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for the Global Goals

TEMPLATE

MONITORING REPORT

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VERSION v. 1.1

RELATED SUPPORT - TEMPLATE GUIDE Monitoring Report v. 1.1

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KEY PROJECT INFORMATION

Key Project Information

GS ID (s) of Project (s)	GS 436
Title of the project (s) covered by monitoring report	Akbük Wind Farm Project, Turkey
Version number of the PDD/VPA-DD (s) applicable to this monitoring report	15
Version number of the monitoring report	7
Completion date of the monitoring report	26/02/2026
Date of project design certification	17/03/2009
Date of Last Annual Report	17/12/2024
Monitoring period number	1 st
Duration of this monitoring period	22/06/2023 to 08/04/2025 (both days are included, 3 rd Crediting period, 1 st Monitoring period)
Project Representative	Ayen Enerji A.S.
Host Country	Turkey/Aydın
Activity Requirements applied	<input type="checkbox"/> Community Services Activities <input checked="" type="checkbox"/> Renewable Energy Activities <input type="checkbox"/> Land Use and Forestry Activities/Risks & Capacities <input type="checkbox"/> N/A
Methodology (ies) applied and version number	ACM0002 Grid-connected electricity generation from renewable sources, v. 21.0
Product Requirements applied	<input checked="" type="checkbox"/> GHG Emissions Reduction & Sequestration <input type="checkbox"/> Renewable Energy Label <input type="checkbox"/> N/A

Table 1 - Sustainable Development Contributions Achieved

Sustainable Development Goals Targeted	SDG Impact	Amount Achieved	Units/ Products
SDG 13: Climate action	Amount of GHGs emission avoided	95,214 tCO ₂	tCO ₂
SDG 8: Decent work and economic growth	Total number of jobs	11 Employees	Number of employees
	Total trainings	2023 (22/06/2023-31/12/2023): :1 training 2024:2 trainings	Training/employee/Monitoring Per.
SDG 7: Affordable and clean energy	Amount of renewable energy	146,765	MWh
SDG 6: Clean Water	Avoided Wastewater	3,821,218	m ³

Table 2 – Product Vintages

Start Dates	End Dates	SDG 13: Climate Action
22/06/2023	31/12/2023	27,631 tCO ₂
01/01/2024	31/12/2024	53,429 tCO ₂
01/01/2025	08/04/2025	14,154 tCO ₂

SECTION A. DESCRIPTION OF PROJECT

A.1. General description of project

The Akbük Wind Farm Project (Akbük WFP) involves a 30.75 MWe/31.5 MWm onshore wind farm with 15 turbines in the region of Aydın Province, Didim District in Turkey.

The purpose of the project is to generate electricity and to feed it into the public grid. The Akbük WFP project shall be registered as a Voluntary Emission Reduction project in order to enable the project implementation by means of financial inflows coming from the credits sale. Because of its significant contribution to climate protection and to sustainable development in the region, this project is expected to fulfil the requirements of the Gold Standard.

The project helped Turkey to stimulate and commercialize the use of grid connected renewable energy technologies and markets. Furthermore, the project demonstrated the viability of grid connected wind farms which can support improved energy security, improved air quality, alternative sustainable energy futures, improved local livelihoods and sustainable renewable energy industry development. The specific goals of the project are to:

- reduce greenhouse gas emissions in Turkey compared to the business-as-usual scenario;
- help to stimulate the growth of the wind power industry in Turkey;
- create local employment during the construction and the operation phase of the wind farm;
- reduce other pollutants resulting from power generation industry in Turkey, compared to a business-as-usual scenario;
- help to reduce Turkey's increasing energy deficit;
- And differentiate the electricity generation mix and reduce import dependency.

As the project developer, Ayen Enerji believes that efficient utilization of all kinds of natural resources with a harmony coupled with responsible environmental considerations is vital for sustainable development of Turkey and the World. This has been a guiding factor for the shareholders towards the concept of designation and installation of a wind power project. Other than the objective of climate change mitigation through significant reduction in greenhouse gas (GHG) emissions, the project has been carried out to provide social and economic contribution to the region in a sustainable way. The benefits that is gained by the realization of the project compared to the business-as-usual scenario can be summarized under four main indicators which are environmental, economic, social and technological.

The project activities have replaced the grid electricity, which is constituted of different fuel sources causing greenhouse gas emissions. By replacing in the consumption of these fuels, it contributes to conservation of water, soil, flora and faunas and transfers these natural resources and the additional supply of these primary energy sources to the future generations as well. In the absence of the project activity, an equivalent amount of electricity would have been generated from the power plants connected to the grid, majority of which are based on fossil fuels. Thus, the project is replacing the greenhouse gas emissions (CO₂, CH₄) and other pollutants (SO_x, NO_x, particulate matters) occurring from extraction, processing, transportation and burning of fossil-fuels for power generation connected to the national grid.

This project has helped accelerating the growth of the wind power industry and stimulate the designation and production of renewable energy technologies in Turkey. Then, other entrepreneurs irrespective of sector have been encouraged to invest in wind power generations. It has also assisted reducing Turkey's increasing energy deficit and diversify the electricity generation mix while reducing import dependency, especially natural gas. Importantly, rural development has been maintained in the areas around the project site by providing infrastructural investments to these remote villages.

The employment of local people who have necessary technical qualifications for the required position has been the priority and enhanced by all project activities during construction and operation of wind farm. As a result, local poverty and unemployment have been partially eliminated by increased job opportunities and project business activities. Although turbines have been transported from abroad, the other components (such as transformers, switchboards, substation components, cabling) have been supplied from local manufacturers. Moreover, as contribution of the project to welfare of the region, the quality of the electricity consumed in the region has been increased by local electricity production, which also contributes decreasing of distribution losses. During the monitoring period total electricity generation is 146,765 MWh and achieved total emission reduction is 95,214 tCO₂. The connection of the project to the National Electricity System done through a Substation.

A.2. Location of project

Akbük Wind Farm Project (Akbük WFP) is located in Aydın. The nearest settlements to the project site are Denizköy town, which is located about 800 m northwest, and Fevzipaşa town, which is located about 2.5 km South

Table 3. Turbine Coordinates¹

Wind Turbine No.	E	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

¹ For the coordinates please check the registered 3rd CP PDD ver.15



Figure 1. Project Location on Turkey Map

A.3. Reference of applied methodology

For the determination of the baseline, the official methodology ACM0002 version 21.0.0, “Grid-connected electricity generation from renewable sources”², is applied, using conservative options and data as presented in the following section. This methodology refers to four Tools, which are:

1. TOOL07 -Tool to calculate the emission factor for an electricity system (Version 07.0.0)³
2. TOOL01 - Tool for the demonstration and assessment of additionality (Version 07.0.0)⁴;
3. TOOL10 - Tool to determine the remaining lifetime of equipment (Version 01.0.0)⁵;

² <https://cdm.unfccc.int/UserManagement/FileStorage/ZPFJL01OU2RYC6N3HASIXV7K84QBG9>

³ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-07-v7.0.pdf>

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

⁵ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-10-v1.pdf>

4. 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)⁶

A.4. Crediting period of project

The first crediting period of the project was 19/03/2009 and 18/03/2016.

The second crediting period was between 19/03/2016 to 18/03/2023 both dates were included (Crediting period of the project is 7 years which is twice renewable). Third crediting period is between 19/03/2023 to 18/03/2030. This is third crediting period's first monitoring period.

⁶ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-11-v3.0.1.pdf>

SECTION B. IMPLEMENTATION OF PROJECT

B.1. Description of implemented project

Akbük WFP has 15 turbines each with an installed capacity of 2.05 MWe/2.1 MWm and total of 30.75 MWe/31.5 MWm. Commissioning of the project is 19/03/2009. The project was constructed on single project site which is on Didim District of Aydın Province in Turkey. Milestones and their dates of the project is given in the table below.

Table 4. Milestones and dates of the project

Date	Activity
30/06/2008	Start of construction / Project Start Date
17/03/2009	Registration Date
19/03/2009	Start of operation and commissioning of the first eight turbines (ID no. 1,2,3,4,5,6,10 and 15) / Crediting Period start date
03/04/2009	Start of operation and commissioning of the remaining seven turbines (ID no. 7,8,9,11,12,13 and 14)
19/03/2009 – 31/03/2010	First Monitoring Period
01/04/2010 – 31/03/2011	Second Monitoring Period
01/04/2011 – 31/12/2011	Third Monitoring Period
01/01/2012 – 31/12/2012	Fourth Monitoring Period
06/11/2014 – 18/03/2016	Fifth Monitoring Period
18/03/2016	Crediting Period End Date
04/10/2021	Creditable period start date of second crediting period
18/03/2023	Second Crediting period end date
19/03/2023	Third crediting period start date
22/06/2023 – 08/04/2025	First monitoring period of third crediting period
18/03/2030	Third Crediting Period End Date

B.1.1 Forward Action Requests

There were two FAR raised during the third CP renewal.

FAR#01: The following FAR has been raised in the Validation report form for renewal. 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.

Response: Between the 19/03/2023 and 22/06/2023 there will be no issuance of carbon credits from this period.

FAR#02 The following FAR has been raised in the GS review and shall be addressed in first monitoring period. The complete re validation report was uploaded on 22 June 2023 after the 2nd crediting period end. 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. Thus PD can claim realized ERs starting from 22 June 2023 in the 3rd crediting period.

Response: Between 19/03/2023 and 22/06/2023, no carbon credits will be issued

B.2. Post-Design Certification changes

B.2.1. Temporary deviations from the approved Monitoring & Reporting Plan, methodology or standardized baseline

There are no deviations from the approved Monitoring & Reporting Plan

B.2.2. Corrections

In the registered PDD (Version 15), Life İklim ve Enerji Ltd. Şti., the former consultant of the project, is stated as the project representative. In this Monitoring Report, the project representative has been revised to Ayen Enerji A.S., which is already identified as the project developer in the registered PDD (Version 15).

B.2.3. Changes to start date of crediting period

There are no changes to the start date of the crediting period.

B.2.4. Permanent changes from the Design Certified monitoring plan, applied methodology or applied standardized baseline

N/A

B.2.5. Changes to project design of approved project

There are no changes to project design of approved project.

SECTION C. DESCRIPTION OF MONITORING SYSTEM APPLIED BY THE PROJECT

As the necessary baseline emission factors are all defined ex ante (Operating and Built Margin, see baseline description), the most important information to be monitored is the amount of electricity fed into the grid by Akbük WFP. This value will be monitored continuously by redundant metering devices, one of them being the main one in the substation, which provides the data for the monthly invoicing to TEİAŞ. The collected data will be kept by Ayen Enerji A.S. during the crediting period and until two years after the last issuance of VERs for the Akbük WFP activity for that crediting period.

Given a data vintage based on ex ante monitoring and selection of a renewable 7 year crediting period, the Combined Margin will be recalculated at any renewal of the crediting period using the valid baseline methodology.

In case of a backup power generator would be installed in power plant for emergency cases the emission on the generator will be negligible according to the Methodology ACM0002 version 21.

Potential leakage emissions in the context of power sector projects are emissions arising due to activities such as power plant construction, fuel handling and land inundation. However, according to the methodology, those emission sources do not need to be taken into account.

Operational and Management Structure

As described before, there are two main factors important for the calculation of emission reductions. The only relevant data that have to be monitored is only net electricity generation ($EG_{facility,y}$) per year. Since project emission is zero no additional monitoring is required. The generation data are subject to the strict internal quality control systems of both parties. The monthly meter reading documents are stored by Ayen Enerji A.S. and TEİAŞ. The settlement notification, which is issued by TEİAŞ and includes the meter reading data, is stored on a TEİAŞ file server and accessible for Akbük via a secured website. The meters themselves can always be read as plausibility check for verification. The other important

parameter is the emission factor. It is approved according to strict quality control parameters from an independent external party. With this, no additional structures or processes have to be implemented to insure the availability and high quality of the necessary data for monitoring.

At the end of each monitoring period, which is planned to generally last one year, from the monthly meter reading records the net electricity generation amounts as calculated by electricity supplied to the grid minus withdrawn from the system, will be added up to the yearly net electricity generation and total project emissions will be subtracted from this amount and result data will be multiplied with the combined margin emission factor with the help of an excel spread sheet that also contains the combined margin calculation. Thus, the complete baseline approach is always transparent and traceable. For the operation of Akbük WFP, below hierarchy is planned:

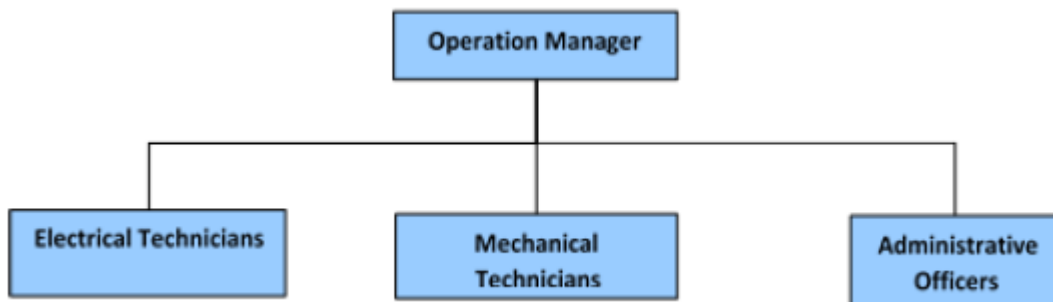


Figure 2. Operation and Management Diagram

Ayen Enerji A.S. keeps all the data needed for the calculation of emission reductions during the crediting period and until two years after the last issuance of GS VERs for Akbük WFP.

Because of the data acquisition and management and quality assurance procedures that are anyway in place, no additional procedures have to be established for the monitoring plan. Dedicated emergency procedures are not provided, as there is no possibility of overstating emission reductions due to emergency cases.

Table 2 Meter Specifications

Name	Brand&Model	Serial Number	Calibration Date
Old Main Meter	EMH LZQJ-XC	5271033	25/06/2015
Old Back-up Meter	EMH LZQJ-XC	5271034	25/06/2015
Main Meter	EMH LZQJ-XC	13213820	04/10/2023
Back-up Meter	EMH LZQJ-XC	13213821	04/10/2023

*Accuracy class is 0.2 for both meters

SECTION D. DATA AND PARAMETERS

D.1. Data and parameters fixed ex ante or at renewal of crediting period

Data/parameter	$EF_{grid,CM,y}$
Unit	tCO ₂ /MWh
Description	For the combined margin CO ₂ emission factor that were used to calculate estimated emission reductions, publication of Turkish Ministry of Energy and Natural Resources which is indicating Turkey's National Electric Grid Emission Factor for the year of 2020 was used.
Source of data	https://enerji.gov.tr//Media/Dizin/EVCED/tr/ÇevreVeİklim/İklimDeğişikliği/TUESEmisyonFktr/Belgeler/2020_Sebeke_EF.pdf
Value(s) applied	0.6488 tCO ₂ /MWh
Choice of data or measurement methods and procedures	The baseline emissions are the product of electrical energy baseline expressed in MWh of electricity produced by the renewable generating unit multiplied by an emission factor.
Purpose of data	To show CO ₂ e reduction in order to monitor SDG 13 Indicator.
Additional comments	-

D.2 Data and parameters monitored

SDG 13

Data / Parameter	ER _y
Unit	tons of CO ₂ e/year
Description	Baseline emissions correspond to emission reductions and are calculated as the net electricity generated by the project activity, multiplied with combined margin CO ₂ emission factor for grid connected power generation in year y.

Source of data	Both measured and calculated Emission reductions will be calculated as considering the EPIAS records for the net electricity generated and the emission factor for the grid, 0.6488 tCO ₂ /MWh, which is calculated and published by The Ministry of Energy and Natural Resources of Turkey ⁷ As per monitoring plan sheet of registered CM Excel. During the verification, the results shall be obtained from the Actual ER excel file.
Value(s) applied	95,214 tCO ₂
Measurement methods and procedures	Amount of annual net electricity generation, which is calculated by monthly settlement notifications of EPIAS based on monthly meter readings, will be used to calculate estimated CO ₂ emission reduction by project activity.
Monitoring frequency	Annually
QA/QC procedures	-
Purpose of data	Calculation of combined margin CO ₂ emission factor and thus the baseline emissions-to demonstrate contribution to SDG Target 13.3: Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning
Additional comment	-

SDG 7

Data / Parameter	EGfacility,y
Unit	MWh/yr
Description	Quantity of net electricity generation supplied by the project plant to the grid in year y
Source of data	Electricity meter(s)
Value(s) applied	146,765 MWh

⁷ https://enerjiapi.etkb.gov.tr/Media/Dizin/ETKB/Duyurular//0c6b62ea-bf2f-4fea-b9b3-28bc6f48ddf2_Bilgi_Formu_-_Web_Sitesi.pdf

Measurement methods and procedures	Electricity generation data will be monitored monthly according to PDD. This generation value will be multiplied by the ex-ante emission reduction amount per MWh to calculate the realized emission reduction amount.			
	Name	Brand&Model	Serial Number	Calibration Date
	Old Main Meter	EMH LZQJ-XC	5271033	25/06/2015
	Old Back-up Meter	EMH LZQJ-XC	5271034	25/06/2015
	Main Meter	EMH LZQJ-XC	13213820	04/10/2023
	Back-up Meter	EMH LZQJ-XC	13213821	04/10/2023
Monitoring frequency	Monthly			
QA/QC procedures	<p>The calibration of the monitoring equipment was carried out according to the information provided in the GS-VER PDD. The GS-VER PDD mainly includes the following obligation for the calibration of the appropriate meters:</p> <p>“The Turkish Electricity Market Regulation Agency (EPDK) sets rules on the accuracy of electricity meters that are used by power plants feeding into the grid. The rules are part of the EPDK regulation 25056 from 22 March 2003. The table in Article 11 of the regulation specifies the use of electricity meters of the accuracy class 0.5S for power plants between 10 MW and 100 MW and refers to compliance with International Electro technical Commission’s norm EN 60687. TEİAŞ conducts remote reading. In addition, another technician, employee of the Project, conducts reading from the project site and sends to TEİAŞ. By this way, a crosscheck is done. Also, with the readings from project site, continuously these meters are compared with each other and if any differences are detected the necessary control measures are taken. By this way, a cross-check is done. Moreover, continuously these meters are compared with each other and if any differences are detected the necessary control measures are taken.</p> <p>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</p> <p>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</p>			

	current and voltage transformers are done every 10 years'. Therefore, periodic calibration of the meters will be done every 10 years. As above mentioned, the data acquisition and management and quality assurance procedures that are anyway in place, no additional procedures have to be established for the monitoring plan.
Purpose of data	To exhibit renewable electricity generation performance the plant to monitor its contribution to SDG 7.
Additional comment	-

SDG 8

Data / Parameter	Quality of employment
Unit	Number trainings given to employees
Description	The trainings' data has been monitored to indicate the contribution to the SDG 8
Source of data	Attendance documents from the trainings & Interviews with the employees
Value(s) applied	At least 1 training per year. 2023: 1 2024: 2
Measurement methods and procedures	Training records
Monitoring frequency	Each monitoring period.
QA/QC procedures	Attendance records or training certificates are provided during each monitoring period.
Purpose of data	To exhibit employment performance of the plant and to monitor Principle 6.1.
Additional comment	-

Data / Parameter	Quantitative employment and income generation
Unit	Number of employments
Description	The employment data has been monitored to indicate the contribution to the SDG 8
Source of data	SGK (Social Security Institution) Records of the company
Value(s) applied	2023: 11 employees 2024:11 employees. 2025 :11 employees.

Measurement methods and procedures	SGK (Social Security Institution) Records of the company
Monitoring frequency	Each monitoring period.
QA/QC procedures	
Purpose of data	To exhibit employment performance of the plant
Additional comment	-

SDG 6

Data / Parameter	Water quality and quantity
Unit	m ³ /year
Description	Average Amount of Waste Water Discharged per MWh
Source of data	EPIAŞ based on monthly meter readings
Value(s) applied	total cooling wastewater avoidance 3,821,218 m ³ in this monitoring period
Measurement methods and procedures	Coefficient for wastewater avoidance from potential cooling water operations calculated by taking the Total Waste Water Discharged by Thermal Power Plants in the related year and Net Electricity Generation in the related year.
Monitoring frequency	Annually
QA/QC procedures	Amount of annual net electricity generation, which is calculated by monthly settlement notifications of EPIAŞ based on monthly meter readings.
Purpose of data	Avoiding wastewater discharge to the environment
Additional comment	-

Principle 9.4 Release of Pollutants

Data / Parameter	Water quality and quantity
Unit	-
Description	Disposal of wastewater
Source of data	Records of the transfer of wastewater by sewerage truck and statement of the wastewater treatment plants
Value(s) applied	Wastewater has been transferred 8 times by the municipality’s vacuum truck. Transfer dates are given bellow: 25/09/2023,26/12/2023,11/01/2024 ,26/02/2024, 24/04/2024,

	24/06/2024, 06/08/2024, 24/10/2024,24/02/2025
Measurement methods and procedures	Wastewater generated is collected in tanks/containers, and these waters are transported and disposed of by the local municipality.
Monitoring frequency	At least one wastewater disposal record in one monitoring period.
QA/QC procedures	-
Purpose of data	Avoidance of wastewater discharge to the environment
Additional comment	-

Data / Parameter	Solid Waste
Unit	-
Description	a) Solid household waste b) Waste oil etc. (gearbox oil waste, oil filters etc.)
Source of data	a) Garbage bins' photos b) Removal invoices.
Value(s) applied	a)Solid waste collection invoices. Garbage bins photos provided. Solid waste removal invoice dates; 24/07/2023,25/09/2023,24/10/2023,25/12/2023,24/05/2024 26/02/2024,24/04/2024,24/06/2024,06/08/2024,24/02/2025 b) According to Motat records 1,690 kg waste oil generated and disposed during monitoring period.
Measurement methods and procedures	Proper management and disposal of waste oil has been monitored by collecting the relevant documentation as evidence, and by other appropriate means, if necessary.
Monitoring frequency	Each monitoring period
QA/QC procedures	-
Purpose of data	Necessary precautions and measures has been taken for the proper management and removal of the waste oil produced during the turbine maintenance according to the related legislation.
Additional comment	-

Principle 9.10 High Conservation Value Areas and Critical Habitats

Data / Parameter	Nest and carcass observation
Unit	-
Description	Ensuring that the project creates no disturbance to the regional habitat
Source of data	Assigned personnel will be responsible for observation of project site bi-weekly. The personnel will record their observations and report them to the project manager every 3 months.

Value(s) applied	The project owner has no obligation imposed by the authorities regarding bird monitoring. No bird carcasses were encountered during this monitoring period.
Measurement methods and procedures	To ensure that the project creates no disturbance to the regional habitat, monitoring method will be conducted by assigned personnel to observe carcasses. In case of observation of carcass or nest, the project manager is informed by providing a letter by the assigned personnel every 3 months. During this monitoring period, no nests or carcasses were observed during inspections
Monitoring frequency	Annually
QA/QC procedures	-
Purpose of data	To monitor the contribution to Principle 9.10 High Conservation Value Areas and Critical Habitats.
Additional comment	-

D.3. Comparison of monitored parameters with last monitoring period

Not applicable being a non-Community Service Activities.

D.4. Implementation of sampling plan

No sampling plan is applied in the registered PDD.

SECTION E. CALCULATION OF SDG IMPACTS

E.1. Calculation of baseline value or estimation of baseline situation of each SDG Impact

SDG 6 Clean Water

There would be a potential fossil fuel generation activity if this WPP would not come into implementation. In this scenario of electricity generation, there will be a significant wastewater that will be discharged into natural environments. The baseline value for a potential wastewater discharges due to a fossil fuel fired energy generation is calculated as follow:

$$\text{Average Amount of Wastewater Discharged per each GWh Electricity Generation} = \frac{\text{Total Wastewater Discharged by Thermal Power Plants in the baseline year}}{\text{Total Electricity Generation in the baseline year}}$$

Calculation of Wastewater Avoidance :

$$\text{Amount of Avoided Cooling Wastewater Discharge by Project Activity per year} = \text{Annual Electricity Generation of Project Activity (GWh/y) within the MP} \times \text{Average Amount of Wastewater Discharged per each GWh Electricity Generation}$$

Net Amount of Avoided Wastewater Discharge by Project Activity = Amount of Avoided Wastewater Discharge by Project Activity - Amount of Wastewater Produced by Project Activity

$$\text{Baseline}_{\text{wastewater}} = 0$$

SDG 7: Affordable and Clean Energy

There is no clean energy generation for baseline situation of the project site.

Therefore, the baseline estimate is equal to 0 MWh.

SDG 8: Decent Work and Economic Growth

There is no employment opportunity and training for employee as project created within the project area and nearby settlements for baseline situation. Project contributes to qualified decent work and economic growth could be expressed.

SDG 13: Climate Action

Baseline emissions (BE_y) are calculated as follows:

$$BE_y = EG_{\text{facility},y} \times EF_{\text{grid,CM},y}$$

Where;

BE_y =Baseline emission in year y (tCO₂e)

EG_{facility,y} =Quantity of net electricity generation supplied by the project plant/unit to the grid in year y (MWh)

EF_{grid,CM,y}= Combined margin CO₂ emission factor of the WAPDA grid in year y (tCO₂/MWh)

During this monitoring period;

Monitoring Period		Emission Reduction (tCO ₂ e)
22/06/2023	31/12/2023	27,631
01/01/2024	31/12/2024	53,429
01/01/2025	08/04/2025	14,454
Total		95,214

E.2. Calculation of project value or estimation of project situation of each SDG Impact

SDG 13

The proposed project activity involves the generation of electricity by development of a wind farm. The generation of electricity does not result in greenhouse gas emissions and therefore, is taken as 0 tCO₂/year.

SDG 8

The employment of local people that have necessary technical qualifications for the required post has been the priority and enhanced by all project activities during construction and operation of wind farm. As a result, local poverty and unemployment has been partially eliminated by increased job opportunities and project business activities. Moreover, as contribution of the project to welfare of the region, the quality of the electricity consumed in the region has been increased by local electricity production, which also contributes decreasing of distribution losses.

In this monitoring period, 11 workers have been employed. Also, HSE trainings have been given to employees at the plant.

SDG 7

The project generates 146,765 MWh for the whole monitoring period (657 days) and contributes to share of low-cost / must-run sources.

SDG 6

Avoidance of around 3,821,218 m³ wastewater discharge to the environment for this monitoring period.

E.3. Calculation of leakage

LEy is 0, as it is not considered according to ACM0002

E.4. Calculation of net benefits or direct calculation for each SDG Impact

SDG	SDG Impact	Baseline estimate	Project estimate	Net benefit
13	CO ₂ Emission Reduction & Air Quality	95,214 tCO ₂	0 tCO ₂	95,214 tCO ₂
8	Quantitative Employment and income generation & Qualitative Employment	Quantitative Employment: No Employment. Qualitative Employment: No training	11 employees work at the plant. There are 3 training during the MP.	11 employees work at the plant. There are 3 training during the MP.
7	Electricity Generation	Energy is generated by using renewable energy systems throughout the project. There is no electricity generation in the baseline scenario in which Akbük WFP is not being implemented	146,765 MWh	146,765 MWh
6	Clean Water and Sanitation	Water Quality: No wastewater discharges.	Avoidance amounts around 3,821,218 m ³	Avoidance amounts around 3,821,218 m ³

E.5. Comparison of actual SDG Impacts with estimates in approved PDD

SDG	Values estimated in ex ante calculation of approved PDD for this monitoring period	Actual values achieved during this monitoring period
13	Emission Reduction 143,015 tCO ₂	Emission Reduction 95,214 tCO ₂
8	Quantitative Employment and Income Generation: 10	Quantitative Employment and Income Generation: 11 Employees work at the WFP Qualitative Employment: 3 trainings

7	Energy is generated by using renewable energy systems throughout the project. This generation amount was estimated as 220,430 MWh	146,765 MWh of energy was generated using renewable energy systems throughout the project.
6	Estimated amount of wastewater avoidance: 5,739,112 m ³	Actual amount of wastewater avoidance 3,821,218 m ³

E.5.1. Explanation of calculation of value estimated ex ante calculation of approved PDD for this monitoring period

SDG 6 Avoidance of Wastewater: The annual estimated wastewater avoidance per GWh of produced electricity for the project activity is estimated as 3,188,395.61 m³ thus considering number of days covered during present monitoring period to be 657 The estimated value for monitoring period is 5,739,112 m³.

SDG 7: Affordable and Clean Energy The annual estimated power generation for the project activity is 122,461 MWh, thus considering number of days covered during present monitoring period to be 657, the estimated power generation will be 220,430 MWh.

SDG 13: Climate Action The annual estimated emission reduction for the project activity is 79,453 tCO₂e, thus considering the number of days covered during the present monitoring period to be 657, and the estimated emission reduction contributing towards SDG 13 will be 143,015 tCO₂e.

SDG 8: Decent Work and Economic Growth The project leads to employment opportunities which would not have been possible in the baseline scenario. The project provides employment at least 10 workers. Project activity improves the quality of employment by giving training to employees.

E.6. Remarks on increase in achieved SDG Impacts from estimated value in approved PDD

The SDG 6, SDG7 and SDG 13 impacts received during current monitoring period are lower than the estimated value. The achieved emission is 33.42% lower than the estimated emission reductions. The generation of electricity depends upon many other climatic conditions, and not within the control of the project participant. The lower generation during the current verification period is hence due to certain natural conditions.

SECTION F. SAFEGUARDS REPORTING

Principles	Mitigation Measures added to the Monitoring Plan
Principle 6.1 Labour Rights	The company provide job opportunities to local people. SGK records of employees provided during each monitoring period. Moreover, health and safety training will be provided to all of the employees
Principle 9.4 Release of pollutants	<ol style="list-style-type: none"> 1. Wastewater generated collected in septic tanks and transported to the Municipality's wastewater treatment plant. In this way, discharge of wastewater was not be allowed. 2. Waste oil vacuumed by vacuum truck regularly. By this way, discharge of plant sourced waste oil was not be allowed. 3. Garbage bins' photos provided for solid household waste. In this way, solid waste disposal was not be allowed.

<p>Principle 9.10 High Conservation Value Areas and Critical Habitats</p>	<p>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 observed by appointed personnel periodically.</p>
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SECTION G. STAKEHOLDER INPUTS AND LEGAL DISPUTES

G.1. List all Inputs and Grievances which have been received via the Continuous Input and Grievance Mechanism together with their respective responses/mitigations.

In order to develop the project as a Gold Standard VER project two Local Stakeholder Consultation Meeting which is in line with Gold Standard Requirements was held on 04/05/2007. The Gold Standard Organization process for VER includes two round stakeholder process. The second part of the Consultation is Stakeholder Feedback Round which was held between 27/10/2015 to 27/12/2015. The participants were provided information about ongoing activities of the project and let them to provide their comments. The comments from the participants were positive for Akbük WFP. Project Documents and Feedback forms were enabled for the stakeholders to access from 01/05/2008 to 27/07/2008 and within this period comments were positive. The comments from the participants were positive for Akbük WFP.

As part of the verification, a site visit was conducted together with the VVB. Local people were interviewed on site for the Akbük WFP, and stakeholder engagement procedure was conducted with Akyeniköy village head and the local stakeholders on 08/04/2025. As validated during the audit, Mukhtar (head of the village) had already taken the contact information of Company Executive of the company so that the local stakeholders will be able to reach company executive whenever they have any complaints, suggestions or ideas about the project.

Since Mukhtar and made men are the head of the village, they will be the contact persons between the project owner and the local stakeholders. Muhtar will make sure that there's continuous communication between the two parties. During the site visit, it is validated that there were no negative comments from the stakeholders. Moreover, logbook was delivered to the mukhtar of the Akyeniköy village. This logbook is checked in the verifications to see whether there are any complaints from the local stakeholders. Since this project is about the complete its 1st verification of the 3rd crediting period and it does not result in different impacts with respect to different vintages, the grievance mechanism mainly relies on the existed grievance mechanism by use of logbook. There would not be requirement to use further grievance tools throughout the project life cycle.

G.2. Report on any stakeholder mitigations that were agreed to be monitored.

There have been no stakeholder mitigations agreed to be monitored.

G.3. Provide details of any legal contest that has arisen with the project during the monitoring period

There is no legal contest that has arisen with the project during the monitoring periods.

Revision History

Version	Date	Remarks
1.1	14 October 2020	<p>Hyperlinked section summary to enable quick access to key sections</p> <p>Improved clarity on Key Project Information</p> <p>Section for POA monitoring</p> <p>Forward action request section</p> <p>Improved Clarity on SDG contribution/SDG Impact term used throughout</p> <p>Clarity on safeguard reporting</p> <p>Clarity on design changes</p> <p>Leakage section added for VER/CER projects</p> <p>Addition of Comparison of monitored parameters with last monitoring period</p> <p>Provision of an accompanying Guide to help the user understand detailed rules and requirements</p>
1.0	10 July 2017	Initial adoption