Gold Standard for the Global Goals

TEMPLATE

MONITORING REPORT

PUBLICATION DATE **14.10.2020**

VERSION **v. 1.1**

RELATED SUPPORT **- TEMPLATE GUIDE Monitoring Report v. 1.1**

This document contains the following Sections

KEY PROJECT INFORMATION

Key Project Information

GS ID (s) of Project (s)	GS672
Title of the project (s) covered by monitoring report	Düzova Wind Power Project, Türkiye
Version number of the PDD/VPA-DD (s) applicable to this monitoring report	04
Version number of the monitoring report	05
Completion date of the monitoring report	27/02/2026
Date of project design certification	1st CP (22/11/2010) 2nd CP (16/01/2017) 3rd CP (10/09/2023)
Date of Last Annual Report	10/12/2025
Monitoring period number	3rd Crediting Period, 1st Monitoring Period
Duration of this monitoring period	11/08/2023-04/08/2025 (both days included)
Project Representative	Project Owner: Ütopya Elektrik Üretim Sanayi ve Ticaret A.Ş Project Representative: Climate Balanced İklim Enerji Ticaret ve Eğitim Ltd. Şti.
Host Country	Turkiye
Activity Requirements applied	☐ Community Services Activities ☒ Renewable Energy Activities ☐ Land Use and Forestry Activities/Risks & Capacities ☐ N/A
Methodology (ies) applied and version number	ACM0002, "Consolidated baseline methodology for grid connected electricity generation from renewable sources" version 21.0
Product Requirements applied	☒ GHG Emissions Reduction & Sequestration ☐ Renewable Energy Label ☐ N/A

Table 1 - Sustainable Development Contributions Achieved

Sustainable Development Goals Targeted	SDG Impact	Amount Achieved	Units/ Products
SDG 13 Climate Action	Reduction of CO_2 emissions and other pollutants due to implementation of project activity	Emission Reduction: 165,526 tCO_2 $NO_{x:}$: 271,46 tons SO_2: 1,260.27 tons	VERs tons tons
SDG 8 Decent Work and Economic Growth	The project provides employment. Trainings to be held.	10 employees work at WWP HSE trainings are given to all employees at the plant.	Training records, SGK (social security) records
SDG 7 Affordable and Clean Energy	Net electricity generated and delivered to the grid by the power plant in year y	259,624.318 MWh renewable energy	MWh
SDG 6 Clean Water and Sanitation	Wastewater discharge transfer records are to be provided.	Wastewater transfer receipts dated 4/08/2023,22/03/2024,25/12/2024,28/02/2025 are provided to VVB.	Wastewater discharge transfer records

Table 2 Product Vintages

		Amount Achieved
Start Dates	**End Dates**	**VERs**
11/08/2023	31/12/2023	31,005 tCO_2
1/01/2024	31/12/2024	86,550 CO_2
1/01/2025	04/08/2025	47,971 tCO_2

SECTION A. DESCRIPTION OF PROJECT

A.1. General description of project

Ütopya Elektrik Üretim Sanayi ve Tic. A.Ş. ("Ütopya Elektrik" or project owner) invests into a new wind power plant i.e. Düzova Wind Power Plant ("Düzova WPP") and granted production license by EMRA on May 2007 for 15 MW, construction work had been started on 01/06/2009, and first commissioning of the turbines occurred on 11/08/2009 and production license amended to 30 MW on April 2010. Second amendment on License Regulation on 11/08/2011, gave right to the project owner to increase mechanical installed capacity of the power plant to 40 MW, provided that electrical power capacity to be fed into the grid shall not exceed the electrical installed capacity stated in the license (30 MWe) and additional turbines shall be built in the project area. By third amendment of license on 13 March 2013, total capacity of the project is increased to 50 MW with 20 turbines each having 2.5 MW capacity.

As stated in the above paragraph, Düzova WPP consists of 20 wind turbines. 16 of them are GE 2.5xl model turbines with 2.5 MW output each having 100 m diameter rotor, 7,854 m^2 swept area and 85 m hub height. 4 of them are GE 2.75-100 model with 103 m diameter rotor, 8,332 m^2 swept area and 100 m hub height. These turbines operate as 2.5 MW (6 of them operate as 2.75 MW). The wind turbines are connected to the wind farm substation through 34.5 kV underground cables. The voltage is raised to 154 kV and is transferred to grid via a 3 km long transmission line which is connected to the bypassing Bergama-Ayvalık transmission line of TEIAS. The entire net electricity production is 152,900 MWh per year.

Annual energy yield of the first 15 MWe capacity was estimated to be 59,300 MWh and 30 MWe was estimated to be 118,100 MWh. According to the energy yield study of GL Garrad Hassan on 19 July 2013 annual energy generation for 51.5 MW capacity is estimated to be 152,900 MWh/yr. Thus, all electricity generation figures in PDD are revised in accordance with this figure.

Finally, by the fourth amendment of license on 19/09/2014, total capacity of project is increased to 51.5 MW without any additional turbines but increasing the capacity of 6 turbines (turbines numbered T13, T14, T17, T18, T19, T20) 0.25 MW from 2.5 MW to 2.75 MW. Also, the electricity generation amount stayed at same, 152,900 MWh. Since the installed capacity of the project is 51.5 MW, this project is a large-scale project. The proposed project involves the development of an onshore wind

farm with a total capacity of 51.5 MWm / 51.5 MWe which is located in Bergama District of İzmir Province in Türkiye.

The main characteristics of the project design changes are given in Table 4

Table 3 **Summary of design changes**

Explanation	Date of Issuance or Amendment	Installed Capacity (MWm/MWe)	Number of Turbines	Annual Generation (MWh/yr)
Preliminary Design	03/05/2007	15 MWm / 15 MWe	6	59,300
1. Design Change	08/04/2010	30 MWm / 30 MWe	12	97,200
2. Design Change	01/03/2012	40 MWm / 30 MWe	16	118,100
3. Design Change	13/03/2013	50 MWm / 50 MWe	20	152,900
Non-Design Change	19/09/2014	51.5 MWm / 51.5 MWe	20	152,900

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As per the generation license issued by Energy Market Regulatory Authority (EMRA)[1] on 03/05/2007 (EÜ1179-22/851) the project has a total of 20 turbines with an installed capacity of 14x2.5 MW and 6x2.75 MW, corresponding to a total capacity of 51.5 MWm/ 51.5 MWe. As per the generation license, all legal rights of the project is given to Ütopya Elektrik Üretim Sanayi ve Ticaret A.Ş. (Project Owner) for 49 years including pre-construction and construction periods[2].

The project boundary of the Düzova Wind Power Plant covers all physical and geographical components directly involved in electricity generation and delivery to

[1] Enerji Piyasasi Düzenleme Kurumu

the grid. This includes the 20 wind turbines (14 x 2.5 MW and 6 x 2.75 MW, total 51.5 MW installed capacity), the internal 34.5 kV underground cable netwo
rk, the on-site substation, and the 3 km transmission line connecting the plant to the Bergama-Ayvalık transmission line of TEİAŞ. The boundary also includes auxiliary equipment and monitoring systems (SCADA and meters) necessary for safe and reliable operation. In terms of greenhouse gas accounting, the project boundary encompasses all sources and sinks associated with electricity generation at the plant, while upstream construction activities and negligible sources are excluded as per ACM0002 methodology.

The operational lifetime of the project is about 49 years as per the license issued. According to the technical lifetime of turbines which is given as 25 years as per the tool[2] Project will be delivered to government authority at no cost at the end of license period.

Estimated generation corresponds to 97,481 tCO_2 avoided annually and 682,367 tCO_2 through 7 years of third crediting period in total. During this monitoring period emission reduction is 165,526 tCO_2.

The Project Developer confirms that no VERs corresponding to the vintage years 2023, 2024, and 2025 have been claimed, issued, or are intended to be claimed under any carbon standard or registry other than Gold Standard.

The project is exclusively registered under Gold Standard and no parallel registration or credit issuance exists under any other voluntary or compliance carbon mechanism.

Table 4 Milestones for Düzova WPP

Milestone	Date
Issuance of the license	03/05/2007
Proposal Requests from Consultants for VER Development	15/11/2008
Signature with FutureCamp GmbH for VER Development	28/01/2009
Initial Stakeholder Consultation in Aşağıkırıklar Village	13/02/2009
Electromechanical Contract Signature with GE	17/02/2009

[2] https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-10-v1.pdf

EIA Exempt Approval	13/03/2009
Date for start of construction	01/06/2009
Starting to the Operation with 6 turbines	11/08/2009
Commissioning of turbines T1, T2, T3, T4, T5, T6 6x2.5	11/08/2009
Electromechanical Contract Signature with GE for additional 6 turbines	25/05/2010
Starting date for construction of additional 6 turbines	03/09/2010
Commissioning of turbines T7, T8, T9, T10, T11, T12, T13, T14, T15, T16 12x2.5	03/09/2010
Final Validation Report	05/10/2010
Gold Standard Registration	22/11/2010
End of the first monitoring period	31/08/2010
Approval date of first design change (by GS)	09/06/2011
End of the second monitoring period	30/09/2011
EIA Exempt Approval decision after capacity increases	06/01/2012
Approval date of second design change (by GS)	15/10/2012
Construction start date for second capacity increase	05/04/2012
Operation start date for the 4 turbines	12/02/2013
Capacity increase of turbines T7, T9, T10, T15, T16 5x2.5	12/02/2013
Electromechanical Contract Signature with GE for additional 4 turbines (third capacity increase)	18/03/2013
Capacity increase of turbines T13, T14 2x2.5	16/05/2013
Construction start date for third design change	20/05/2013
End of the third monitoring period	31/05/2013
Loan Agreement for additional 4 turbines for third capacity increase	23/08/2013
Commissioning of turbines T17, T18, T19, T20 4x2.5	21/03/2014
Commercial operation date for the 50 MW (capacity increase)	21/03/2014
EIA Exempt Approval decision	12/11/2014
Capacity increase of turbines T13, T14, T17, T18, T19 and T20 (Total capacity: 51,5 MW)	06/11/2015
First crediting period (7 years)	11/08/2009 - 10/08/2016
Second crediting period (7 years)	11/08/2016 - 10/08/2023

The decision to remove turbines T13, T14 and T20 from the western free trade zone	30/12/2021
Third crediting period (7 years)	11/08/2023 - 10/08/2030
Start date of the third crediting period, first monitoring period (5th monitoring period of the project)	11/08/2023
EPDK Board Decision (12595-25): Approval of license amendment for relocation of turbines T13, T14, and T20.	02/05/2024
End date of the third crediting period, first monitoring period (5th monitoring period of the project)	04/08/2025

Main goals of the proposed project include;

- Utilization of the renewable energy potential of Türkiye in order to meet rapidly increasing electricity demand and contribute achieving energy security
- Increase share of WPPs in electricity generation mix of Türkiye and reduction of GHG emissions.
- Contribute to the national economic development by creating direct and indirect job opportunities during construction and operation phases.
- Reduce import dependency of fossil fuel dominated electricity sector and diversify of energy sources in generation mix through use of local resources.
- Contribution to sustainable development through supporting local community and local economy.

A.2. Location of project

The project site is located in the Aşağıkırıklar village, Bergama district, İzmir city, Türkiye. The project area is completely plain area without any trees. There are not any agricultural activities on proposed project area. Location of the project and the specific positions of the 20 wind turbines are presented below.

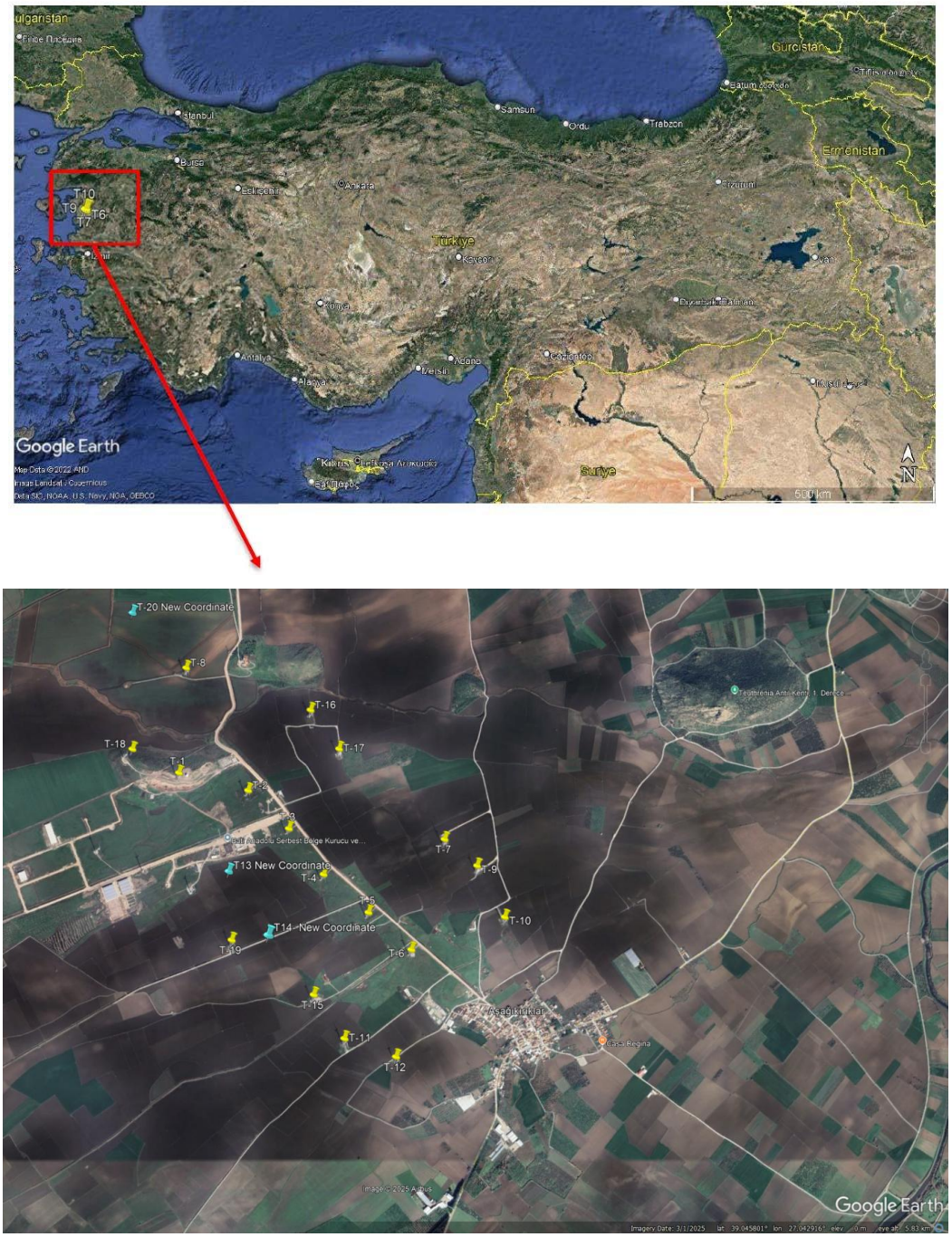


Figure 1 Physical Location of the Project

Table 5 Project Coordinates

Wind Turbine	Latitude (N)	Longitude(E)	Latitude (N)	Longitude(E)
T-1	39° 02' 50.5817"	27° 01'06.7715"	39.045702°	27.018070°
T-2	39° 02' 46.9451 "	27° 01' 24.8672"	39.044692°	27.023097°
T-3	39° 02' 39.1246"	27° 01' 35.5975"	39.042519°	27.026077°
T-4	39° 02' 29.8444"	27° 01' 44.6625"	39.039942°	27.028595°
T-5	39° 02' 22.2178"	27° 01' 56.2235"	39.037823°	27.031807°
T-6	39° 02' 14.8506"	27° 02' 07.1184"	39.035777°	27.034833°
T-7	39° 02' 36.9400"	27° 02' 15.7406"	39.041913°	27.037228°

T-8	39° 03' 12.6411"	27° 01' 07.8590"	39.051830°	27.018372°
T-9	39° 02' 31.5845"	27° 02' 24.0576"	39.040425°	27.039538°
T-10	39° 02' 21.2984"	27° 02' 30.9569"	39.037568°	27.041455°
T-11	39° 01' 57.5320"	27° 01' 50.3060"	39.030966°	27.030163°
T-12	39° 01' 54.0248"	27° 02' 03.2399"	39.029992°	27.033756°
T-13	39° 3'19.10"N	27° 01'18.58"	39.055305	27.021828°
T-14	39° 02'11.23"	27° 01'28.93	39.036453°	27.024703°
T-15	39° 02' 6.0010"	27° 01' 42.4898"	39.033319°	27.027992°
T-16	39° 03' 3.7134"	27°01' 40.8072"	39.049350°	27.027524°
T-17	39° 02' 56.9957"	27° 01' 50.6229"	39.047087°	27.029627°
T-18	39° 02' 47.5529"	27° 01' 59.9792"	39.047072°	27.014650°
T-19	39° 02' 13.5632"	27° 01' 27.1855"	39.036303°	27.022158°
T-20	39° 03'18.26"	27° 00'51.34"	39.055072°	27.014261°

The area where the T13, T14, and T20 turbines are located was declared a Free Zone by the state, requiring their relocation to new areas within the project. This relocation process is technically appropriate, environmentally sound, and does not introduce any new risks to nearby settlements. With this modification, the integrity of the project under its existing license will be maintained, continuous power generation will be ensured, and full compliance with regulations related to the Free Zone will be achieved, with no changes made to the license other than the updated coordinates of turbines T13, T14, and T20.

A.3. Reference of applied methodology

The UNFCCC approved baseline and monitoring methodology applicable to this project is ACM0002: Grid-connected electricity generation from renewable sources Version 21.0[3] was applied for the project activity. ACM0002 refers to the following tools:

- Tool 01: "Tool for the demonstration and assessment of additionality", Version 7.0.0[4], and,
- Tool 11: "Assessment of the validity of the original/current baseline and

[3] https://cdm.unfccc.int/methodologies/DB/HF3LP6O41YY0JIP1DK6ZRJO9RSCX3S
[4] https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-01-v7.0.0.pdf

update of the baseline at the renewal of the crediting period", Version 03.0.1[5]

- Tool 07: "Tool to calculate the emission factor for an electricity system", Version 07.0[6]

A.4. Crediting period of project

The start date of the third crediting period is 11/08/2023 and the end date is 10/08/2030.

- First crediting period (7 years) 11/08/2009 – 10/08/2016
- Second crediting period (7 years) 11/08/2016 - 10/08/2023
- Third crediting period (7 years) 11/08/2023 – 10/08/2030

SECTION B. IMPLEMENTATION OF PROJECT

B.1. Description of implemented project

Düzova WPP has 20 turbines each with an installed capacity of capacity of 14x2.5 MW and 14x2.500 MW and 6x2.750 MW, corresponding to a total capacity of 51.5 MWm / 51.5 MWe. The project uses GE 2.5/100 and GE 2.75/100 turbines with total electrical output capacity will be limited to 51.5 MWe. 14 of them are GE 2.5xl model turbines with 2.5 MW output each having 100 m diameter rotor, 7,854 m2 swept area and 85 m hub height. 6 of them are GE 2.75-100 model with 103 m diameter rotor, 8,332 m^2 swept area and 100 m hub height. These turbines operate as 2.5 MW (6 of them operate as 2.75 MW). The wind turbines are connected to the wind farm substation through 34.5 kV underground cables. The voltage is raised to 154 kV and is transferred to grid via a 3 km long transmission line which is connected to the bypassing Bergama-Ayvalık transmission line of TEIAS. The entire net electricity production is 152,900 MWh per year. Detailed technical characteristics of turbine model is given in the table below

Main Data	
Type	GE 2.5-100 GE 2.75-100
Diameter	100 m

[5] https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-11-v3.0.1.pdf
[6] https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-07-v7.0.pdf

Hub height	85 m
Cut-in wind speed	3.0 m/s
Cut-out-wind speed	25 m/s

Generator(T1,T2,T3,T4,T5,T6,T7,T8,T9,T10,T11,T12)	
Manufacturer	ABB
Vendor designation	AMG 0500 LN08 AAM
Rated Power	2640 kW
Rated voltage	710 V

Generator (T15,T16,T13,T14)	
Manufacturer	WINERGY
Vendor designation	JQRC-560M5-08A
Rated Power	2640 kW
Rated voltage	710 V

Generator (T17,T18,T19,T20)	
Manufacturer	INDAR
Vendor designation	TAR630G4B50N
Rated Power	2875 kW
Rated voltage	690 V

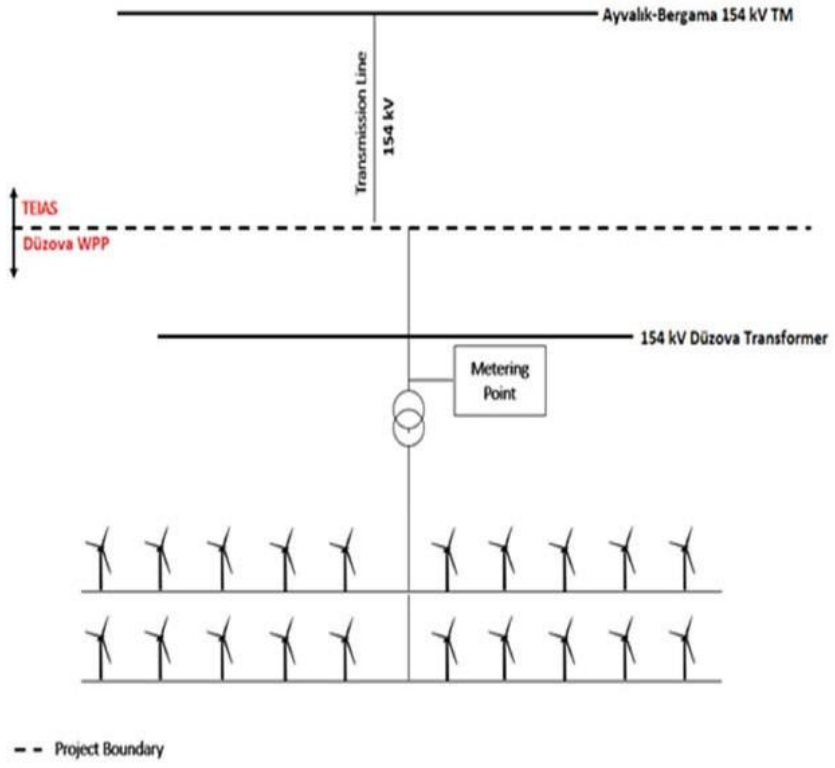


Figure 2 Electrical Single Line Diagram

Table 6 Specification of meters are as follow: First metering point (A)

	Main Meter	Spare Meter
Brand	EMH	EMH
Type	LZQJ-XC	LZQJ-XC
Class	0.2S	0.5S
Serial number	11590286	8088829
Date of calibration	28/08/2022	08/10/2019
Due date of calibration	08/2032	10/2029
Testing Dates	23/09/2024	24/10/2020 28/08/2022 23/09/2024

Table 7 Specification of meters are as follow: Second metering point (B)

	Main Meter	Spare Meter
Brand	EMH	EMH
Type	LZQJ-XC	LZQJ-XC
Class	0.2S	0.5S
Serial number	11590287	8088830
Date of calibration	28/08/2022	09/10/2019
Due date of calibration	08/2032	10/2029
Testing Dates	23/09/2024	24/10/2020 28/08/2022 23/09/2024

B.1.1 Forward Action Requests

According to verification report of the 4th MP of the 2nd Crediting Period, there are 2 FARs

#FAR01.

GS VVBs shall resume on-site visit in all future monitoring period verification.

Response: Last site visit has been conducted on 04/08/2025.

#FAR02

PP shall maintain regular checks for stakeholder's logbook since it went missing once. When not available, the book shall be replaced immediately. VVB shall include assessment in all future verifications.

Response: During this verification period, a new logbook was delivered following a meeting with the Aşağıkırıklar muhktar. Records confirming the delivery have been submitted to the VVB.

According to 3rd Crediting Period Design Renewal Review, there are 2 FARs.
#FAR01
In-line with GS4GG Principles and Requirements, VVB and PP shall consider the rule below for future monitoring activities:
5.1.39: An annual update report shall be provided to GS -when design certification is achieved- for each monitoring year by the end of next calendar year for which verification is not completed. (VVB: has been added into the report as FAR 01)
Response: The Annual Update Report dated 10/12/2025 was uploaded to the Gold Standard platform on 26/12/2025.
#FAR02
During the next verification the VVB shall provide clarification on minimum site visit requirements.
Response: The last site visit was conducted on 04/08/2025, while the previous site visit was conducted on 03/05/2023. Therefore, the minimum site visit requirement has been fulfilled.

B.2. Post-Design Certification changes
B.2.1. Temporary deviations from the approved Monitoring & Reporting Plan, methodology or standardized baseline
There is no revision in the monitoring plan of the project.

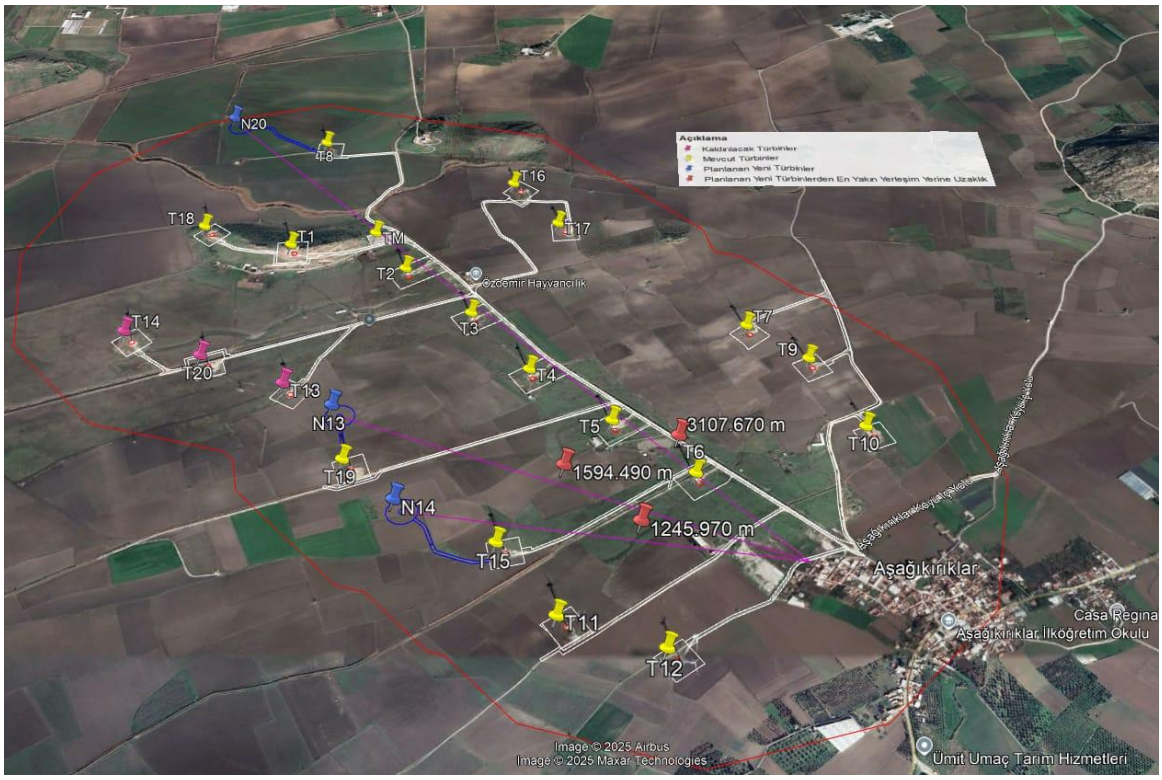
B.2.2. Corrections
Pursuant to the decision of the Energy Market Regulatory Authority (EMRA) dated 30/12/2021 and numbered 10668-13, it has become necessary to relocate turbines T13, T14, and T20 located within the licensed wind power plant (WPP) project owned by Ütopya Elektrik Üretim Sanayi ve Ticaret A.Ş. outside the boundaries of the Western Anatolia Free Zone.
The new locations selected for these three turbines not only comply with the requirement to move them outside the Free Zone, but were also carefully chosen to remain within the boundaries of the licensed project area. Thus, the turbines will not be relocated outside the licensed site. The new positions are in close proximity to the

original locations, minimizing environmental, technical, and social impacts. The technical specifications and coordinates of the relocated turbines are summarized in the table below:

Turbine No	Old Coordinates (Lat, Long)	New Coordinates (Lat, Long)
T13	39° 2'21.46", 27° 1'9.46"	39° 3'19.10",27° 1'18.58"
T14	39° 2'29.71", 27° 0'44.71"	39° 2'11.23", 27° 1'28.93"
T20	39° 2'25.84", 27° 0'56.77"	39° 3'18.26", 27° 0'51.34"

These relocations have been planned in a manner that helps reduce the environmental impacts of the turbines, including noise, shadow flicker, and visual effects. During the site selection process for the new locations, factors such as topography, wind regime, constructability, accessibility, and the existing power transmission infrastructure were taken into account. According to the conducted analyses, no adverse impact on the energy production efficiency of the turbines is expected.

In addition, the distances of the new turbine locations to the nearest residential areas have been analyzed. In particular, the distances to Aşağıkırıklar Village have been carefully evaluated, and it has been confirmed that all turbines remain well within the required legal limits. Furthermore, some of the new turbine locations are situated at greater distances from residential areas compared to their original positions. The table below presents the distances of the new turbine locations to the nearest residential area:



Current turbines

Turbines planned to be relocated

New locations of turbines planned to be relocated

Distance of turbines to the nearest residential area after planned relocation

Table 8 istances from New Turbine Locations to the Nearest Residential Area

Turbine No	Nearest Settlement	Nearest Settlement
N13	Aşağıkırıklar	1.594,490 m
N14	Aşağıkırıklar	1.245,970 m
N20	Aşağıkırıklar	3.107,670 m

These turbine relocations have been carried out solely due to the redefinition of the Free Zone boundary and are limited to adjustments within the licensed project area. The relocation process has been implemented entirely within the boundaries of the licensed site and in full compliance with the licensing conditions. In doing so, the licensing requirements set forth by the Energy Market Regulatory Authority (EMRA) have been preserved, while also ensuring adherence to principles of environmental sustainability.

In conclusion, the turbine relocation process is technically appropriate, environmentally sound, and does not introduce any new risks in relation to nearby settlements. Through this modification, the integrity of the project under its existing license will be maintained, continuous power generation will be ensured, and full compliance with regulations related to the Free Zone will be achieved. No changes will be made to the license other than the coordinates of turbines T13, T14, and T20.

B.2.3. Changes to start date of crediting period

Not applicable

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

Not applicable.

B.2.5. Changes to project design of approved project

Not applicable.

SECTION C. DESCRIPTION OF MONITORING SYSTEM APPLIED BY THE PROJECT

Data handling was slightly revised due to innovation in technology that enables TEİAŞ to read meters remotely. Thus, under this process, the meter is read remotely at the end of every month and published through website of TEİAŞ which can be accessed by project owner to check the correctness of the data. Besides, the data that is read by TEİAŞ, project owner carries monthly protocol to cross-check the data. Once the meter data is correct then the amount is also published in TEİAŞ website which is also accessible by project owner. When all data is correct, an invoice (receipt of sale) is prepared by Ütopya Elektrik and delivered to TEIAŞ. Since that date, EPIAS supplies the data. So that, monthly data from EPIAS are stored electronically on EPIAS website and this data can be accessed by login of Project Developer. Düzova WPP also stores a hardcopy of the monthly meter reading protocols for back up of systematic storage of data.

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 are treated as negligible.

Four meters are installed in a redundant manner keeps the uncertainty level of the only parameter for baseline calculation low. High data quality of this parameter is not only in the interest of the emission reduction monitoring, but paramount for the business relation between the plant operator and the electricity buyer.

On the last day of each month, the production index is taken from the main as well as the reserve meter by Energy Markets Regulatory Authority (EMRA). In following month, EPİAŞ issue electricity generation records which can be accessed by plant operators via logging to secured website. These records are used to monitor net monthly generation of the power plant. For each month, the net electricity amount supplied to the grid is calculated by electricity fed into grid minus electricity withdrawn from the grid available in EPİAŞ records.

TEIAS notices are used to cross-check the EPİAŞ records. TEIAS sends an electronic spreadsheet which includes daily and monthly electricity generation and withdrawn amounts for each power plant.

The data are kept by the project owner at least two years after the last issuance of GS VERs. Besides the data that can be get from meters, production amount can be

checked from SCADA system of GE. SCADA figures differ a bit with meter data due to internal losses.

To ensure the reliability of monitored electricity generation data, not only the metering system but also the operational continuity of the turbines is systematically controlled. Therefore, annual preventive maintenance of the wind turbines is carried out in accordance with the manufacturer's technical requirements to ensure operational reliability and sustained performance. During the monitoring period, scheduled maintenance activities were performed turbine by turbine. In 2023, annual maintenance was conducted sequentially between July and October. In 2024, maintenance activities were carried out between May and October, and in 2025, annual maintenance was again performed individually for each turbine between May and October.

Maintenance activities are documented and archived by the Project Owner. Planned maintenance activities required temporary turbine shutdowns during the maintenance windows, and such operational interruptions are reflected in the monitored electricity generation data.

Breakdown events, if any, are recorded in the turbine fault logbook and monitored through the SCADA system. No abnormal or long-term downtime affecting monitoring integrity was identified during the current monitoring period.

These procedures ensure continuous operational control and support the accuracy and consistency of monitored electricity generation data.

Operation and management diagram is presented below.

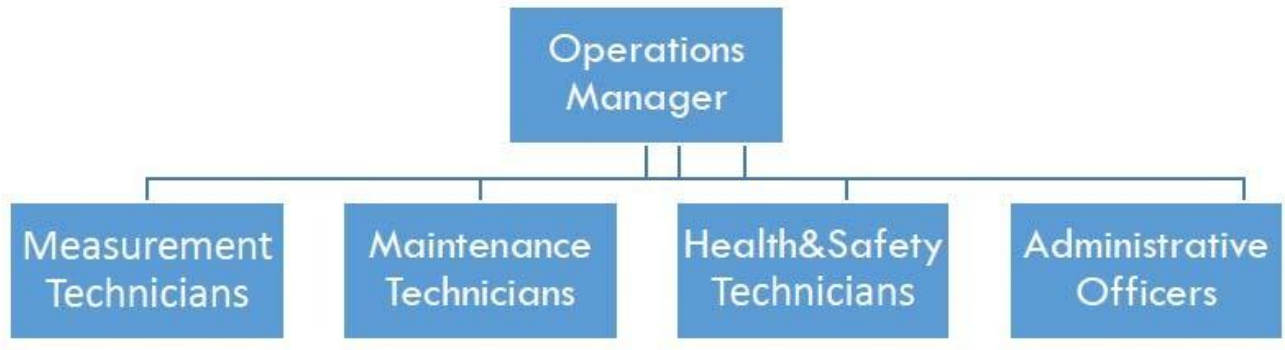


Figure 3 Operation and Management Diagram of the Düzova WPP

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:

According to the Article 2 of the 'Communiqué regarding the Meters to be used in the Electricity Market ': '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' (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 are done every 10 years.

Table 9 Specification of meters are as follow: First metering point (A)

	Main Meter	Spare Meter
Brand	EMH	EMH
Type	LZQJ-XC	LZQJ-XC
Class	0.2S	0.5S
Serial number	11590286	8088829
Date of calibration	28/08/2022	08/10/2019
Due date of calibration	08/2032	10/2029
Testing Dates	23/09/2024	24/10/2020 28/09/2022 23/09/2024

Table 10 Specification of meters are as follow: Second metering point (B)

	Main Meter	Spare Meter
Brand	EMH	EMH
Type	LZQJ-XC	LZQJ-XC
Class	0.2S	0.5S
Serial number	11590287	8088830
Date of calibration	28/08/2022	09/10/2019
Due date of calibration	08/2032	10/2029

Testing Dates	23/09/2024	24/10/2020 28/08/2022 23/09/2024

As the measuring devices are sealed by TEIAŞ, Ütopya Elektrik cannot intervene with the devices. In case of unforeseen problems or failures of the meters or if any differences occur between primary and secondary devices TEIAŞ has to be informed for necessary maintenance and calibration. There is an agreement between Ütopya Elektrik and TEIAŞ that in case of problems or failures of the meters TEIAŞ reacts as fast as possible to solve the problem. The electrical single line diagram is shown in Figure 3.

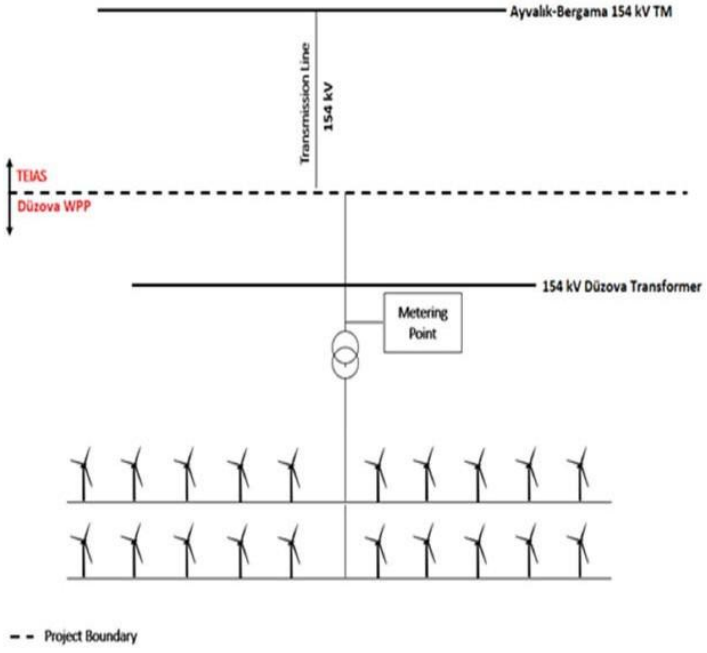


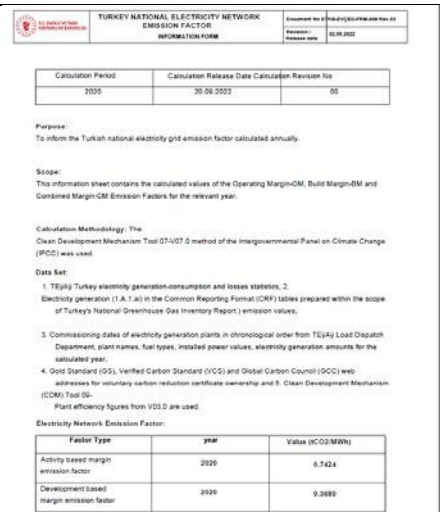
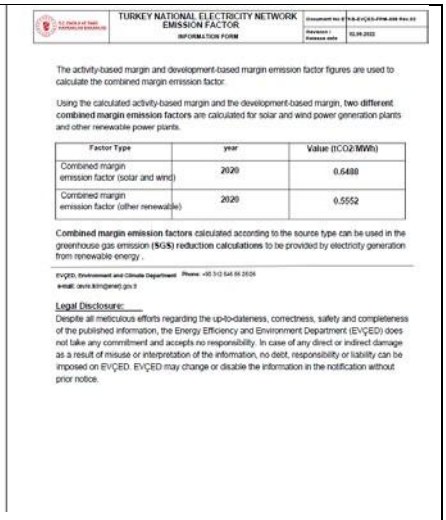
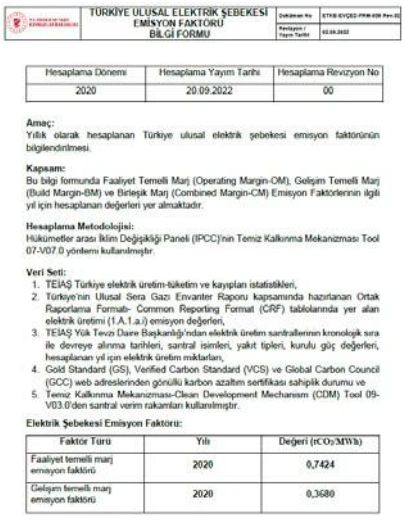
Figure 4 Electrical Single Line Diagram

SECTION D. DATA AND PARAMETERS

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

SDG 13

Data/parameter	$EF_{grid,CM,y}$
Unit	tCO_2/MWh
Description	Combined margin CO_2 emission factor for the project electricity system in year y
Source of data	Ministry of Energy and Natural Resources, OM & BM values

	 TURKEY NATIONAL ELECTRICITY NETWORK EMISSION FACTOR INFORMATION FORM Calculation Period: 2020 | Calculation Release Date Calculation: 30.09.2022 | Revision No: 00 Purpose: To inform the Turkish national electricity grid emission factor calculated annually. Scope: This information sheet contains the calculated values of the Operating Margin-OM, Build Margin-BM and Combined Margin-CM Emission Factors for the relevant year. Calculation Methodology: The Clean Development Mechanism Tool 07-V07.0 method of the Intergovernmental Panel on Climate Change (IPCC) was used. Data Set: 1. TEİAŞ Turkey electricity generation-consumption and losses statistics, 2. Electricity generation (1.A.1.a) in the Common Reporting Format (CRF) tables prepared within the scope of Turkey's National Greenhouse Gas Inventory Report) emission values, 3. Commissioning dates of electricity generation plants in chronological order from TEİAŞ Load Dispatch Department, plant names, fuel types, installed power values, electricity generation amounts for the calculated year, 4. Gold Standard (GS), Verified Carbon Standard (VCS) and Global Carbon Council (GCC) web addresses for voluntary carbon reduction certificate ownership and 5. Clean Development Mechanism (CDM) Tool 09- Plant efficiency figures from V03.0 are used. Electricity Network Emission Factor: Factor Type | year | Value (tCO2/MWh) Activity based margin emission factor | 2020 | 0.7424 Development based margin emission factor | 2020 | 0.3680  TURKEY NATIONAL ELECTRICITY NETWORK EMISSION FACTOR INFORMATION FORM The activity-based margin and development-based margin emission factor figures are used to calculate the combined margin emission factor. Using the calculated activity-based margin and the development-based margin, two different combined margin emission factors are calculated for solar and wind power generation plants and other renewable power plants. Factor Type | year | Value (tCO2/MWh) Combined margin emission factor (solar and wind) | 2020 | 0.6488 Combined margin emission factor (other renewable) | 2020 | 0.5552 Combined margin emission factors calculated according to the source type can be used in the greenhouse gas emission (SGS) reduction calculations to be provided by electricity generation from renewable energy . EVÇED, Environment and Climate Department Phone: +90 312 646 86 2626 e-mail: cevre.iklim@enerji.gov.tr Legal Disclosure: Despite all meticulous efforts regarding the up-to-dateness, correctness, safety and completeness of the published information, the Energy Efficiency and Environment Department (EVÇED) does not take any commitment and accepts no responsibility. In case of any direct or indirect damage as a result of misuse or interpretation of the information, no debt, responsibility or liability can be imposed on EVÇED. EVÇED may change or disable the information in the notification without prior notice.  TÜRKİYE ULUSAL ELEKTRİK ŞEBEKESİ EMİSYON FAKTÖRÜ BİLGİ FORMU Hesaplama Dönemi: 2020 | Hesaplama Yayım Tarihi: 20.09.2022 | Hesaplama Revizyon No: 00 Amaç: Yıllık olarak hesaplanan Türkiye ulusal elektrik şebekesi emisyon faktörünün bilgilendirilmesi. Kapsam: Bu bilgi formunda Faaliyet Temelli Marj (Operating Margin-OM), Gelişim Temelli Marj (Build Margin-BM) ve Birleşik Marj (Combined Margin-CM) Emisyon Faktörlerinin ilgili yıl için hesaplanan değerleri yer almaktadır. Hesaplama Metodolojisi: Hükümetler arası İklim Değişikliği Paneli (IPCC)'nin Temiz Kalkınma Mekanizması Tool 07-V07.0 yöntemi kullanılmıştır. Veri Seti: 1. TEİAŞ Türkiye elektrik üretim-tüketim ve kayıpları istatistikleri, 2. Türkiye'nin Ulusal Sera Gazı Envanter Raporu kapsamında hazırlanan Ortak Raporlama Formatı- Common Reporting Format (CRF) tablolarında yer alan elektrik üretimi (1.A.1.a.i) emisyon değerleri, 3. TEİAŞ Yük Tevzi Daire Başkanlığı'ndan elektrik üretim santrallerinin kronolojik sıra ile devreye alınma tarihleri, santral isimleri, yakıt tipleri, kurulu güç değerleri, hesaplanan yıl için elektrik üretim miktarları, 4. Gold Standard (GS), Verified Carbon Standard (VCS) ve Global Carbon Council (GCC) web adreslerinden gönüllü karbon azaltım sertifikası sahiplik durumu ve 5. Temiz Kalkınma Mekanizması-Clean Development Mechanism (CDM) Tool 09-V03.0'den santral verim rakamları kullanılmıştır. Elektrik Şebekesi Emisyon Faktörü: Faktör Türü | Yılı | Değeri (tCO2/MWh) Faaliyet temelli marj emisyon faktörü | 2020 | 0,7424 Gelişim temelli marj emisyon faktörü | 2020 | 0,3680  TÜRKİYE ULUSAL ELEKTRİK ŞEBEKESİ EMİSYON FAKTÖRÜ BİLGİ FORMU Faaliyet temelli marj ve gelişim temelli marj emisyon faktörü rakamları birleşik marj emisyon faktörünün hesaplanmasında kullanılmaktadır. Hesaplanan faaliyet temelli marj ve gelişim temelli marj kullanılarak güneş ve rüzgâr kaynaklı elektrik üretim santralleri ve diğer yenilenebilir enerji santralleri için iki farklı birleşik marj emisyon faktörü hesaplanmıştır. Faktör Türü | Yılı | Değeri (tCO2/MWh) Birleşik marj emisyon faktörü (güneş ve rüzgâr) | 2020 | 0,6488 Birleşik marj emisyon faktörü (diğer yenilenebilir) | 2020 | 0,5552 Yenilenebilir enerji kaynaklı elektrik üretimi ile sağlanacak sera gazı salım (SGS) azaltım hesaplamalarında kaynak türüne göre hesaplanan birleşik marj emisyon faktörleri kullanılabilecektir. EVÇED, Çevre ve İklim Daire Başkanlığı Telefon: +90 312 646 86 2626 e-posta: cevre.iklim@enerji.gov.tr Yasal Bilgilendirme: Yayımlanan bilgilerin güncelliği, doğruluğu, güvenliği ve tamlığı konusunda tüm titiz çalışmalara rağmen olabilecek hatalardan Enerji Verimliliği ve Çevre Dairesi (EVÇED) hiçbir taahhüt altına girmez ve sorumluluk kabul etmez. Bilgilerin yanlış kullanılması veya yorumlanması sonucunda doğrudan veya dolaylı bir zarar oluşması halinde EVÇED'e hiçbir borç, sorumluluk veya mükellefiyet yüklenemez. EVÇED bilgilendirmede yer alan bilgileri önceden bildirimde bulunmaksızın değiştirebilir veya kullanım dışı bırakabilir. https://enerji.gov.tr//Media/Dizin/EVCED/tr/ÇevreVeİklim/İklimDeğişikliği/TUESEmisyonFktr/Belgeler/2020_Sebeke_EF.pdf Weblink might not be accessible outside of Türkiye, therefore, screenshots are provided.
Value(s) applied	EFgrid,CM,y = EFgrid,OM,y x 0.75 + EFgrid,BM,y x 0.25 As given by the Ministry of Energy and Natural Resources, built margin is 0.3680 and operating margin is 0.7424. However, as per Tool 7 paragraph 72, build margin of second crediting period is used for the build margin value of the third crediting period. EFgrid,CM,y = 0.7424 x 0.75 + 0.3230 x 0.25 = 0.6376 tCO_2/MWh
Choice of data or Measurement methods and procedures	The coefficients are taken as 0.75 and 0.25 for OM and BM, respectively according to the methodology.
Purpose of data	To calculate baseline emission
Additional comment	-

D.2 Data and parameters monitored
SDG 13

Data/parameter	Emissions Reductions in tCO_2
Unit	tCO_2
Description	Reduction of CO_2 emissions due to implementation of project activity
Source of data	Electricity generated by the project and Türkiye's national electricity grid emission factor which is provided by Ministry of Energy and Natural Resources is used as reference in calculation of the emission reduction.
Value(s) applied	165,526 tons of CO_2.
Measurement methods and procedures	Net electricity supplied by the project is continuously measured via main and backup electricity meters (. Data are read monthly through the Automatic Meter Reading System (OSOS) by EPIAŞ and cross-checked with TEİAŞ records. Calculations follow ACM0002 methodology using: $ER = EG_{PJ,y} \times EF_{grid,CM,y}$. Data are verified by the Project Engineer and stored both electronically (EPIAŞ portal) and in hardcopy by the Project Owner.
Monitoring frequency	Continuous measuring, monthly recording
QA/QC procedure	Electricity generation which makes base for calculation of emission reductions is metered by appropriate electricity meters which comply with the regulations. QA/QC procedures for these meters (provided in table of $EG_{PJ,facility,y}$) apply for this parameter as well.
Purpose of data	To calculate the baseline emission value; and also to monitor the contribution to SDG 13 (Take urgent action to combat climate change and its impacts)
Additional comment	-

Data/parameter	Air Quality
Unit	tons
Description	Reduction of SO_2 and NO_x , emission due to implementation of project activity that would otherwise be emitted by thermal power plants

Source of data	Electricity generated by Düzova WPP and NO_X and SO_2 emission data from GHG inventory of Türkiye is used as reference in calculation of the emission reduction.
Value(s) applied	Total NO_x emission related to electricity generation is about 320.68 kt for 2020 according to National Inventory of Türkiye . NO_x emission per MWh is calculated as 1.05 kg /MWh. Therefore, the NO_x emission reduction is calculated as 271.46 tons per monitoring period. SO_2 emission per MWh is calculated as 4.85 kg /MWh. Therefore, the SO_2 emission reduction is calculated as 1,260.27 tons per monitoring period.
Measurement methods and procedures	The net electricity supplied by the Project is continuously measured and recorded by EPIAS; and kept by the Project Owner. NO_x and SO_2 emission data from GHG inventory of Türkiye is used as reference in calculation of the emission reduction. Calculations follow using: Air Quality = EPIAS electricity generation data × emission factor (kg/MWh)
Monitoring frequency	Yearly
QA/QC procedure	Electricity generation which makes base for calculation of emission reductions is metered by appropriate electricity meters which comply with the regulations. QA/QC procedures for these meters (provided in table of $EG_{PJ,facility,y}$) apply for this parameter as well.
Purpose of data	To calculate the baseline emission value; and also to monitor the contribution to SDG 13 (Take urgent action to combat climate change and its impacts)
Additional comment	-

SDG 7

Data/parameter	$EG_{PJ,facility,y}$
Unit	MWh
Description	Quantity of net electricity generation supplied by the project plant to the grid in year y
Source of data	Electricity meter(s) EPİAŞ records/screenshots are the main source

Value(s) applied

EPIAS(Main Source)	
Monitoring Period	**Electricity Generation (MWh)**
2023	48,630.669
2024	135,750.514
2025	75,243.135
Total	**259,624.318**

TEIAS(Cross-Check)	
Monitoring Period	**Electricity Generation (MWh)**
2023	47,107.391
2024	135,716.826
2025	72,248.178
Total	**255,072.395**

Measurement methods and procedures

$EG_{PJ,grid,y}$ calculation is done by EPIAS records (screenshots) and which are more conservative than the site records.

On the last day of each month, the production index is taken from the main as well as the reserve meter by Market Financial Settlement Center (in Turkish EPİAŞ, a state institution responsible for electricity market settlement operations) via Automatic Meter Reading System (OSOS) In following month, EPİAŞ issue electricity generation records for each generation unit which can be accessed by plant operators via logging to secured website. These records are used to monitor net monthly generation of the power plant. For each month, the net electricity amount supplied to the grid is calculated by electricity fed into grid minus electricity withdrawn from the grid available in EPİAŞ records.

Monthly meter reading protocols, which are kept by staff, are used to cross-check the EPİAŞ records. TEIAS sends an electronic spreadsheet that includes daily and monthly electricity generation and withdrawn amounts for each power plant. Thus, cross-check source is the TEIAS meter readings. ID specifications of the metering device used at transformer center are;

First metering point (A)

	Main Meter	Spare Meter
Brand	EMH	EMH
Type	LZQJ-XC	LZQJ-XC
Class	0.2S	0.5S
Serial number	11590286	8088829
Date of calibration	28/08/2022	08/10/2019
Due date of calibration	08/2032	10/2029
Testing Dates	23/09/2024	24/10/2020 28/08/2022

<table>
<tr><td></td><td>
<table>
<tr><td></td><td></td><td>23/09/2024</td></tr>
<tr><td colspan="3">Second metering point (B)</td></tr>
<tr><td></td><td>Main Meter</td><td>Spare Meter</td></tr>
<tr><td>Brand</td><td>EMH</td><td>EMH</td></tr>
<tr><td>Type</td><td>LZQJ-XC</td><td>LZQJ-XC</td></tr>
<tr><td>Class</td><td>0.2S</td><td>0.5S</td></tr>
<tr><td>Serial number</td><td>11590287</td><td>8088830</td></tr>
<tr><td>Date of calibration</td><td>28/08/2022</td><td>09/10/2019</td></tr>
<tr><td>Due date of calibration</td><td>08/2032</td><td>10/2029</td></tr>
<tr><td>Testing Dates</td><td>23/09/2024</td><td>24/10/2020
28/08/2022
23/09/2024</td></tr>
</table>
</td></tr>
<tr><td>Monitoring frequency</td><td>Continuous measurement and at least monthly recording</td></tr>
<tr><td>QA/QC procedure</td><td>In cases where electricity meters are regulated (e.g. the electricity is supplied to the electric grid), the electricity meter is subjected to regular maintenance and testing in accordance with the stipulation of the meter supplier and/or as per the requirements set by the grid operators or national requirements. The calibration of meters, including the frequency of calibration, should be done in accordance with national standards or requirements set by the meter supplier or requirements set by the grid operators. The accuracy class of the meters should be in accordance with the stipulation of the meter supplier and/or as per the requirements set by the grid operators or national requirements.
Date of calibration of the meters are provided above, as stated in first index protocols. Hence, this calibration valid for ten years [7] according to regulations related with metering devices.
Additionally, the meter tests were done and there is no issue in the condition of the meters. The meters shall be calibrated every 10 years.
The backup meters was installed and calibrated on 08/12/2019 so that next calibration will be carried out for the backup meters in 12/2029. The main meters have been changed on 28/08/2022, therefore, their next calibration has to be in August 2032.</td></tr>
</table>

[7] https://www.resmigazete.gov.tr/eskiler/2008/08/20080807-3.htm

Purpose of data	To calculate emission reduction value by using renewable energy and understand its impact on renewable energy share in total energy consumption under the concept of SDG 7.
Additional comment	-

SDG 8

Data/parameter	Quantitative employment and income generation
Unit	Number of locally recruited staff and their social security records
Description	Ensuring that the staff receives their full salaries on time.
Source of data	Social Security Records to be provided by the Project Owner.
Value(s) applied	The project employs 10 people during operation.
Measurement methods and procedures	The project owner is committed to ensuring that the staff receives their full salaries on time. Number of employees and the evidence for their wages being paid checked from the social security records, which provided by the Project Owner.
Monitoring frequency	Annually
QA/QC procedure	Social security records provided by the Project Developer.
Purpose of data	To monitor the contribution to SDG 8.
Additional comment	Reference documents are social security records of project staff.

Data/parameter	Quality of Employment
Unit	Number of certificates issued/trainings provided
Description	Contribution to quality of employment by ensuring that the staff is trained and certified for the required positions
Source of data	Training Records (including H&S) & Other Certificates required by certain professions, if necessary
Value(s) applied	At least 1 HSE training was given to all employees. HSE training is conducted on; 15/11/2023-16/11/2023 04/11/2024-05/11/2024 23/12/2024-24/12/2024
Measurement methods and procedures	All employees attend health and safety trainings. For positions requiring specific skills, staff who are either trained or certified are recruited.

Monitoring frequency	Annually
QA/QC procedure	The training programmes help increase the efficiency of the workforce and provides employees skilled at their job. This not only helps the company but to self- improvement of individual employees.
Purpose of data	To monitor the contribution to SDG 8 and Principle 3.
Additional comment	Reference documents for this parameter are training certificates of the staff.

SDG 6

Data/parameter	Water Quality and Quantity
Unit	-
Description	Appropriate disposal of wastewater as required by the Law on Water Pollution Control
Source of data	Assessing collection methods during site visits and checking waste disposal records.
Value(s) applied	<table><tr><th>Wastewater Receipts</th><th>Date</th></tr><tr><td>1</td><td>4.08.2023</td></tr><tr><td>2</td><td>22.03.2024</td></tr><tr><td>3</td><td>25.12.2024</td></tr><tr><td>4</td><td>28.02.2025</td></tr></table>
Measurement methods and procedures	Domestic wastewater is collected and disposed to the sewage system via trucks; and the disposal records is kept by the Project Owner
Monitoring frequency	Annually
QA/QC procedure	Disposal records (sewage truck) is kept by the project owner for QA/QC purposes.
Purpose of data	To monitor the contribution to SDG 6 and Principle 9.4.
Additional comment	-

Data/parameter	Principle 4.3 Land Tenure and Other Rights -Compensation for expropriation.
Unit	Number of certificates issued/trainings provided
Description	Expropriation was needed for a small area within the project boundaries.
Source of data	Compensation documents
Value(s) applied	Expropriation works are continuing for the project site. So far, the deed of consents of many lands has been finalized and some lands have been purchased by the project owner. The documents (deed of consent documents) showing the current status of the lands are used as

	reference. Works on this subject is continue in the coming period.
Measurement methods and procedures	Compensation documents
Monitoring frequency	Annually
QA/QC procedure	-
Purpose of data	To monitor the contribution to SDG 8 and Principle 4.3.
Additional comment	Expropriation process has been going on. Official compensation documents are as reference documents.

Data/parameter	Principle 9.5 Hazardous and Non-hazardous Waste – Other Pollutants
Unit	-
Description	Proper management of waste oil
Source of data	Assessing disposal methods during site visits and checking waste oil disposal records.
Value(s) applied	During this monitoring period, 1,490 kg of waste oil was avoided in compliance with regulations.
Measurement methods and procedures	Waste oil from equipment is collected properly in line with the relevant regulation and disposed via accredited abatement companies. Waste oil is disposed in line with regulation #26952 on control of waste oils.
Monitoring frequency	Annually
QA/QC procedure	Disposal records kept by the project owner for QA/QC purposes.
Purpose of data	To monitor the contribution to Principle 9.5.
Additional comment	-

Data/parameter	Principle 9.9 Animal Welfare - Biodiversity
Unit	-
Description	Ensuring that the Project creates no disturbance to the regional habitat
Source of data	Data are obtained from the 2014 ornithological field study, the official 2024 opinion issued by DKMP confirming the area's ecological status, and routine operational monitoring records collected by on-site personnel during regular inspections.
Value(s) applied	The ornithology study shows that the project area is not located on a major migration route and overall bird

	activity is low. During the site visit, staff confirmed that no bird fatalities were observed. Therefore, regular bird monitoring is not conducted, as in Türkiye such monitoring is only required by the Ministry when deemed necessary. In addition, DKMP's official opinion states that the site lies outside protected areas.
Measurement methods and procedures	Ornithology studies had been conducted to ensure there is no disturbance to the regional habitat.
Monitoring frequency	Annually
QA/QC procedure	The logbook placed at the village head's office is checked regularly to see if any carcass have been spotted by the local people
Purpose of data	To monitor the contribution to Principle 9.9.
Additional comment	-

Data/parameter	Principle 4.1 - Sites of Cultural and Historical Heritage - Archaeological Site Control
Unit	-
Description	The impact of the turbines to the archaeological site
Source of data	Project Proponent, inputs/grievances from the stakeholders
Value(s) applied	There is no adverse impact on the archaeological site
Measurement methods and procedures	Conservation plans developed by Ministry of Culture and Tourism and Project Proponent
Monitoring frequency	Conservation plans developed by Ministry of Culture and Tourism and Project Proponent
QA/QC procedure	Once Each Verification
Purpose of data	The logbook placed at the village head's office checked regularly to see if any local people noticed any impact, which is highly unlikely as all the permits have been taken and completed.
Additional comment	To demonstrate that the project does not impact the archaeological site

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

Not applicable since not a community Service Activities.

D.4. Implementation of sampling plan

No sampling plan is applied in the registered PDD[8].

[8] PDD version 4 dated on 06/02/2024

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 and Sanitation

In the baseline scenario, no wastewater discharge to the environment in the project area.

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.

SDG 13: Climate Action

Baseline emissions (BE_y) are calculated as follows:

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

Where;

BE_y =Baseline emission in year y (tCO_2e)

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

$EF_{grid,CM,y}$= Combined margin CO_2 emission factor in year y (tCO_2/MWh)

During this monitoring period;

BE_y= 259,624.318 x 0.6376

= 165,526 tCO_2 (Rounded value)[9]

Monitoring Period		Emission Reduction (tCO_2e)
11/08/2023	31/12/2023	31,005
1/01/2024	31/12/2024	86,550
1/01/2025	04/08/2025	47,971
Total		**165,526**

[9] Please see the ER sheet for detailed calculation.

Indirect GHG Emissions- Air Quality

There would be a potential fossil fuel generation activity if this WPP were not implemented. In this scenario of electricity generation, there is emissions of SO_2, NO_x. The baseline value for a potential emission of SO_2, and NO_x due to a fossil fuel-fired energy generation is calculated as follow:

First of all, emissions for per GWh of fossil fuel-fired electricity are required to calculate how many tons of emissions would have been observed from such fossil fuel-fired electricity generation. These default values have been calculated in the registration period as:

- 4.85 kg/MWh for SO_2
- 1.05 kg/MWh for No_x

Then, the emissions of these compounds are calculated as follow:

Emission Amount by Project Activity per (tons) = Electricity Generation of Project Activity x Emission per kg/MWh/1000

This yields as:

Monitoring Period		SO_2 tons	NO_x tons
11/08/2023	31/12/2023	236.06	50.85
1/01/2024	31/12/2024	658.96	141.94
1/01/2025	04/07/2025	365.25	78.67
Total		1,260.27	271.46

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

SDG 13: Climate Action

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 tCO_2/year.

Indirect GHG Emissions- Air Quality

There are no SO_2 and NOx emissions due to the project activity.

SDG 8: Decent Work and Economic Growth

In this monitoring period, 10 workers have been employed. Also, all employees at the plant have been provided Health&Safety Trainings at least once in years.

SDG 7: Affordable and Clean Energy

The project generates 259,624.318 MWh for the whole monitoring period (725 days) and contributes to share of low-cost / must-run sources.

SDG 6 Clean Water and Sanitation

Domestic wastewater is collected and disposed to the sewage system via trucks.

Wastewater Receipts	Date
1	04/08/2023
2	22/03/2024
3	25/12/2024
4	28/02/2025

E.3. Calculation of leakage

LE_y is 0, as it is not considered according to ACM0002 version 21.

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 & Air Quality	Emission Reduction:165,526 tCO_2 Air Quality Impact: SO_2:1,260.27 tons NO_x:271.46 tons	Emission Reduction:0 tCO_2 Air Quality Impact: SO_2:0 tons NO_x:0 tons	Emission Reduction:165,526 tCO_2 Air Quality Impact: SO_2:1,260.27 tons NO_x:271.46 tons
8	Quantitative Employment and Income Generation & Qualitative Employment	Quantitative Employment: No employment. Qualitative Employment: No training	10 Employees work at WPP. HSE trainings are given to all employees at the plant	10 Employees work at WPP. HSE trainings are given to all employees at the plant
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 Düzova WPP is	Access to affordable and clean energy services: 259,624.318 MWh	Access to affordable and clean energy services: 259,624.318 MWh

		not being implemented		
6	Clean Water and Sanitation	No wastewater to be discharged to the environment in the project area	Domestic wastewater is collected and disposed to the sewage system via trucks. **Wastewater Receipts** / **Date** 1 / 04/08/2023 2 / 22/03/2024 3 / 25/12/2024 4 / 28/02/2025	Domestic wastewater is collected and disposed to the sewage system via trucks. **Wastewater Receipts** / **Date** 1 / 04/08/2023 2 / 22/03/2024 3 / 25/12/2024 4 / 28/02/2025

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[10] achieved during this monitoring period
13	Emission Reduction:193,627 tCO_2 Air Quality Impact: SO_2:1,474.25 tons NO_x:317.55tons	Emission Reduction:165,526 tCO_2 Air Quality Impact: SO_2:1,260.27 tons NO_x:271.46 tons
8	At least 7 Employees work at WPP. HSE trainings are given to all employees at the plant	10 Employees work at WPP. HSE trainings are given to all employees at the plant
7	Access to affordable and clean energy services: 303,705.48 MWh	Access to affordable and clean energy services: 259,624.318 MWh
6	No wastewater to be discharged to the environment in the project area.	Domestic wastewater is collected and disposed to the sewage system via trucks. **Wastewater Receipts** / **Date** 1 / 04/08/2023

[10] Whenever emission reductions are capped, both the original and capped values used for calculations must be transparently reported. Use brackets to denote original values.

2	22/03/2024
3	25/12/2024
4	28/02/2025

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

SDG 13: Climate Action: The annual estimated emission reduction for the project activity is 97,481 tCO_2e, thus considering number of days covered during present monitoring period to be 725 and the estimated emission reduction contributing towards SDG 13 is 193,627 tCO_2e.

SDG 7: Affordable and Clean Energy: The annual estimated power generation for the project activity is 152,900 MWh, thus considering number of days covered during present monitoring period to be 725, the estimated power generation is 303,705.48 MWh.

Estimated SO_2 reduction calculation of registered PDD version 4 dated on 06/02/2024 is 742.21 tons/year and 1,474.25 tons for 725 days. Estimated NO_x reduction calculation of registered PDD version 4 dated on 06/02/2024 is 159.87 tons/year and 317.55 tons for 725 days,

SDG 8: Decent Work and Economic Growth The number of workers was estimated to be 7 as per the approved PDD version 4 dated on 06/02/2024. Project activity improves the quality of employment by giving training to employees.

SDG 6: No wastewater to be discharged to the environment in the project area.

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

During the current monitoring period, the impacts related to SDG 7 and SDG 13 were lower than the estimated values. During this monitoring period, wastewater was transported by sewage tanker 4 times. For SDG 8, the number of workers was estimated to be 8 as per the approved PDD version 4 dated on 06/02/2024; however, SGK records show that there are 9 workers currently employed at Düzova WPP.

The estimated emission reductions were 193,627 tCO_2, while the actual achieved reductions were 165,526 tCO_2.The achieved emission reductions were 14.51% lower than the estimated values. It is important to note that electricity generation is influenced by various climatic conditions, which are beyond the control of the project

participant. Scientific assessments[11] indicate that potential climate change may lead to a decrease in wind energy resources. Therefore, the lower electricity generation observed during the current verification period is attributed to natural climatic factors and is considered acceptable.

[11] https://open.metu.edu.tr/handle/11511/102765#:~:text=The%20results%20showed%20that%20climate,in%20T%C3%BCrkiye%20(%2D4.1%25).

SECTION F. SAFEGUARDS REPORTING

PRINCIPLES	MITIGATION MEASURES ADDED TO THE MONITORING PLAN
Principle 4.1 - Sites of Cultural and Historical Heritage **Archaeological Site Control**	The project has been implemented in a way that does not cause any negative impact on the archeological site. However, a monitoring parameter is included in the monitoring plan. The project was monitored during the monitoring period. The project does not have any negative impact on the archaeological site.
Principle 3 – Community Health and Safety **Quality of Employment**	All employees attended training on health & safety. For positions that require specific skills, staff are either trained or certified staff is recruited. Training records and other certificates checked for this monitoring period.
Principle 4.3 – Land Tenure and Other Rights **Expropriation**	Expropriation work has been completed at the project site. Land title deeds have been completed, and some land has been purchased by the project owner. Documents (letters of consent) showing the current status of the land are used as references.
Principle 9.4 – Release of Pollutants **Water Quality and Quantity**	Domestic wastewater is collected and disposed to the sewage system via trucks; and the disposal records kept by the Project Owner. Wastewater receipts dates are given below.
Principle 9.5 – Hazardous and Non-hazardous Waste **Waste Oil**	Waste oil from equipment collected properly in line with the relevant regulation and disposed via accredited abatement companies. Waste oil is disposed in line with regulation # 26952 on control of waste oils. During this monitoring period, 1,490 kg of waste oil was avoided in compliance with regulations.

Wastewater Receipts	Date
1	4.08.2023
2	22.03.2024
3	25.12.2024
4	28.02.2025

Principle 9.9 – Animal Welfare **Biodiversity**	According to the ornithological study conducted in 2014, the project area is not located on a major bird migration route; bird density during the observation periods was low, and no migration bottleneck or level of bird activity that could pose a collision risk was identified. In the official opinion issued by DKMP in 2024, it was stated that the project area does not fall within National Parks, Nature Parks, Nature Conservation Areas, Natural Monuments, Wildlife Protection and Development Areas, or designated wetlands, and therefore no objections were raised regarding the planned activity. The Ministry requests bird monitoring studies only when deemed necessary through an official notification. During the site visit, the project owner also confirmed that no bird carcasses had been observed within the project area.

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.

There is no stakeholder grievance/compliant from the local stakeholders in the beginning of the third crediting period. There is no grievance / compliant received during the first and second crediting period. The plant staff and the nearby villagers are in communication all the time since there are many employees of the plant living in the nearby villages. The culture of communication in the area is verbal, therefore, people prefer to convey their messages verbally. Logbook is located at the mukhtar's office of the Aşağıkırıklar Village. In the event of any complaint or suggestion, the mukhtar of Aşağıkırıklar Village will contact the company representative whose contact information has been provided. No legal contest or dispute that has arisen with the project during the second crediting period. The project is operational for a long time since 2009 and there has been no major issues related to the stakeholders. Therefore, no additional stakeholder meeting was conducted.

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

No legal contest or dispute that has arisen with the project during the monitoring period.

Revision History

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