicable SDGs targets and the same has been confirmed from the ER sheet /27/.			

D.9. Estimation of emission reductions

Means of validation	The applied methodology ACM0002: Version 21.0 /9/ defines the methodological steps to determine the project emissions, baseline emissions, leakages and anthropogenic emissions by the proposed project activity. The project also employs tool to calculate the emission factor for an electricity system, version 07.0.0 /23.a/. According to applied methodology ACM0002: Version 21.0 /9/ para 47, baseline emissions include only CO_2 emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity. The methodology assumes that all project electricity generation above baseline levels would have been generated by existing grid-connected power plants and the addition of new grid-connected power plants. **Baseline emission:** The baseline emissions are to be calculated as follows: $BEy = EGPJ,y \times EFgrid,CM,y$ Where: BEy = Baseline emissions in year y (t CO2/yr) $EGPJ,y$ = Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year y (MWh) $EFgrid,CM,y$ = Combined margin CO2 emission factor for grid connected power generation in year y calculated using the latest version of Tool 7 /23.a/ (tCO2/MWh) **Project emissions:** As per para 31 of the applied methodology ACM0002/9/, "For most renewable energy power generation project activities, Pey = 0" and also as per para 33 of the applied methodology ACM0002 /9/, "For all renewable energy power generation project activities, emissions due to the use of fossil fuels for the backup generator can be neglected." Since, the project activity is WPP, no project emissions has been considered which is found to be acceptable. Hence, PE_y =0. **Leakage emissions:** As per para 53 of the applied methodology ACM0002 /9/, "No other leakage emissions are considered. The emissions potentially arising due to activities such as power plant construction and upstream emissions from fossil fuel use (e.g. extraction, processing, transport etc.) are neglected" Hence, LE_y = 0. **Emission reductions:** As per the above, emission reductions are calculated as: $ER_y = BE_y$ $ER_y = BE_y = EGy \times EFgrid,CM$ ER_y = 122,461.8 MWh/year * 0.6488 tCO_2/MWh ER_y = 79,453 tCO_2/year

	The emission reduction as calculated is 79,453 tCO_2 per year. The details of emission reduction calculation are discussed in the GS PDD /5/ and cross-checked from ER calculation sheet /27/. The validation team found calculation of all the particulars correct.
Findings	No Findings were raised.
Conclusion	The validation team has cross checked the parameters and values related to the emission reduction and confirmed that justification of the mentioned values is correct.

D.10. Monitoring plan

Means of validation

The assessment of the ex-ante parameters can be found below. The selected parameters have been found in compliance with the requirements of the applied methodology ACM0002 Version 21.0 /9/

Parameter fixed ex-ante:

Relevant SDG Indicator	Parameter	Value in PDD	Assessment
SDG 13	$EF_{grid,CM,y}$	0.6488 tCO_2/MWh	The value has been sourced from Turkey National Network Emission Factor data sheet /32/. The source of the value was found valid and correct and the value has been correctly applied in the ER calculation sheet /27/.

Data and parameters to be monitored:

S.No..	Relevant SDG Indicator	Parameter and Unit	Monitoring Frequency	Assessment
1	SDG 13	ERy $tCO_2/year$	Annually	The monitoring parameter will be continuously monitored by means of on-site meters and calculated by means of applied methodology /9/. The project is expected to reduce 79,453 $tCO_2/year$. The ER sheet /27/ was reviewed and found appropriate.

	2	SDG 8	Quantitative employment and income generation	Each monitoring period	PD will monitor this parameter each monitoring period and maintain the training records ensuring implementation of SDG 8.
	3	SDG 8	Quality of Employment	Each monitoring period	PD will monitor this parameter each monitoring period and maintain the training records ensuring implementation of SDG 8.
	4	SDG 7	$EG_{facility,y}$ MWh/yr	Monthly	PD will monitor this parameter monthly and this electricity generation value will be multiplied by the ex-ante emission reduction amount per MWh to calculate the actual emission reduction amount.
	5	SDG 6	Water quality and quantity	Annually	PD will monitor this parameter continuously by taking Total Wastewater Discharged by Thermal Power Plants in the related year and Net Electricity Generation in the related year.
	The GS PDD /5/ has been reviewed to check that the procedures for data uncertainty, emergency procedures, rules and responsibility, operational and management structure are mentioned in the GS PDD /5/. The monitoring plan completely describes all measures to be implemented for monitoring all parameters required. The verification team confirms that the parameters are sufficient to calculate the emission reduction in accordance with the applied methodology/9/ and are correctly reported in the GS PDD /5/. The PD has also added sufficient parameters to monitor all the SDG Goals. The monitoring plan has been described in the section B.7.3 of the PDD and has been verified by checking at the time of remote site visit.				
Findings	No Findings were raised.				

Conclusion	The validation team confirms the parameters which are part of monitoring plan is in-line with the PDD and the monitoring arrangementsdescribed in the monitoring plan are feasible within the project design. The PD will be able to implement the monitoring plan.

D.11. Start date, crediting period and duration.

Means of validation	The start date of project activity under the Gold Standard is 30/06/2008, which is the date when the construction of power plant started, and the operational Lifetime of the project is 25 years after construction with renewal after every 7 years. The duration of the first crediting period was from 19/03/2009 – 18/03/2016. The duration of the second crediting period is 19/03/2016 - 18/03/2023 and the duration of the third crediting period is 19/03/2023 to 18/03/2030.
Findings	No findings were raised.
Conclusion	The start date of the project activity is 30/06/2008, which is the date when the construction of power plant started. The duration of the second crediting period is 7 years and start date of the third crediting period will be 19/03/2023, which were found to be in accordance with the GS principles and requirements /1/.

D.12. Safeguarding principles and SDG outcome assessment

D.12.1 Safeguarding principles assessment

Means of validation	PD has outlined the assessment of safeguarding principles for the project activity as per the GS4GG safeguarding principles and requirements version 1.2 /6/ to identify the potential risk and adverse outcome of project activity, to adopt a mitigation strategy, to avoid or where avoidance is not possible, minimize identified risks, with the intention to achieve the stated requirement. Assessment of safeguarding principles have been done and tabulated in the Appendix 5.
Findings	No finding were raised
Conclusion	The validation team confirms that the SDG assessment is undertaken by the project activity. Mitigation measures required for identified risks have been taken into consideration and added to the monitoring plan of the project activity.

D.12.2. Gender sensitive assessment

Means of validation	Gender sensitive assessment has been done in compliance with GS4GG gender sensitive requirements and reported in Section D.2 of the PDD /5/.		
	Questions	Answered by PD	Means of Validation
	Question 1 – Explain how the project reflects the key issues and requirements of Gender Sensitive design and	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	The project activity is a grid connected wind power plant, which is not a gender sensitive

	implementation as outlined in the Gender Policy?	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 is a renewable energy project and not gender sensitive project. The project does not impact women or men, negatively.	project.
	Question 2 – Explain how the project aligns with existing country policies, strategies and best practices	The project does not Involve and Is not complicit in any form of discrimination based on gender, race, religion, sexual orientation or any other basis. Turkey signed the convention of International Labour Organization. The related articles are 100 and 111. The project owner respects Article 5/8425 of Labour Law; Which states no discrimination based on gender, race, religion, sexual orientation or any other basis is allowed.	The project activity is in compliance with ILO 100 and 111 and Article 5/8425 of Labour Law /35/
	Question 3 – Is an Expert required for the Gender Safeguarding Principles & Requirements?	No. 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.	The project activity is a grid connected wind power plant and does not require expert opinion for the gender safeguarding principles & requirements. The validation team confirms that project activity addressed requirement outlined in the para 2.2.1 of the GS4GG gender equality requirements & guidelines /32/ /6/.

	Question 4 – Is an Expert required to assist with Gender issues at the Stakeholder Consultation?	No. At the Stakeholder Consultation, women are free to say anything regarding the project. Their opinions and comments are also taken into account while evaluating the project at the Stakeholder Consultation.	The project activity is a grid connected wind power plant and does not require expert to assist with gender issues at stakeholder consultation. The validation team confirms that project activity addressed requirement outlined in the para 2.3.1 of the GS4GG gender equality requirements & guidelines /32/ /6/.
Findings	No findings were raised.		
Conclusion	The validation team confirms that the gender sensitive requirements /34/ has been properly addressed in the PDD /5/.		

D.13. Local stakeholder consultation

D.13.1. Local stakeholder consultation conducted during validation

Means of validation	The stakeholder consultation meeting was conducted by the project developer on 04/052007. The project stakeholder feedback round was done in two rounds. The second part of the consultation feedback was held between 27/10/2015-27/12/2015. The participants were made aware about the project and its activities and their comments were recorded. Project documents and feedback forms were provided within the scheduled time span. Main stakeholder consultation report were checked to confirm the activity/33/. Questions asked by the LSC were given in detail and it was found that no negative comments were raised by the local stakeholder The assessment team has interviewed the stakeholders. The opinions of the stakeholder were positive they were an active part of the consultation and no negative feedback regarding the project were given for the second crediting period during the remote audit.

Findings	No findings were raised.
Conclusion	Stakeholder consultation report has been reviewed and the validation team confirm that • local stakeholder consultation meeting has been conducted by PD, and • grievance mechanism has been included to address grievances related to the project and contact details has been provided in main stakeholder consultation report /33/

D.13.2 Grievance mechanism for continuous input

Means of validation	PP has provision of continuous grievance mechanism. PP has decided to collect the complaints through the means listed below:

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.	• Continuous Input Process Book/36/ was provided to Muhtar of Akyeniköy neighbourhood. Muhtar is the representative of the neighbourhood and most appropriate person to handle the book and complaints from the neighbourhood.
• Electronic Grievance Expression	• All project information regarding project will be on the website of Life Enerji enabling stakeholders to reach and comment.
GS contact (mandatory)	help@goldstandard.org
Other	Muhtar of Akyeniköy: Ahmet Yarımkaya

Findings	No findings were raised.
Conclusion	The validation team has reviewed the Main stakeholder consultation report /33/ and confirms that grievance mechanism for continuous input has been included to address grievances related to the project.

SECTION E. Internal quality control

The draft validation report for renewal of crediting period prepared by the validation team was reviewed by an independent technical review team to confirm if the internal procedures established and implemented by ESPL were duly complied with and such opinion/conclusion is reached in an objective manner that complies with the applicable GS rules/requirements. The technical review team is collectively required to possess the technical expertise of all the technical area/sectoral scope the project activity relates to. All team members of technical review team were independent of the validation team.

The technical review process may accept or reject the validation opinion or raise additional findings in which case these must be resolved before requesting for registration. The technical review process is recorded in the internal documents of ESPL and the additional findings get included in the report.

The final report approved by the technical reviewer is authorized by Managing Director and issued to the PD and/or submitted for request for registration, as appropriate on behalf of ESPL.

SECTION F. Validation opinion

The validation of "Akbük Wind Farm Project, Turkey with GS ID 436 for renewable of its crediting period was performed based on rules and requirements defined byGS4GG Principles and Requirements /1/ and UNFCCC for the CDM program of activities. The purpose of this project activity is to generate electricity from wind power plant and supply it to National Grid. It is demonstrated that the project is not alikely baseline scenario and the emission reductions attributable to the project are, hence, additional to any that would occur in the absence of the GS PA. The project correctly applies the approved baseline and monitoring methodology ACM0002 "Grid connected electricity generation from renewable sources", version 21.0 /9/ and is assessed against latest valid GS4GG Principles and Requirements /1/, CDM PA PS /3/ and CDM PA VVS /4/ and/or other applicable GS Decisions/Tools/Guidance/Forms.

The GS project activity is likely to achieve the anticipated emission reductions stated in the PDD provided the underlying assumptions do not change.

ESPL has informed the project participants of the validation outcome through the draft validation report and final validation report. In case of negative validation outcome, the final validation report is only submitted to PD. The final validation report contains the information regarding fulfilment of the requirements for validation, as appropriate.

ESPL applied the following validation process and methodology using a competent validation team.

- the desk review of documents and evidence submitted by the project participant in context of the reference GS principles and requirements,
- conducting interview, or interactions with the representative of the project participant,
- reporting audit findings with respect to clarifications and non-conformities and the closure of the findings, as appropriate and
- preparing a draft validation opinion based on the auditing findings and conclusions.
- technical review of the draft validation opinion along with other documents as appropriate by an independent competent technical review team
- finalization of the validation opinion (this report)

The review of the PDD, supporting documentation and subsequent follow-up actions have provided ESPL with sufficient evidence to determine the fulfilment of stated criteria. ESPL believes the project activity "Akbuk Wind Farm Project, Turkey" as described in the GS-PDD /5/ does meet the stated criteria of GS, meets host country criteria and has correctly applied the methodology ACM0002 "Grid connected electricity generation from renewable sources", version 21.0 /9/. Therefore, the project is being recommended to GS4GG for request for renewal of crediting period.

Abbreviations 1: Abbreviations

Abbreviations	Full texts
General	
ACM	Approved Consolidated Methodology
AM	Approved Methodology
BE	Baseline Emission
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reduction
CH4	Methane
CL	Clarification Request
CO2	Carbon di oxide
CP	Crediting Period
DNA	Designated National Authority
DR	Desk Review
DOE	Designated Operational Entity
EB	Executive Board
ESPL	Earthood Services Private Limited
FAR	Forward Action Request
GHG	Green House Gas
GSC/GSP	Global Stakeholder Consultation Process
IPCC	Intergovernmental Panel on Climate Change
KP	Kyoto Protocol
LoA	Letter of Approval/Authorization
LSC	Local Stakeholder Consultation Process
MoC	Modalities of Communication
MoV	Means of Validation
MP	Monitoring Plan
ODA	Official Development Assistance
OM	Operating Margin
PA	Project Activity
PCP	Project Cycle Procedure
PD	Project Developer
PDD	Project Design Document
PE	Project Emission
PoA DD	Programme of Activities Design Document
PP	Project Participant
PS	Project Standard
RCP	Renewal of Crediting Period
RFR	Request for Registration
tCO2e	tonnes of Carbon di Oxide equivalent
TPH	Tonnes Per Hour
UNFCCC	United Nations Framework Convention on Climate Change
V	Version
VVS	Validation and Verification Standard
VVB	Validation and Verification Body
ODA	Official Development Assistance
LSC	Local Stakeholder Consultation
SDG	Sustainable Development Goals
TEAIS	Turkish Electricity Transmission Corporation

Appendix 2. Competence of team members and technical reviewers

Competence Statement			
Name	Shifali Guleria		
Education	M.Sc. (Environmental Studies and Resource Management), TERI University		
Experience	3+ year		
Field	Climate Change		
Approved Roles			
Team Leader	YES		
Validator	YES		
Verifier	YES		
Methodology Expert	YES (AMS-I.A., AMS-II.G., AMS-II.E., AMS-III.A.V., AMS-I.D, ACM0002)		
Local expert	YES		
Financial Expert	NO		
Technical Reviewer	YES		
TA Expert	YES (1.2, 3.1)		
Reviewed by	Deepika Mahala	**Date**	16/02/2022
Approved by	Ashok Gautam	**Date**	18/02/2022

Competence Statement	
Name	Riya Sharma
Education	M.Sc. Biodiversity & Conservation
Experience	1+ years
Field	Climate Change & Environment, Forestry
Approved Roles	
Team Leader	Yes (VM)
Validator	Yes (VM)
Verifier	Yes (VM)
Methodology Expert	NO
Local expert	Yes (India)
Financial Expert	NO

Technical Reviewer	NO		
TA Expert (X.X)	NO		
Reviewed by	Shifali Guleria, Quality Manager	**Date**	29/11/2022
Approved by	Deepika Mahala, Technical Manager	**Date**	29/11/2022

Name	Deepika Mahala		
Country	India		
Education	M. Sc. (Environment Management), GGSIP University B.Sc. Hons. (Chemistry), Sri Venkateshwar College, DU		
Experience	6 Years +		
Field	Climate Change		
Approved Roles			
Team Leader	YES		
Validator	YES		
Verifier	YES		
Methodology Expert	ACM0002, AMS.I.D., AMS.I.A, AMS.III.AV, AMS.II.G, AMS-II.C		
Local expert	YES (India, Bangladesh)		
Financial Expert	NO		
Technical Reviewer	YES		
TA Expert	YES (TA 1.2 & TA 3.1)		
Reviewed by	Shifali Guleria (QM)	**Date**	28/04/2022
Approved by	Kaviraj Singh (MD)	**Date**	28/04/2022

Competence Statement	
Name	Fikriye Seda Atabek
Education	M.Sc. Energy Science and Technology B.Sc. Chemical Engineer
Experience	11 years
Field	Energy Science and Technology
Approved Roles	
Team Leader	NO
Validator	NO
Verifier	NO
Methodology Expert	NO
Local expert	YES (Turkey)
Financial Expert	NO

Technical Reviewer	NO		
TA Expert (X.X)	NO		
Reviewed by	Deepika Mahala, Quality Manager	**Date**	22/12/2021
Approved by	Ashok Gautam, Technical Manager	**Date**	22/12/2021

Competence Statement			
Name	Rahi Sarkar		
Education	M.Sc. Ecology and Environmental Studies B.Sc. Forestry		
Experience	NA		
Field	NA		
Approved Roles			
Team Leader	NO		
Validator	NO		
Verifier	NO		
Methodology Expert	NO		
Local expert	NO		
Financial Expert	NO		
Technical Reviewer	NO		
TA Expert (X.X)	NO		
Trainee	YES		
Reviewed by	Shifali Guleria (Quality Manager)	**Date**	31/10/2022
Approved by	Deepika Mahala (Technical Manager)	**Date**	31/10/2022

Appendix 3. Documents reviewed or referenced.

No.	Title	References to the document	Provider
1	GS Principles & Requirements	Version 1.2	Others
2	GS Validation & Verification Body Requirements	Version 2.0	Others
3	Standard: CDM PS for PA	Version 3.0	Others
4	Standard: CDM VVS for PA	Version 3.0	Others
5	GS PDD	Version 12 dated 27/01/2023	PD
6	GS4GG Key Project Information & Project Design Document Template	Version 1.2	Others
7	Renewable Energy Activity Requirements	Version 1.4	Others
8	Registered accepted PDD.	Version 10 dated 18/08/2022.	Others
9	ACM0002 Grid-connected electricity generation from renewable sources	Version 21.0	Others
10	Site Visit and Remote Audit Requirements and Procedures	Version 1.0	Others
11	Photographic Evidence of site	-	PD
12	Key Project Information & Project Design Document v.1.2 template guidelines	Version 1.2	Others
13	Technical Feasibility Report	-	PD
14	Generation License	18/01/2007	PD
15	EIA Report	Dated February, 2011	PD
16	Provisional Acceptance Document	17/02/2021	PD
19	Waste Transfer Records	Dated 2021	PD
20	Suzlon S88 – 2.1 MW technical overview	-	PD
21	GS transition Annex	-	PD
22	GS project homepage: GS ID 1017 https://registry.goldstandard.org/projects/details/13	-	Others
23	CDM tools: a. TOOL07 - Tool to calculate the emission factor for an electricity system (Version 07.0.0) b. TOOL01 - Tool for the demonstration and assessment of additionality (Version 07.0.0) c. TOOL10 - Tool to determine the remaining lifetime of equipment (Version 01) d. TOOL11 - 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)	-	Others
24	Tool 11: Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period	-	Others
25	Turkish Production Capacity Projection Report	-	others
26	10-year demand forecast report https://www.teias.gov.tr/tr-TR/ilgili-raporlar	-	PD
27	ER sheet	-	PD

28	SDG Impact tool	-	PD
29	Training Records	-	PD
30	Energy Ministry – Emission Factors Factsheet	20/09/2022	Others
31	Safeguarding principles and requirements	Version 1.2	Others
32	Gender equality requirements & guidelines /32/	Version 1.1	Others
33	Main Stakeholder Consultation report	-	PD
34	International Legal obligation article 10 http://www.istanbul.gov.tr/?pid=9218	-	Others
35	ILO Conventions http://www.ilo.org/ankara/conventions-ratified-by-turkey/lang--tr/index.htm	-	Others
36	Continuous Input process book	-	PD
37	GS Passport	-	Others
38	Waste Transfer records	-	PD
39	Latest Electricity Generation	-	PD
40	ODA Declaration	20/01/2023	PD

Appendix 4. Clarification requests, corrective action requests and forward action requests

Table 1. Remaining FAR from validation and/or previous verification

FAR ID		**Section no.**		**Date :** DD/MM/YYYY
Description of FAR				
NA				
Project participant response				**Date :** DD/MM/YYYY
NA				
Documentation provided by project participant				
NA				
VVB assessment				**Date:** DD/MM/YYYY
NA				

There is no finding from previous validation.

Table 2. CL from this verification

CL ID	01	**Section no.**	D.1.3.	**Date :** 24/02/2023
Description of CL				

Section A.3:

1) In Technologies and/or Measures: In the PDD the project claims to have a total power of 30.75 MWe with 15 turbines however during the Remote Audit it was said that the project has a total power of 31.5 MWe (15*2.1MWe). PD is requested to clarify.

2) In the PDD default operational lifetime for on shore wind turbines is 25 years. However, during the remote Site visit Equipment Specification states that the lifetime of the equipment is for 20 years and the license is for 25 years. PD is requested to clarify the correct operational lifetime of the Wind turbines and what will be done with the turbines after the operational lifetime is over

Project participant response	**Date :** 06/03/2023

1) *In accordance with the Generation License installed power is actually 31.5 MW. So, it has been corrected now.*
2) *20 years of lifetime of WTGs is general acceptance and it is not written in specifications of the used turbines. With regular maintenance and repair where needed, wind turbines can exceed this duration easily in practice. As per CDM Tool-10 default value for wind turbine is 25 years which is more realistic. Generation license guarantees that the PA can produce electricity for 49 years. When the lifetime of equipment ends, overhaul, repair, part renewal or complete renewal of the turbine might be performed in accordance with determination of manufacturer.*

Documentation provided by project participant

Specification of the turbine.

VVB assessment	**Date:** 07/03/2023

1) VVB has assessed and the inconsistency addressed has been corrected in the updated PDD.

2) Clarification has been given related to the operational lifetime of the WTGs. The PD is using option (c) use default values of Methodology procedure of CDM tool 10 – "Tool to determine the remaining lifetime of equipment". Since, this is an onshore wind farm project, according to the tool, the operational lifetime can be of 25 years. The following clarification is found to be sufficient and Related documents have been provided.

   Hence CL#01 is closed.

CL ID	02	**Section no.**	D.8.	**Date :** 3/03/2023

Description of CL

In PDD In Table 1- Estimated Sustainable Development Goals Under SDG 8: The annual estimated average of the total number of jobs to be given is 10 and the total number of trainings to be given is 1.

However during the Remote site visit it was discussed that the total number of Trainings were more than one. Some of the trainings which were discussed were HSE, PPE usage, first aid, rescue, fire fighting, electricity, handling of weight.

No such information was found in the PDD. PD is requested to clarify as to how more than one training session was conducted

Project participant response	**Date :** 06/03/2023

In the PDD unit for training is "training/employee/MP", which means each employee get one training each MP. The expected training for each employee includes first aid, rescue, fire fighting, electricity, handling of weight and all trainings are is under "HSE training package". In other words, each mentioned trainings are serial of training under "HSE training".

Documentation provided by project participant

VVB assessment	**Date:** 07/03/2023

PD has clarified that each of the trainings are being given to one employee per monitoring period. The trainings which are mentioned are under one training package, The clarification was found satisfactory.

Hence CL#02 is closed

CL ID	03	**Section no.**	D.1.2.	**Date :** 24/02/2023
Description of CL				
In section A.1 Purpose and general description of the project It is stated that the total installed capacity of the 15 turbines is 30.75 MW with an estimated 122,462 MWh electricity generation per annum. However, during the remote site visit it was stated that along with the total power generation a capacity addition of 6MW is being considered. No such information was found in the PDD. PD is requested to clarify				
Project participant response				**Date :** 06/03/2023
The capacity addition is a plant and it is immature yet. Related applications has just started and not accepted yet and no investment decision done yet. When the solid steps started GS requirements for Design Change will be performed.				
Documentation provided by project participant				
VVB assessment				**Date:** 07/03/2023
PD has clarified that the capacity addition has not been implemented and is still in the developmental stage therefore there was no mention about the capacity addition in the PDD. The clarification was found to be sufficient. Hence CL#03 is closed				

CL ID	04	**Section no.**	D.8.	**Date :** 24/02/2023
Description of CL				
During the remote Site visit, it was confirmed that there has been a change of meters done during 2015. As per PD In section B.7.1 under SGD 7 “According to the Article 2 of the Communiqué: ‘The meters to be used in the electricity market shall be compliant with the standards of Turkish Standards Institute or IEC and have obtained “Type and System Approval” certificate from the Ministry of Trade and Industry.’ Therefore, Ministry of Trade and Industry (Ministry) is responsible from control and calibration of the meters. paragraph b) of the Article 9 of the 'Regulation of Metering and Testing of Metering Systems' 7 (Regulation) of Ministry states that: ‘ b) Periodic tests of meters of electricity, water, coal gas, natural gas and current and voltage transformers are done every 10 years’ . Therefore, periodic calibration of the meters will be done every 10 years.” However, there was no such information about the change of meters, their technical specification or the technical specification of the old meters in the PDD. Insufficient information has been provided as to why the meters are changed. PD is requested to clarify and provide technical specification of the meters.				
Project participant response				**Date :** 06/03/2023
Since PDD is base information for whole CP and meters may change anytime in CP, information related to change of meters, specifications of old and new meters etc. is usually given in Monitoring Report for relevant monitoring period. Such information will be shared in MR.				
Documentation provided by project participant				

VVB assessment	Date: 07/03/2023
The response provided by PD was checked however, the finding stands open due to the following reason. According to GS PDD template guidelines V1.2, section A.3, states that "*Describe the technologies and measures to be employed and/or implemented by the project, including:* *a list of the facilities, systems and equipment that will be installed and/or modified by the project."* Therefore PD is requested to please provide the technical specification(serial number) of the meters in the PDD The CL#04 stands OPEN	
Project participant response	**Date :** 10/03/2023
Related specifications has been added as requested.	
Documentation provided by project participant	
VVB assessment	**Date:** 15/03/2023
VVB has assessed the updated PDD and the technical specification of the main and back up meters were provided. Hence CL#04 is closed	

CL ID	05	Section no.	D.8.	Date : 24/02/2023
Description of CL				
SDG 6: 1) During RSV, it was discussed that the wastewater is stored in septic tank and disposed of by a licensed truck. However, no such information was found in the PDD. PD is requested to give supporting documents such as delivery records for wastewater disposal. 2) Waste oil was said to be stored at waste area and sent to licensed company twice a year for disposal. However, no such information was provided in the PDD. Also, PD is requested to provide evidence to confirm the above statement				
Project participant response				**Date :** 06/03/2023
1) This information has been given in heading B.7.1. under "Principle 9.4 – Release of pollutants" near "Measurement methods and procedures" as well as under heading D.1. Wastewater transfer record have been provided. *2) Related information has been added now under heading B.7.1. under "Principle 9.4 – Release of pollutants"*				
Documentation provided by project participant				
Wastewater and waste transfer records.				
VVB assessment				**Date:** 07/03/2023
PD has updated the information related to the storage and disposal of waste water in the updated PDD, also shared the relevant document Hence CL#05 is closed				

Table 3. CAR from this verification

CAR ID	01	**Section no.**	D.1.4	**Date :** 07/02/2023
Description of CAR				
In section B.5.2, “Ongoing Financial Need”, PD is requested to "*provide a qualitative narrative, supported by an overview of project finances, that demonstrates how the finance derived Gold Standard Certification is material to the ongoing sustainability of the Project*." According to GS4GG principles and requirements, V1.2 para 4.1.52				
Project participant response				**Date :** 20/02/2023
The loan payback is ongoing and bank notification for the ongoing loan repayment has been submitted.				
Documentation provided by project participant				
Bank’s Loan Notification				
VVB assessment				**Date:** 22/02/2023
PD has provided the bank loan document which provides the overview of the finances derived Gold Standard Certification is material to the ongoing sustainability of the project. Hence CAR#01 is closed				

CAR ID	02	**Section no.**	D.1.2	**Date :** 07/02/2023
Description of CAR				
In Section C.2.1, Duration of the first crediting period in PDD Version 11 is given as 19/03/2016 to 18/03/2023, however according to PDD Version 10 the duration of the first crediting period is mentioned as 19/03/2009 to 18/03/2016. PD shall address the inconsistency.				
Project participant response				**Date :** 20/02/2023
The date was written wrong and corrected now. Actual dates of the first crediting period is between 19/03/2009 – 18/03/2016 and related corrected has been done in PDD as well.				
Documentation provided by project participant				
VVB assessment				**Date:** 22/02/2023
The date has been corrected in the revised PDD. Hence CAR#02 is closed				

Table 4. FAR from this verification

FAR ID	01	**Section No.**	D.1.2	**Date :** 13/11/2023
Description of FAR				

The following FAR has been raised in the GS review and shall be addressed in first monitoring period. The duration of the second crediting period is 7 years and start date of the third crediting period will be 19/03/2023, which were found to be in accordance with the GS principles and requirements. However, the credits will be claimed starting from 22 June 2023 in CP3. Delay in the completion of re-validation beyond the last date of current certification cycle shall result in a reduction of any issuance of Certified Products and/or Impact Statements available during following certification cycle (for example, a delay of 1 year beyond the first cycle shall mean that no Certified Impact Statements shall be issued for the period of delay). Thus, PD can only claim credits starting from 22 June 2023 in CP3.

Project participant response	**Date :** DD/MM/YYYY
Documentation provided by project participant	
VVB assessment	**Date:** DD/MM/YYYY

Appendix 5. Safeguarding Principles Assessment

Assessment Questions/ Requirements	Justification of Relevance (Yes/potentially/no)	How Project will achieve Requirements through design, management or risk mitigation.	Mitigation Measures added to the Monitoring Plan (if required)	Means of validation
Principle 1. Human Rights				
1. The Project Developer and the Project shall respect internationally proclaimed human	1.No 2.No	The project respects internationally proclaimed human rights including dignity, cultural property. Turkey is a party to Universal Declaration of Human Rights: http://ua.mfa.gov.tr/detay.aspx?26	Turkey is a party to the Universal Declaration of Human Rights, therefore does not violate these rights and it's not a matter of discussion for Turkey.	The project activity does not cause human rights abuses and is obliged to the International Legal obligation Article 10 of the European Convention for the Protection of Human Rights./36/ Thus, no mitigation measure is

rights and shall not be complicit in violence or human rights abuses of any kind as defined in the Universal Declaration of Human Rights 2. The Project shall not discriminate with regards to participation and inclusion		34		required. The validation team confirms that project fulfils the GS certification requirement outlined in the para 3.1.1 and 3.1.2 of the GS4GG safeguarding principles requirements version 1.2/6/.
Principle 2. Gender Equality				
1. The Project shall not directly or indirectly lead to/contrib	1.No 2. No 3. No 4.-	The project does not involve in any form discrimination in any kind of form. Turkey is also party to Convention on Discrimination since 1967 to	In the main office of the project owner company there are women employees as well. Therefore, project contributes to recognition of women rights implicitly.	The project activity does not involve any form of discrimination based on gender and is obliged to the ILO convention 100 and 111 /34,35/. Therefore no mitigation measure is needed for this principle. The

				validation team confirms that project fulfils the

ute to adverse impacts on gender equality and/or the situation of women 2. Projects shall apply the principles of non-discrimination, equal treatment, and equal pay for equal work 3. The Project shall refer to the country's national gender strategy or equivalent national commitment to aid in assessing		prevent any form of discrimination; http://ua.mfa.gov.tr/files.ashx?872		GS certification requirement outlined in the para 3.2.1, 3.2.3 and 3.2.4 of the GS4GG safeguarding principles requirements version 1.2 /6/.

gender risks 4. (where required) Summary of opinions and recommendations of an Expert Stakeholder(s)				
Principle 3. Community Health, Safety and Working Conditions				
1. The Project shall avoid community exposure to increased health risks and shall not adversely affect the health of the workers and the community	1.No	1. The project will take all the necessary precautions for all the hazards that by mitigating their impacts in line with the legal limits. (ie. level of dust, noise and flickering effect). Since it is a renewable energy project, it is not creating any kind of pollution like in fossil fuel-based energy plants. Therefore, there is no air pollution caused by emissions. Both workers and community are not exposed to any health risks. Moreover, Turkey ratified ILO convention 155 about work safety and precautions.	No mitigation measure is needed for the Principle 3.	The project is a wind power plant project and does not adversely affect health of the workers. The project is obliged to the ILO convention 155 /35/ and will demonstrate work safety at the project location during the implementation of the project. Therefore no mitigation measure is needed for this principle The validation team confirms that PoA fulfils the GS certification requirement outlined in the para 3.3.1 of the GS4GG safeguarding principles requirements version 1.2 /33/.

Principle 4.1 Sites of Cultural and Historical Heritage	

Does the Project Area include sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture?	1.No	The project does not occupy any high value cultural area.	No mitigation measure is needed for the Principle 4.1.	The project activity involves generation of electricity from Wind power. Therefore, it does not involve or to be complicit in the alteration, damage or removal of any sites, objects or structures of significant cultural heritage. The project activity does not propose any kind of utilization of cultural heritage including the knowledge, innovations, or practices of local communities. The validation team confirms that project activity fulfils the GS certification requirement outlined in the para 3.4.2 of the GS4GG safeguarding principles requirements version 1.2/33/.
Principle 4.2 Forced Eviction and Displacement				
Does the Project require or cause the physical or economic relocation of peoples (temporary or permanent, full or partial)?	1.No	The project does not require or cause the physical or economic relocation of peoples (temporary or permanent, full or partial)	No mitigation measure is needed for the Principle 4.2.	This project involves generation of electricity from Wind power and does not involve any kind of relocation of people. The validation team confirms that project activity fulfils the GS certification requirement outlined in the para 3.4.5 of the GS4GG safeguarding principles

				requirements version 1.2/33/.
Principle 4.3 Land Tenure and Other Rights				
Does the Project require any change, or have any uncertainties related to land tenure arrangements and/or access rights, usage rights or land ownership?	1.No	No, the project does not cause any type of change with respect to land tenure or impact any legal rights of the nearby people. The land use permission has been certified by notarization.	No mitigation measure is needed for the Principle 4.3.	It does not require to change to land tenure arrangements and/or other rights. The validation team confirms that project activity fulfils the GS certification requirement outlined in the para 3.4.8 of the GS4GG safeguarding principles requirements version 1.2/33/.
Principle 4.4 Indigenous People				
Are indigenous peoples present in or within the area of influence of the Project and/or is the Project located on land/territory claimed by indigenous peoples?	No	Turkey does not host any indigenous people community	No mitigation measure is needed for the Principle 4.4.	Turkey does not host any indigenous community
Principle 5. Corruption				

The Project shall not involve, be complicit in or inadvertently contribute to or reinforce corruption or corrupt Projects	1.No	The project does not involve any kind of corruption. Turkey is a party to United Nation Convention against Corruption since 2006; http://ua.mfa.gov.tr/detay.aspx?15042	The Project owner has not any negative track record related to corruption or any such activity whatsoever.	The project activity does not involve in any kind of corruption or reinforced corruption or corrupt project and has ratified OECD and UN conventions/36,37/. The validation team confirms that project activity fulfils the GS certification requirement outlined in the para 3.5.1 of the GS4GG safeguarding principles requirements version 1.2/33/.Therefore no mitigation measure is needed for this principle
Principle 6.1 Labour Rights				
The Project Developer shall	1.No 2.No	Project owner protects labours rights of all	Necessary health and safety measures will be	The project activity does not involve any kind of forced

ensure that all employment is in compliance with national labour occupational health and safety laws and with the principles and standards embodied in the ILO fundamental conventions Workers shall be able to establish and join labour organisations Working agreements with all individual workers shall be documented and implemented and include: a) Working hours (must not exceed 48 hours per week on a regular basis),	3.No 4.No 5.No	employees within this company. Workers might have occupational accidents during construction and operation phase. According to project developer, during construction and operational phase of the project "Health and Occupational Safety Regulation" will be followed. Regulation could be found under this link too: http://www.mevzuat.gov.tr/MevzuatMetin/1.5.6331.pdf	taken during operation phase according the regulation of health and safety requirements in construction Works (http://www.resmigazete.gov.tr/eskiler/2013/10/20131005-2.htm)., Additionally, relevant staff will be trained to be able to work with high voltages, high heights and heavy machineries.	labour or compulsory labour and has ratified ILO convention 29 and 105 /35/. The employees of the project do not collusion any form of forced or compulsory labour and will be provided with training and certification to work with high voltage equipments. The validation team confirms that project activity fulfils the GS certification requirement outlined in the para 3.6.1 of the GS4GG safeguarding principles requirements version 1.2 /33/.

AND b) Duties and tasks, AND c) Remuneration (must include provision for payment of overtime), AND d) Modalities on health insurance, AND e) Modalities on termination of the contract with provision for voluntary resignation by employee, AND f) Provision for				

annual leave of not less than 10 days per year, not including sick and casual leave. No child labour is allowed (Exceptions for children working on their families' property requires an Expert Stakeholder opinion) The Project Developer shall ensure the use of appropriate equipment, training of workers, documentation and reporting of accidents and incidents, and emergency preparedness and response				

measures				
Principle 6.2 Negative Economic Consequences				
Does the project cause negative economic consequences during and after project implementation?	1.No	On the contrary, it supplies job opportunities for local people. By this way, it contributes improvement of economy.	No mitigation measure is needed for the Principle 6.2.	There are no negative economic consequences from the project activity. The validation team confirms that project activity fulfils the GS certification requirement outlined in the para 3.6.3 of the GS4GG safeguarding principles requirements version 1.2 /33/.
Principle 7.1 Emissions				
Will the Project increase greenhouse gas emissions over the Baseline Scenario?	1.No	On the contrary, it helps to reduce GHG emissions by producing green energy.	No mitigation measure is needed for the Principle 7.1.	The project activity does not generate emissions and fulfils the GS certification requirement outlined in the GS4GG safeguarding principles requirements version 1.2/33/.
Principle 7.2 Energy Supply				
Will the Project use energy from a local grid or power supply (i.e., not connected to a national or regional grid) or fuel resource (such as wood, biomass) that provides for other local users?	1.Potentially	Plant sometimes can use energy from local grid in the absence of wind. However, this amount is really less when it is compared with its production of green energy amount.	This amount will be tried to decrease as far as possible. It can be check during the verification process with the monthly meter readings and EPİAŞ records.	Plant sometimes can use energy from local grid in the absence of wind. The validation team confirms that project fulfils the GS certification requirement outlined in the GS4GG safeguarding principles requirements version 1.2/33/.

Principle 8.1 Impact on Natural Water Patterns/Flows				
Will the Project affect the natural or pre-existing pattern of watercourses, ground-water and/or the watershed(s) such as high seasonal flow variability, flooding potential, lack of aquatic connectivity or water scarcity?	1.No	Since there is no water use in the generation of electricity, Project does not 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. Only water use in the project side is for domestic purposes.	No mitigation measure is needed for the Principle 8.1.	The validation team confirms that project fulfils the GS certification requirement outlined in the GS4GG safeguarding principles requirements version 1.2/33/.
Principle 8.2 Erosion and/or Water Body Instability				
Could the Project directly or indirectly cause additional erosion and/or water body instability or disrupt the natural pattern of erosion?	1.No	The project is being implemented in a proper way (by considering the concerns indicated via the entire principle 4.2.2 Erosion and/or Water Body Instability): There is no interruption to the hydrological systems in a WPP	No mitigation measure is needed for the Principle 8.2.	The project does not cause any additional erosion and/or water body instability or disrupt the natural pattern of erosion and therefore no mitigation measure is required. The validation team confirms that project activity fulfils the GS certification requirement outlined in the GS4GG safeguarding principles requirements version 1.2/33/.
Principle 9.1 Landscape Modification and Soil				

Does the Project involve the use of land and soil for production of crops or other products?	1.No	The project is being implemented in a proper way (by considering the concerns indicated via the entire	No mitigation measure is needed for the Principle 9.1.	The project does not involve the use of land and soil for production of crops or other products therefore no mitigation measure

		principle Landscape Modification and Soil): Only potential impact to soil would be observed due to construction activities of the project, and these negligible impacts are not permanent. Furthermore, there is an access road to the project area so that there is no problem in accessing the area. The necessary attention to be paid to the speed limits of the trucks and the material inside the trucks will be covered. Trucks to be loaded in line with the axle load and will not be overloaded, the top 10% of the material to be moisturised.		is required.
Principle 9.2 Vulnerability to Natural Disaster				
Will the Project be susceptible to or lead to increased vulnerability to wind, earthquakes, subsidence, landslides, erosion, flooding, drought or other extreme climatic conditions?	1.No	The project is being implemented in a proper way (by considering the concerns indicated via the entire principle Vulnerability to Natural Disaster): The project area is not a place to specific extreme climatic conditions and harmful natural events such as	No mitigation measure is needed for the Principle 9.2.	The project is not susceptible to and does not lead to increased vulnerability to wind, earthquakes, subsidence, landslides, erosion, flooding, drought or other extreme climatic conditions and therefore no mitigation measure is required.

		earthquake.		
Principle 9.3 Genetic Resources				
Could the Project be negatively impacted by or involve genetically modified organisms or GMOs (e.g., contamination, collection and/or harvesting, commercial development, or take place in facilities or farms that include GMOs in their processes and production)?	1.No	The project is being implemented in a proper way (by considering the concerns indicated via the entire principle 4.3.3 Genetic Resources): There is no relevance to GMO of a Wind Power Plant.	No mitigation measure is needed for the Principle 9.3.	Not Applicable
Principle 9.4 Release of pollutants				
Could the Project potentially result in the release of pollutants to the environment?	1.Yes	Only wastewater and solid waste production results from daily water use (eg. domestic wastewater) and daily domestic consumption (eg. domestic solid waste). These domestic wastes are removed	Wastewater produced will be collected in an impermeable septic tank and will be periodically transferred to treatment plant of Akyeniköy Municipality. This process	The Project may generate some waste oil, which will be vacuumed by the vacuum truck regularly. Monitoring parameter has been included to monitor the oil waste and solid waste

		from the project facility in line with the associated legislative framework.	will be handled according to the Regulation of Ministry of Environment and Forestry. Waste oil will be vacuumed by vacuum truck regularly. By this way, discharge of plant sourced waste oil will not be allowed. Following PIF, all waste generated by the workers	

			and machines will be collected in separate closed bins (plastic, metals etc.) and then they will be collected by the Municipality. Non recyclable wastes will be collected in impermeable closed bins. Garbage bins' photos will be provided for solid household waste. By this way, solid waste disposal will not be allowed.	
Principle 9.5 Hazardous and Non-hazardous Waste				
Will the Project involve the manufacture, trade, release, and/ or use of hazardous and non-hazardous chemicals and/or materials?	1.No	The proposed project activity is a renewable energy project and doesn't involve any hazardous chemicals & other materials. the host party has its credible legislation "Health and Occupational Safety Regulation". Regulation could be found under this link too: http://www.resmigazete.gov.tr/eskiler/2012/06/20120630-1.htm	The following mitigation measures will be applied to the project activity. Hazardous wastes are collected and treated by the third authorized party in accordance with local laws and related regulations. Non-hazardous wastes are collected and treated in accordance with local laws and related regulations.	The project activity is a wind power plant and does not release any hazardous or non-hazardous chemical waste, therefore, no mitigation measure is required.
Principle 9.6 Pesticides & Fertilisers				

Will the Project involve the application of pesticides and/or fertilisers?	1.No	There is no operation which requires pesticide fertilizer use for this project.	No mitigation measure is needed for the Principle 9.6.	The project is a wind power plant project and does not involve application of pesticides and/or fertilisers. Thus, no mitigation measure is required.
Principle 9.7 Harvesting of Forests				
Will the Project involve the harvesting of forests?	1.No	The project is being implemented in a proper way (by considering the concerns indicated via the entire principle 4.3.7 Harvesting of Forests): There has not been a significant forestation during the construction phase (i.e. project has been approved as EIA positive) and the project does not involve an operation that requires forest harvesting.	No mitigation measure is needed for the Principle 9.7.	The project is a wind power plant project and does not involve harvesting of forests. Thus, no mitigation measure is required.
Principle 9.8 Food				
Does the Project modify the	1.No	The project is being	No mitigation measure is needed for the Principle	The project is a wind power plant

			9.8.	

quantity or nutritional quality of food available such as through crop regime alteration or export or economic incentives?		implemented in a proper way (by considering the concerns indicated via the entire principle 4.3.8 Food): The project does not involve any operation that disrupt husbandry and agriculture in the region.		project and does not involve modify the quantity or nutritional quality of food available such as through crop regime alteration or export or economic incentives. Thus, no mitigation measure is required.
Principle 9.9 Animal husbandry				
Will the Project involve animal husbandry?	1.No	The project is being implemented in a proper way (by considering the concerns indicated via the entire principle 4.3.9 Animal husbandry): The project does not involve any operation that disrupt husbandry and agriculture in the region.	No mitigation measure is needed for the Principle 9.9.	The project is a wind power plant project and does not involve in animal husbandry. Thus, no mitigation measure is required.

Principle 9.10 High Conservation Value Areas and Critical Habitats				
Does the Project physically affect or alter largely intact or High Conservation Value (HCV) ecosystems, critical habitats, landscapes, key biodiversity areas or sites identified?	1.yes	The Project physically does not affect or alter largely intact or High Conservation Value (HCV) ecosystems, critical habitats, landscapes, key biodiversity areas or sites identified.	The Project is not located in a high conservation value area or within critical natural habitats or critical biodiversity areas or sites identified. Therefore, the project activity does not affect or alter ecosystems, critical habitats, landscapes, key biodiversity areas or sites identified. However, bird nests and carcasses on the project site will be observed by appointed personnel periodically.	The project does not physically affect or alter largely intact or High Conservation Value (HCV) ecosystems, critical habitats, landscapes, key biodiversity areas or sites identified. Thus, no mitigation measure is required.
Principle 9.11 Endangered Species				
Are there any endangered species identified as potentially being present within the Project boundary (including those that may route through the area)? AND/OR Does the Project potentially impact other areas where endangered species may be present through transboundary affects?	1.No	The Project does not potentially impact other areas where endangered species may be present through transboundary affects. With this respect, there is no damage or alteration of any flora or fauna due to the project activity.	No mitigation measure is needed for the Principle 9.11.	The project activity does not include any endangered the flora and fauna types which have been identified within the boundaries of project area and therefore, no mitigation measure is required.