

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

A - Description of project

B - Implementation of project

C - Description of monitoring system applied by the project

D - Data and parameters

E- Calculation of SDG Impacts

F- Safeguards Reporting

G- Stakeholder inputs and legal disputes

KEY PROJECT INFORMATION

Key Project Information

GS ID (s) of Project (s)	GS 1237 ¹
Title of the project (s) covered by monitoring report	Sadilli Wind Farm Project, Turkey
Version number of the PDD/VPA-DD (s) applicable to this monitoring report	9
Version number of the monitoring report	6
Completion date of the monitoring report	02/02/2026
Date of project design certification	11/09/2013 (11/05/2022 for 2 nd CP)
Date of Last Annual Report	12/12/2024
Monitoring period number	2 st MP of 2 nd CP
Duration of this monitoring period	28/09/2023 to 31/07/2025 (both days are included, 2 nd Crediting period, 2 st Monitoring period)
Project Representative	Net Zero Danışmanlık Anonim Şirketi
Host Country	Turkey
Activity Requirements applied	☐ Community Services Activities ☒ Renewable Energy Activities ☐ Land Use and Forestry Activities/Risks & Capacities ☐ N/A
Methodology (ies) applied and version number	01 - ACM0002, v. 20.0.0, "Grid-connected electricity generation from renewable sources"
Product Requirements applied	☒ GHG Emissions Reduction & Sequestration ☐ Renewable Energy Label ☐ N/A

¹ <https://registry.goldstandard.org/projects/details/146>

Table 1 - Sustainable Development Contributions Achieved

Sustainable Development Goals Targeted	SDG Impact	Amount Achieved	Units/ Products
SDG 13 Climate Action	Emissions Reductions	131,553	GSVERs (tCO _{2e})
SDG 7 Affordable and clean energy	MWh of renewable energy generated	202,959	MWh
		9,523,951	EUR
SDG 8 Decent work and economic growth	The project provides employment. Health&Safety Trainings to be held.	9 people employed and 34 training conducted during the monitoring period	Health & Safety Trainings and SGK records
SDG 6 Clean water	Wastewater discharge transfer records are to be provided.	Avoidance of 5,011 x1000 m ³ /year wastewater discharge to the environment.	Invoices

Table 2 – Product Vintages

		Amount Achieved			
Start Dates	End Dates	SDG 13	SDG 7	SDG 8	SDG 6
28/09/2023	31/12/2023	23,410tCO _{2e}	36,116 MWh 1,694,764EUR	9 people are employed and 9 training are conducted	892 x 1000 m ³
01/01/2024	31/12/2024	71,242 tCO _{2e}	109,912 MWh 5,157,666 EUR	9 people are employed and 20 training are conducted	2714 x 1000 m ³
01/01/2025	31/07/2025	36,901 tCO _{2e}	56,931 MWh 2,671,521 EUR	9 people are employed and 5 training are conducted	1406 x 1000 m ³

SECTION A. DESCRIPTION OF PROJECT

A.1. General description of project

Çanres Elektrik Üretim A.Ş. (hereafter referred to as "Çanres Elektrik"), operated 14 units of Sadilli Wind Farm Project, Turkey (hereafter referred to as "Sadilli WPP") with total installed capacity of 38.5 MWm/33 MWe. The Project consists of the installation of 14 wind turbines that have an installed capacity of 2.75 MW each; totaling 38.5 MWm. Type of turbines is GE 2.75-100. Project located in Çanakkale and Tekirdağ provinces, in Turkey. Energy Market Regulatory Authority (EMRA) issued the license of the project in February 2012².

The GE Renewable Energy 2.75-100 wind turbines installed at the project site are three-bladed, upwind, horizontal-axis machines designed in accordance with IEC 61400-1 standards. They operate with variable speed and a full-power converter system, equipped with active yaw and electric pitch control with battery backup. The braking system is a full-feathering aerodynamic type, and the generator is a permanent-magnet type, providing high efficiency even at low wind speeds. The cut-in, rated, and survival wind speeds are approximately 3,5 m/s, 25 m/s, and 59,5 m/s, respectively³.

The mobilisation for construction of the Project had started on 03/09/2012 and the provisional acceptance date of the first three turbines was 26/10/2014⁴. Furthermore, electricity production started at midnight of that date at 12 am so, operation start date of the first three turbines was 27/10/2014, and it was considered as the actual start date of the project. Therefore, the first crediting period started following the commissioning of the power plant, which was planned to be commissioned on 27/10/2014.

² Please see Sadilli_WPP_Generation_License

³ GE Power & Water, "Introducing GE's 2.75 MW Wind Turbines (2.75-100 & 2.75-103)," 2011; GE Energy, "Wind Turbine Generator Systems 2.75-100 – 50 Hz & 60 Hz," 2011

⁴ Please see Sadilli RES_Provisional Acceptance Report_(T12-T13-T14)_Part1

The generation license has a limit of 33 MWe, meaning that the total electrical power supply of the Project is limited to 33 MWe. The Project is expected to generate 112,000 MWh per year. The turbines, each equipped with 3 blades, have a hub height of 85 m and a rotor diameter of 100 m. The Project has been connected to the Keşan transformer station via a 154 kV high voltage transmission line.

During the 2nd Monitoring Period of the 2nd Crediting Period, total electricity generation was 202,959 MWh and the achieved total emission reduction was 131,553 tCO₂. The annual average values during this MP are 110,074 MWh for SDG 7 and 71,347 tCO₂ for SDG 13.

The details of the project and the state of installation are mentioned in the table below.

Table 3: Details of the project activity

Project Investor	Project Type	Total Project Capacity	State	Usage
Çanres Elektrik Üretim A.Ş.	Wind	38.5 MW	Tekirdağ, Çanakkale	Sale to Grid

Çanres Elektrik is operating Sadilli WPP with a total installed capacity of 38.5 MWm/33 MWe (14 units of GE 2.75-100 type turbines) in Çanakkale and Tekirdağ provinces of Turkey. Each turbine has a rated power of 2.75 MWe, a rotor diameter of 100 meters, and a hub height of 85 meters. Milestone activities for the implementation of Sadilli WPP are given in the below table:

Table 4: Date and description of milestone activities for Sadilli WPP

Date	Milestone
01/11/2007	EMRA is applied for the license
15/02/2012	License is issued by EMRA ⁵
15/11/2011	Proposals for carbon development are collected (prior consideration)
29/12/2011	Confirmation for going ahead with carbon development services
26/01/2012	EIA exemption permit acquired.
28/02/2012	Equipment order is signed.
06/08/2012	Agreement with the construction company is signed.
03/09/2012	Mobilisation on site is initiated (road construction etc.).
19/12/2012	Loan agreement is signed.
26/12/2012	Final license amendment application is made to EMRA.
01/05/2013	Estimated operational start date (partial).
03/09/2012	Mobilisation on site is initiated (road construction etc.).
19/12/2012	Loan agreement is signed.
26/12/2012	Final license amendment application is made to EMRA.
01/05/2013	Estimated operational start date (partial).
12/12/2013	EIA exemption permit is amended according to the turbine coordinate change.
26/10/2014	3 turbines with 8.25 MWe capacity are started to operate and start date of the first monitoring period. (Provisional Acceptance date of the turbines T12-T13-T14) ⁶
27/10/2014	Start date of the 1 st monitoring period of the 1 st crediting period
14/11/2014	5 turbines with 13.75 MWe capacity are started to operate (Provisional Acceptance date of the turbines T1-T5-T9-T10-T11) ⁷
06/12/2014	6 turbines with 16.5 MWe capacity are started to operate (Provisional Acceptance date of the turbines T2-T3-T4-T6-T7-T8) ⁸
31/03/2016	End date of the 1 st monitoring period of the 1 st crediting period

⁵ Please see: Sadilli_WPP_Generation_License document

⁶ Please see: Sadilli WPP_Provisional Acceptance Report_(T12-T13-T14)_Part1 document

⁷ Please see: Sadilli WPP_Provisional Acceptance Report_(T1-T5-T9-T10-T11)_Part1 document

⁸ Please see: Sadilli WPP_Provisional Acceptance Report_(T2-T3-T4-T6-T7-T8)_Part1 document

01/04/2016	Starting date of the 2 nd monitoring period of the 1 st crediting period
30/09/2017	End date of the 2 nd monitoring period of the 1 st crediting period
01/10/2017	Starting date of the 3 rd monitoring period of the 1 st crediting period
30/09/2019	End date of the 3 rd monitoring period of the 1 st crediting period
01/10/2019	Starting date of the 4 th monitoring period of the 1 st crediting period
26/10/2021	End date of the 4 th monitoring period of the 1 st crediting period
27/10/2021	Start date of the 2 nd crediting period
27/10/2021	Start date of the 1 st monitoring period of 2 nd crediting period
27/09/2023	End date of the 1 st monitoring period of 2 nd crediting period
28/09/2023	Start date of the 2 nd monitoring period of 2 nd crediting period
31/07/2025	End date of the 2 nd monitoring period of 2 nd crediting period

Scenario existing prior to the implementation of project activity:

The scenario existing prior to the implementation of the project activity, is electricity delivered to the grid by the project activity that would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described in the “Tool to calculate the emission factor for an electricity system – Version 07⁹”.

Baseline Scenario:

As per the applicable methodology, a Greenfield power plant is defined as “a new renewable energy power plant that is constructed and operated at a site where no renewable energy power plant was operated prior to the implementation of the project activity”.

As the project activity falls under the definition of a Greenfield power plant with or without a BESS as described under paragraph 4(a) or paragraph 5(a), the baseline scenario as per paragraph 24 of Section 5.2.1 of applied methodology is the following: If the project activity is the installation of a Greenfield power plant, the baseline scenario is electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new

⁹ <https://cdm.unfccc.int/methodologies/PAMethodologies/tools/am-tool-07-v7.0.pdf>

generation sources, as reflected in the combined margin (CM) calculations described in the "Tool to calculate the emission factor for an electricity system – Version 07¹⁰".

Hence, pre-project scenario and baseline scenario are the same.

Project boundary

As per the Approved Large Scale Consolidated Methodology ACM0002 version 20.0.0 ¹¹, the project boundary is "The spatial extent of the project boundary includes the project power plant and all power plants connected physically to the electricity system that the CDM project power plant is connected to." Correspondingly, in this project activity the project boundaries include the project site and all power plants attached to the Turkish National Grid.

A.2. Location of project

The Project located near Süleymaniye, Bayramiç, Elmalı villages of Sadilli district in Tekirdağ, Turkey. The coordinates of the turbines are given below. Project license is for 14 turbines with the 2.75 MW output. The coordinates of the turbines are given in Table 5.

Table 5. Geographical Coordinates of the Turbines of Sadilli WWP

Turbine Number	Coordinates (DMS)	Coordinates (UTM)
T1	40° 45' 04" E 26° 53' 13" N	E: 490466,0 N: 4510521,0
T2	40° 44' 54" E 26° 53' 27" N	E: 490775,0 N: 4510830,0
T3	40° 44' 59" E 26° 53' 47" N	E: 491255,0 N: 4511004,0
T4	40° 45' 5" E 26° 53' 56" N	E: 491476,0 N: 4511166,0
T5	40° 45' 10" E 26° 54' 14" N	E: 491886,0 N: 4511331,0
T6	40° 45' 18" E 26° 54' 27" N	E: 492186,0 N: 4511579,0
T7	40° 45' 11" E	E: 492440,0

¹⁰ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-07-v7.0.pdf>

¹¹ <https://cdm.unfccc.int/UserManagement/FileStorage/AG07ZJQ3EXD42LT5YV9HR16M8KINPO>

	26° 54' 38" N	N: 4511346,0
T8	40° 45' 9" E 26° 54' 51" N	E: 492745,0 N: 4511282,0
T9	40° 45' 15 " E 26° 55' 5" N	E: 493078,0 N: 4511459,0
T10	40° 45' 19 " E 26° 55' 20" N	E: 493436,0 N: 4511588,0
T11	40° 45' 26" E 26° 55' 25" N	E: 493555,0 N: 4511809,0
T12	40° 45' 13" E 26° 55' 26" N	E: 493586,0 N: 4511401,0
T13	40° 45' 7" E 26° 55' 36" N	E: 493819,0 N: 4511231,0
T14	40° 45' 1" E 26° 55' 46" N	E: 494051,0 N: 4511035,0

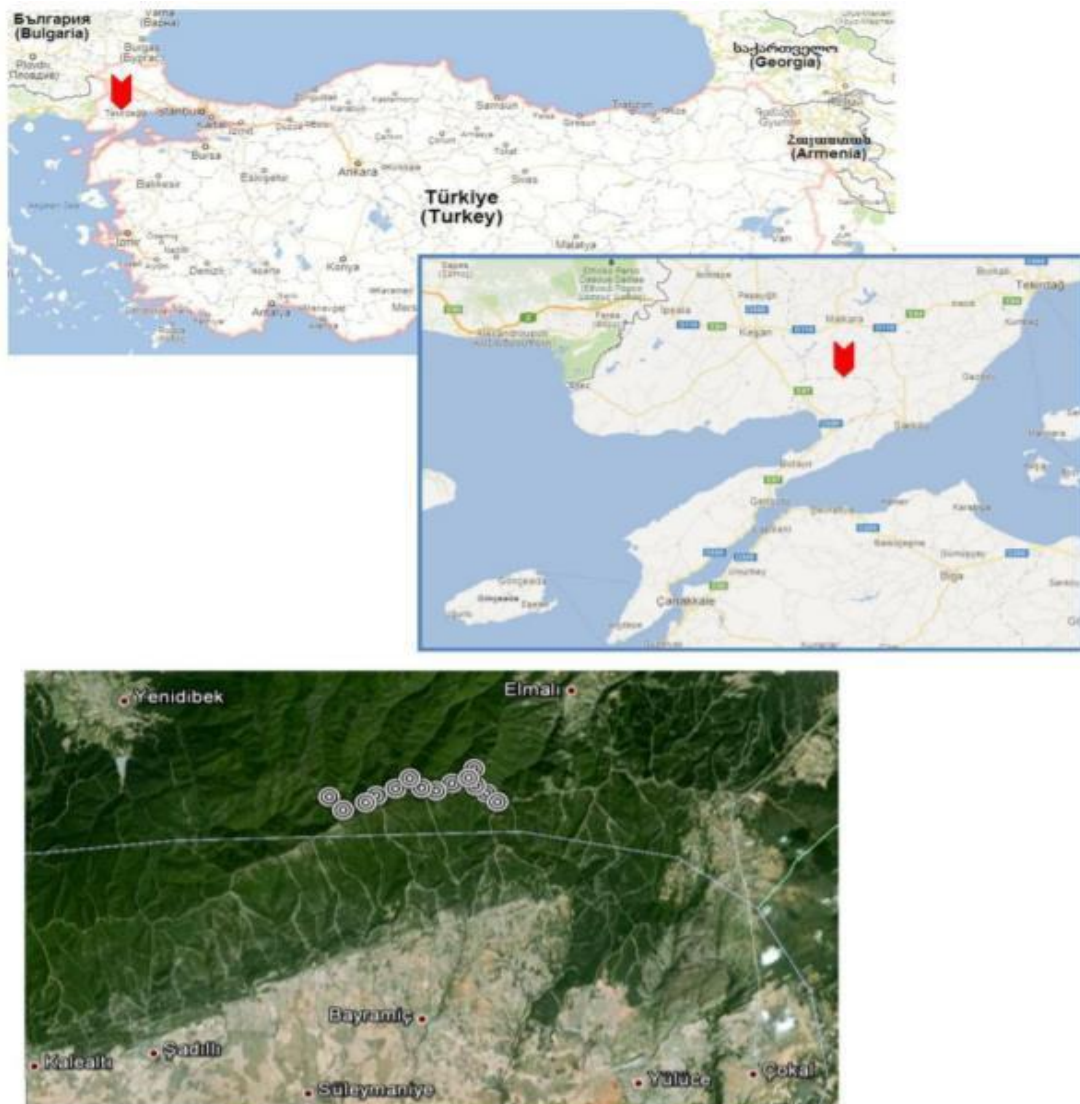


Figure 1. Project Location on Turkey Map

A.3. Reference of applied methodology

For the determination of the baseline, the official methodology ACM0002 version 20.0.0, "Grid-connected electricity generation from renewable sources"¹², is applied, using conservative options and data as presented in the following section. This methodology refers to four Tools, which are:

1. Tool to calculate the emission factor for an electricity system (Version 07.0.0)¹³;
2. Tool for the demonstration and assessment of additionality (Version 07.0.0)¹⁴;
3. Tool to determine the remaining lifetime of equipment (Version 01.0.0)¹⁵;

A.4. Crediting period of project

The crediting period of the project is 7 years and it is renewable twice. The first crediting period starts following the commissioning of the power plant which was to be 27/10/2014. The second crediting period is from 27/10/2021 to 26/10/2028. Both dates are included. The current monitoring period is included in the second crediting period because the monitoring period is from 28/09/2023 to 31/07/2025.

¹² <https://cdm.unfccc.int/methodologies/DB/XB1TX7TAZ6SLWM9B7BC67THHVD16JV>

¹³ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-07-v7.0.pdf>

¹⁴ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-01-v7.0.0.pdf>

¹⁵ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-10-v1.pdf>

SECTION B. IMPLEMENTATION OF PROJECT

B.1. Description of implemented project

Sadilli Wind Farm has 14 turbines each with an installed capacity of 2.75 MWe, resulting in a total installed capacity of 38.5 MWm/33 MWe. The project uses GE 2.75-100 type turbines belonging to General Electric, with a rotor diameter of 100 m. Each turbine is equipped with an 85-meter hub consisting of three blades. Based on the prevailing wind conditions, the blades are continuously positioned to optimize the pitch angle. Average annual wind speeds measured at the project site at 85 meters hub height is 7.7 m/s. Technical characteristics of the turbines are given in Table 6 and Table 7 below. The construction of the project commenced on 03/09/2012. Three turbines with a total capacity of 8.25 MWe were commissioned on 26/10/2014¹⁶ (the start date of the first monitoring period). Five turbines with a total capacity of 13.75 MWe were commissioned on 14/11/2014¹⁷, and the remaining six turbines with a total capacity of 16.5 MWe were commissioned on 06/12/2014¹⁸, according to the provisional acceptance protocols.

Technology to be employed

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

GE Energy, a wind turbine manufacturer, has been selected as equipment provider. The Project includes 14 turbines:

Table 6. Equipment Information

Turbine number	Model of turbines	Explanation
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¹⁶ Şadilli RES - Geçici Kabul Tutanağı (T12-T13-T14) 1. Kısım

¹⁷ Şadilli RES - Geçici Kabul Tutanağı (T1-T5-T9-T10-T11)_1

¹⁸ Şadilli RES - Geçici Kabul Tutanağı (T2-T3-T4-T6-T7-T8)_1

14 x 2.75 MWe	GE 2.75-100 wind Turbine	The turbines are of similar model and the total capacity of the wind farm is 38.5 MWm. The total overall power supply is limited to 33 MWe in order to comply with the generation license.
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The turbines consist of the following components: rotor, drive train, gearbox, generator, cooling and filtration, braking system, nacelle, yaw system, tower, control and grid connection and lightning protection. The GE 2.75-100 turbines start operating at a wind speed of 3.5 m/s and shut down at 25 m/s, while the survival wind speed is 59.5 m/s, according to the provisional acceptance protocols. The model of the turbines and their specifications are provided below:

Table 7. Specification of turbine units^{19 20}

Component	Explanation/Specification
Model	GE 2.75-100
Rated power	2.75 MWe
Rotordiameter	100m
Tower	85m
Cut-in wind speed	3,5 m/s
Cut-out wind speed	25 m/s
Survivalwind speed	59,5 m/s

¹⁹ Please see; GE 2.75MW 100m CI 2-3.pdf document

²⁰ Wind Turbine Generator Systems 2.75-100

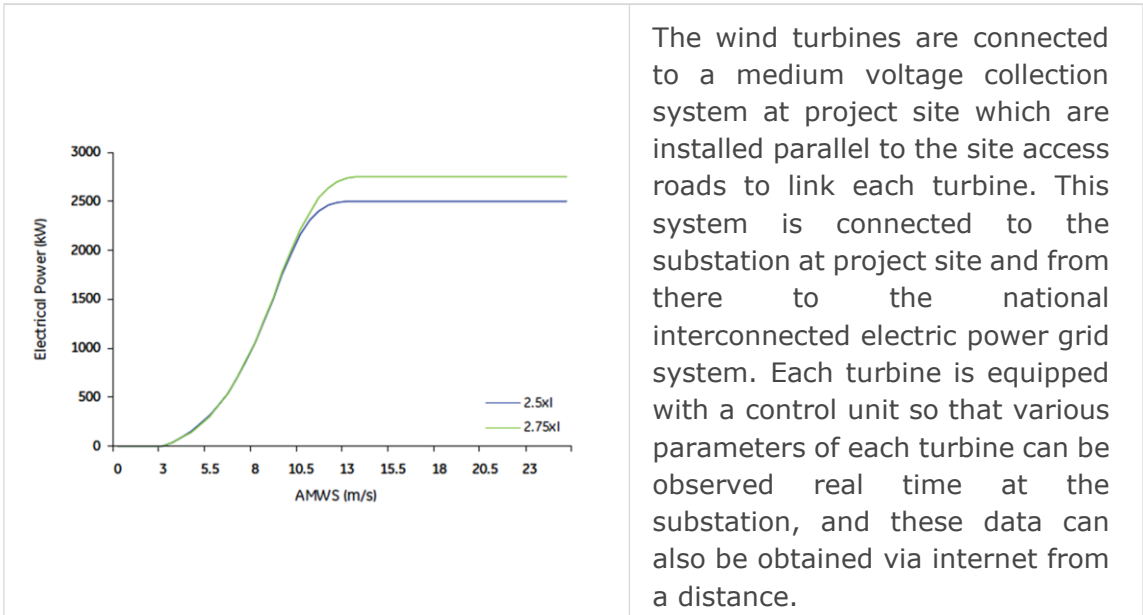


Figure 2. Power curve of the GE 2.75 - 100 turbine

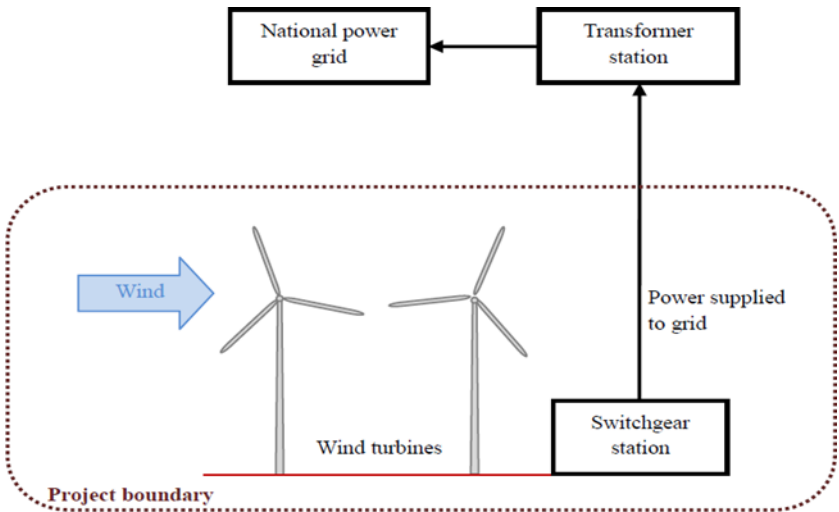


Figure 3. Project Boundary

The electrical single line diagram is shown in Figure 5.

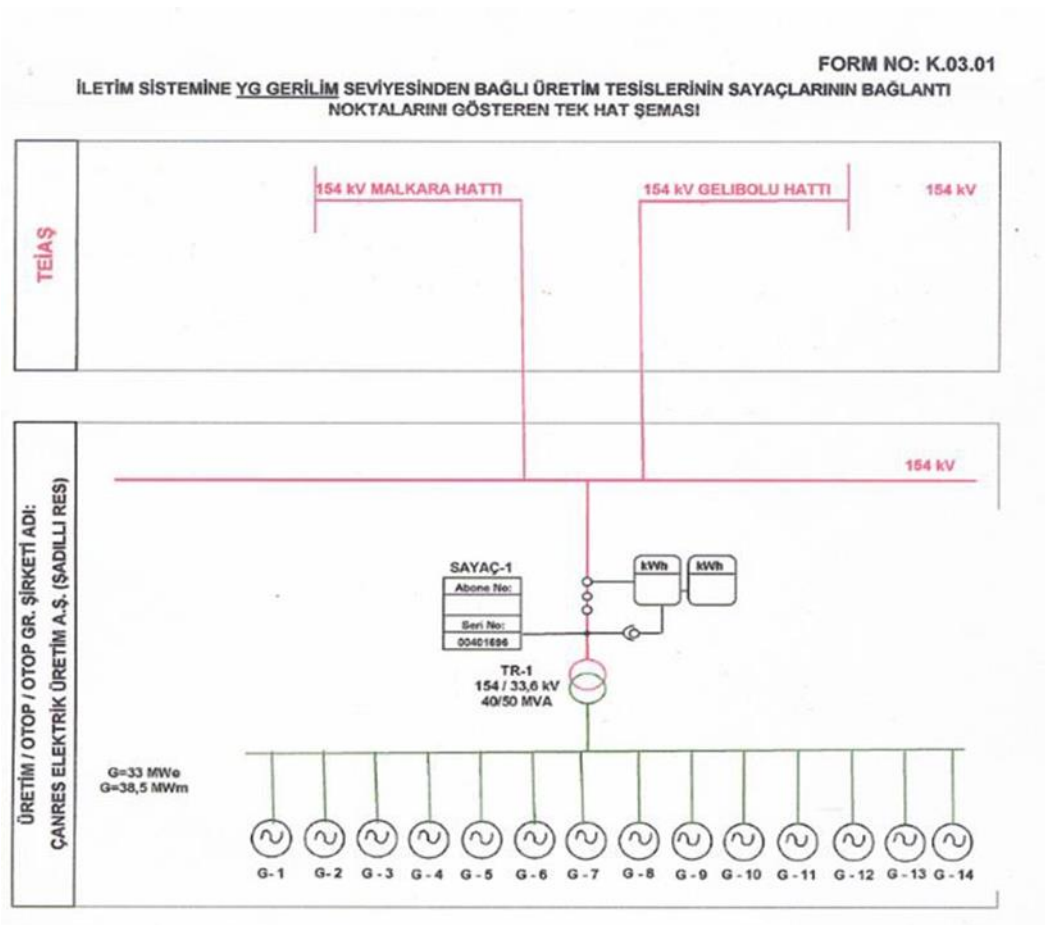


Figure 4. Electrical Single Line Diagram

The Sadıllı WPP is connected to the grid through the Keşan TM 154 kV line and the 154 kV Malkara TM–Gelibolu TM EİH in-out line. At Sadıllı WPP, two electricity meters are used, one as the main and the other as the spare. The meters were manufactured by EMH and their model number is LZQJ-XC. The serial number of the main meter is 8088831, and the serial number of the spare meter is 8088832. As shown in Table 8, the meters were installed and calibrated on 03/10/2019, manufactured in 2018. The calibration validity is 10 years. The last test date is 22/11/2023, and both meters have an accuracy class of 0.5s.

Table 8: The specification of electricity meters

Name	Main Meter	Spare Meter
Serial Number	8088831	8088832
Manufacturer	EMH	EMH
Brand-Model	LZQJ-XC	LZQJ-XC
Date of installation/Calibration Date ^{21 22}	03/10/2019	03/10/2019
Last Test Date ^{23 24}	22/11/2023	22/11/2023
Calibration Validty	10 years	10 years
Year of Manufacture	2018	2018
Accuracy	0.5s	0.5s

This monitoring period covers the dates from 28/09/2023 to 31/07/2025, and the amount of electricity generated during this period is 202,959 MWh.

B.1.1 Forward Action Requests

Three FARs were raised in the previous monitoring period: two from the performance review and one from the verification report (version 05, dated 10/03/2025). FAR1 and FAR2 were derived from the Performance Review, while FAR3 was derived from the VVB Verification and Certification Report, all covering the monitoring period from 27/10/2021 to 27/09/2023.

FAR#1: As per Rule Clarification on Assessment Approach for Reporting Higher Ex-Post Emission Reductions, PD shall carry out root cause analysis as higher emission reductions are observed in many monitoring periods, PD shall also be update PDD

²¹ 2019 ANA SAYAÇ İLK ENDEKS VE TEST BELGESİ

²² 2019 YEDEK SAYAÇ İLK ENDEKS VE TEST BELGESİ

²³ 22.11.2023 Sayaç Test Raporları

²⁴ 22.11.2023 Sayaç Test Mühür Tutanağı

following the relevant provisions of Design change requirements – Gold Standard for the Global Goals. VVB shall assess the same.²⁵

FAR#1: Estimated annual emission reduction in the ex-ante calculation of the registered PDD is 72,598 tCO₂/year, which corresponds to 133,660 tCO₂ for 673 days. The actual emission reduction achieved during this monitoring period (28/09/2023 – 31/07/2025, 673 days) is 131,553 tCO₂. The difference between estimated and actual emission reductions is –1.58%, which is below the 10% threshold. This difference is mainly due to the variation in wind potential. Since the change is within the allowed sensitivity range, the emission reductions are accepted as the actual monitored value.

FAR#2: As the change in emission reductions is more than 10% in this monitoring period and higher emission reductions are observed in many monitoring periods, the emission reductions are capped to 153,369 tCO₂e as the upper bound of the sensitivity analysis (10%) in line with paragraphs 2.1.3 (b) and 2.1.4 of the Rule clarification on Assessment Approach For Reporting Higher Ex-Post Emission Reductions.

The remaining emission reductions that are over and above the upper bound of the sensitivity range may be claimed during the next issuance if the change is found to be temporary.²⁶

FAR#2: The estimated annual emission reduction in the ex-ante calculation of the registered PDD is 72,598 tCO₂/year, which corresponds to 133,660 tCO₂ for 673 days. The actual emission reduction achieved during this monitoring period (28/09/2023 – 31/07/2025) is 131,553 tCO₂. The difference between estimated and actual emission reductions is –1.58%, which is below the 10% threshold defined in the "Rule Clarification on Assessment Approach for Reporting Higher Ex-Post Emission Reductions." This variation is mainly due to changes in wind potential. As the deviation is within the allowed sensitivity range, the emission reductions are accepted as the actual monitored value.

²⁵ GS1237 Performance Review_approved

²⁶ GS1237 Performance Review_approved

FAR#3: As per Rule Clarification on Assessment Approach for Reporting Higher Ex-Post Emission Reductions, PD shall carry out root cause analysis, and as higher emission reductions are observed in many monitoring periods, PD shall also be updated PDD following the relevant provisions of Design change requirements – Gold Standard for the Global Goals. VVB shall provide its assessment on the same for the upcoming verification.²⁷

FAR#3: The estimated annual emission reduction in the ex-ante calculation of the registered PDD is 72,598 tCO₂/year, which corresponds to 133,660 tCO₂ for 673 days. The actual emission reduction achieved during this monitoring period (28/09/2023 – 31/07/2025) is 131,553 tCO₂. The difference between estimated and actual emission reductions is -1.58%, which is below the 10% threshold defined in the "Rule Clarification on Assessment Approach for Reporting Higher Ex-Post Emission Reductions." This variation is mainly due to changes in wind potential. As the deviation is within the allowed sensitivity range, the emission reductions are accepted as the actual monitored value.

B.2. Post-Design Certification changes

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

N/A

B.2.2. Corrections

N/A

B.2.3. Changes to start date of crediting period

N/A

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

N/A

²⁷ Final_Ver Report_1086 Şadıllı Wind_Khalid Mahmood _v05_10-03-2025-Clean.pdf

B.2.5. Changes to project design of approved project

N/A

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 EPIAŞ which can be accessed by project owner to check the correctness of the data. Besides, the data that is read by EPIAŞ, project owner carries monthly protocol to cross-check the data. Once the meter data is correct then the amount is also published in EPIAŞ website which is also accessible by project owner. When all data is correct, an invoice (receipt of sale) is prepared by Çanres Elektrik and delivered to EPIAŞ. EPIAŞ is the main data source, and the data are cross-checked with the SCADA data obtained from the project site.

Generation data collected during crediting period is submitted to Net Zero Danışmanlık Anonim Şirketi who is responsible for calculating the emission reduction subject to verification: Generation data is used to prepare monitoring reports which are used to determine the vintage from the project activity. These reports are submitted to the duly authorized and appointed Designated Operational Entity 'DOE' before each verification period.

As the necessary baseline emission factors are all defined ex ante, the only information to be monitored is the amount of electricity fed into the grid by Sadilli WPP. The data which is base for the invoices and published in EPIAŞ website is used as input for emission reduction calculation.

The collected data is kept by Çanres Elektrik during the crediting period and until two years after the last issuance of VERs for the Sadilli WPP project activity for that crediting period. As of 01/09/2015, EPIAS took over the PMUM procedures from TEIAS. Since that date, EPIAS supplies the 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.

The fact that two reliable 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. Since the meters are reading electricity supplied to the system and withdrawn from the system separately, the net electricity amount supplied to the grid was calculated by electricity supplied minus electricity withdrawn which was taken from monthly settlement notifications.

Monthly data from EPIAS are stored electronically on EPIAS website and this data can be accessed by login of Project Developer. Çanres Elektrik also stores a hardcopy of the monthly meter reading protocols for back up of systematic storage of data.

Moreover, there are always internal reviews of the meters data that is checked by different parties. First, data of the meters is collected by technicians daily in written forms. The data collected daily is saved in plant manager computer and backed up and shared by headquarter of Çanres Elektrik in Istanbul. Besides the data that can be gotten from meters, production amount can be checked from SCADA system of Nordex. SCADA figures differ a bit with meter data due to internal losses.

VER Team Members is expected to include the following staff :

Operation General Manager: Responsibility for running the plant and compliance with VER monitoring plan

Operation Manager: Responsible for keeping data about generation and consumption.

Operational technician: Ensuring the continuity of electricity generation, technical and administrative follow-up and management and

Net Zero Danışmanlık Anonim Şirketi: Responsible for emission reduction calculations, preparing monitoring report and periodical verification process.

Operation and management diagram is presented in Figure 4.

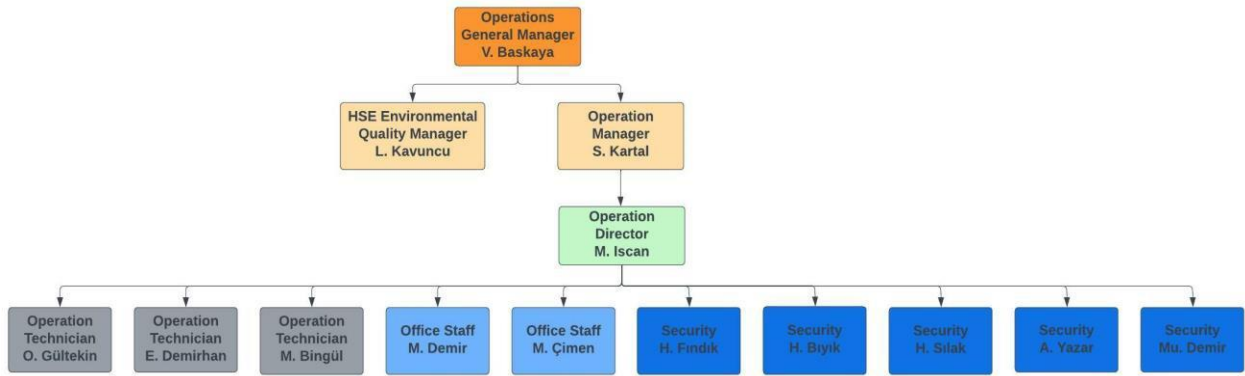


Figure 5. Operation and Management Diagram of the Sadilli WPP

The electrical single line diagram is shown in Figure 5.

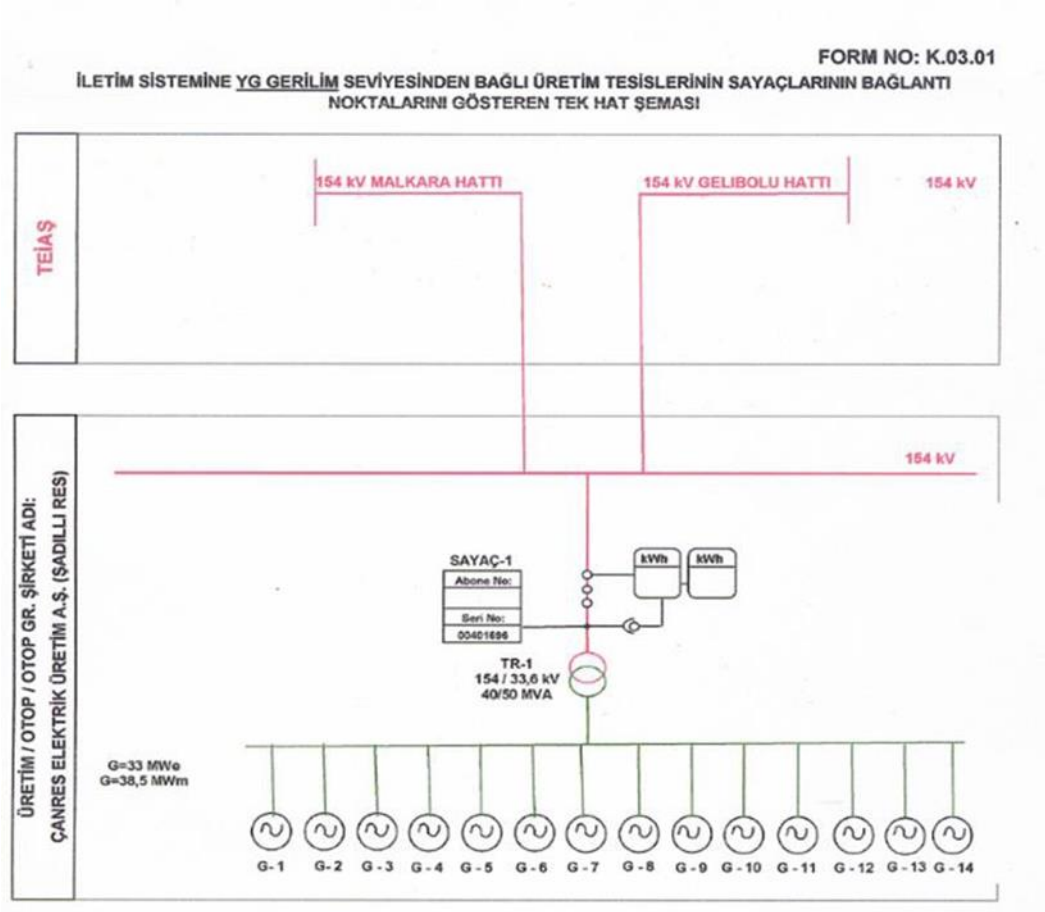


Figure 6. Electrical Single Line Diagram

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:

"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 Çanres Elektrik, 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 two meters are compared with each other and if any differences are detected the necessary control measures are taken."

As the measuring devices are sealed by TEİAŞ, Çanres 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 TEİAŞ has to be informed for necessary maintenance and calibration. There is an agreement between Çanres Elektrik and TEİAŞ that in case of problems or failures of the meters TEİAŞ reacts as fast as possible to solve the problem.

As above mentioned, the data acquisition and management and quality assurance procedures that are anyway in place, no additional procedures necessarily to be established for the monitoring plan. Also, operational technicians ensure the continuity of electricity generation, technical and administrative follow-up and management.

In addition, while periodic calibration of the meters is done every 10 years²⁸, periodic test of the meters is also carried out once every 2 years²⁹.

²⁸ Please see the link <https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=6381&MevzuatTur=7&MevzuatTertip=5>

²⁹ Please see: TEİAŞ System Usage Agreement

Table 9. Specification of the Electricity Meters

Name	Main Meter	Spare Meter
Serial Number	8088831	8088832
Manufacturer	EMH	EMH
Brand-Model	LZQJ-XC	LZQJ-XC
Date of installation/Calibration Date (First Index) ^{30 31}	03/10/2019	03/10/2019
Last Test Date ^{32 33}	22/11/2023	22/11/2023
Calibration Validity	10 years	10 years
Year of Manufacture	2018	2018
Accuracy	0.5s	0.5s

³⁰ 2019 ANA SAYAÇ İLK ENDEKS VE TEST BELGESİ

³¹ 2019 YEDEK SAYAÇ İLK ENDEKS VE TEST BELGESİ

³² 22.11.2023 Sayaç Test Raporları

³³ 22.11.2023 Sayaç Test Mühür Tutanağı

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 2019 was used.
Source of data	Please see: https://enerji.gov.tr/Media/Dizin/BHIM/tr/Duyurular/Bilgi_Forumu_Web_Sitesi_2019_202110071443.pdf
Value(s) applied	0.6482 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 the SDG 13 Indicator.
Additional comment	-

Data/parameter	$EF_{grid,BM,y}$
Unit	tCO ₂ /MWh
Description	For the emission BM 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 2019 was used. Publication includes calculated Emission Factor values that are Operating Margin (OM), Growth Based Margin (Build Margin-BM) and Combined Margin (CM) Emission Factors, for the relevant year with usage of the IPCC's Clean Development Methodology Tool 07-V06.0.
Source of data	Please see: https://enerji.gov.tr/Media/Dizin/BHIM/tr/Duyurular/Bilgi_Forumu_Web_Sitesi_2019_202110071443.pdf
Value(s) applied	0.4153 tCO ₂ /MWh
Choice of data or Measurement methods and procedures	Ministry of Energy and Natural Resources makes available the official data in Turkey. The latest data available during PDD preparation was for 2019.

Purpose of data	Used for baseline emissions
Additional comment	-

Data/parameter	EF_{grid,OM,y}
Unit	tCO ₂ /MWh
Description	For the emission OM 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 2019 was used. Publication includes calculated Emission Factor values that are Operating Margin (OM), Growth Based Margin (Build Margin-BM) and Combined Margin (CM) Emission Factors, for the relevant year with usage of the IPCC's Clean Development Methodology Tool 07-V06.0.
Source of data	Please see: https://enerji.gov.tr/Media/Dizin/BHIM/tr/Duyurular/Bilgi_Forumu_Web_Sitesi_2019_202110071443.pdf
Value(s) applied	0.7258 tCO ₂ /MWh
Choice of data or Measurement methods and procedures	Ministry of Energy and Natural Resources makes available the official data in Turkey. The latest data available during PDD preparation was for 2018.
Purpose of data	Used for baseline emissions
Additional comment	-

Data/parameter	Gross electricity generation
Unit	MWh
Description	Gross Electricity supplied to the grid (2019)
Source of data	Turkish Electricity Transmission Company (TEİAŞ), Annual Development of Turkey's Gross Electricity Generation of Primary Energy Resources (2019) TEİAŞ
Value(s) applied	TEİAŞ (2019), please see: https://webapi.teias.gov.tr/file/5b2fb3e8-bf05-48b1-b2f0-20139c0cc7fb?download

Choice of data or Measurement methods and procedures	TEİAŞ is the national electricity transmission company, which makes available the official data of all power plants in Turkey.
Purpose of data	Used for baseline emissions
Additional comment	-

Data/parameter	Balance of payments and investment
Unit	-
Description	Savings on natural gas imports
Source of data	Monthly meter readings
Value(s) applied	Avoidance of around 23,498,657 m ³ natural gas import each year by generation (112.0 GWh/y) of project activity, which is worth about 5,255,662 EUR per year.
Choice of data or Measurement methods and procedures	According to TEİAŞ; 19,568,140 thousand m³ natural gas is consumed for electricity generation in 2018. In 2018 Electricity generation amount from natural gas is 92,483 GWh. Since Turkey imports 99.16% of consumed natural gas, it is calculated that for 1 GWh electricity generation 209,809.44 m³ natural gas is imported in 2018. Amount of annual net electricity generation, which is calculated by monthly settlement notifications of EPIAŞ based on monthly meter readings, has been used to calculate correspondent amount of currency saved by project activity with help of above calculated factor.
Purpose of data	Ensure access to affordable, reliable, sustainable and modern energy.
Additional comment	

Data/parameter	Average amount of wastewater discharged
Unit	m ³ /GWh
Description	Average amount of wastewater discharged per GWh
Source of data	Turkish Electricity Transmission Company (TEİAŞ), Annual Development of Turkey's Gross Electricity Generation of Primary Energy Resources (2018) Turkish Statistical Institute (TURKSTAT), Wastewater Discharged by Thermal Power Plants (2018)
Value(s) applied	24.7 m ³ /GWh (According to official data links given below, 24.7

	m³ wastewater is discharged the environment due to each GWh electricity produced) TEİAŞ (2018) please see ; https://webapi.teias.gov.tr/file/512cbf1d-0ca3-4492-b901-3722c7b682f7?download TURKSTAT (2018) please see; https://data.tuik.gov.tr/Bulten/Index?p=Sektorel-Su-ve-Atiksu-Istatistikleri-2018-30673
Choice of data or Measurement methods and procedures	Coefficient for wastewater avoidance from potential cooling water operations calculated by taking Total Waste Water Discharged by Thermal Power Plants in the related year (publication of TURKSTAT data for the year of 2018, which is the most recent available data, was used) and Net Electricity Generation in the related year (publication of TEİAŞ data for the year of 2018 was used) TEİAŞ is the national electricity transmission company, which makes available the official data of all power plants in Turkey. TURKSTAT compile, evaluate, analyses and publish official statistics in the fields of economy, social issues, demography, culture, environment, science and technology, and in the other required areas in Turkey.
Purpose of data	Avoidance wastewater discharge to the environment
Additional comment	-

D.2 Data and parameters monitored

Relevant SDG Indicator/Safeguarding Principle	SDG 13: Climate action Target: 13.3 by emission reduction Indicator: 13.3.1
Data / Parameter	ER _y
Unit	tons of CO _{2e} /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 were calculated as considering the EPIAS records for the net electricity generated and the emission factor for the grid, 0.6482 tCO ₂ /MWh, which was calculated and published by The Ministry of Energy and Natural Resources of Turkey As per monitoring plan sheet of registered CM Excel. During this monitoring period, the results were obtained from the Actual ER excel file.
Value(s) applied	131,553 tCO ₂ /year
Measurement methods and procedures	Amount of annual net electricity generation, which is calculated by monthly settlement notifications of PMUM based on monthly meter readings, has been 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	-

Relevant SDG Indicator/Safeguarding Principle	SDG 6: Clean water and Sanitation Target: 6.3 Indicator: 6.3.1
Data / Parameter	Water Quality and Quantity
Unit	m ³ /year
Description	Average amount of wastewater discharged per GWh

Source of data	EPIAŞ based on monthly meter readings
Value(s) applied	Avoidance of around 5,011 x1000 m ³ wastewater discharge to the environment during MP.
Measurement methods and procedures	Coefficient for wastewater avoidance from potential cooling water operations calculated by taking Total Wastewater Discharged by Thermal Power Plants in the related year and Net Electricity Generation in the related year.
Monitoring frequency	Annually
QA/QC procedures	-
Purpose of data	Avoidance wastewater discharge to the environment
Additional comment	-

Relevant SDG	SDG 8: Decent work and economic growth		
Indicator/Safeguarding Principle	Target: 8.8 by employment and decent work Indicator: 8.8.2		
Data / Parameter	Quality of employment		
Unit	-		
Description	Quality of employment		
Source of data	Health & Safety trainings		
Value(s) applied	All employees attended trainings on Health and Safety. HSE trainings are held for employees at the plant.		
Measurement methods and procedures	A total of 34 trainings were conducted during this monitoring period. Training attendance list and/or certificates are provided in the table below:		
	Number	Training	Number of Participants
			Date
	2	Driving Safety Training in Rainy Weather	6
	3	OHS	4
	4	State of Well-Being	3
	5	Being Prepared for Disasters	4
	6	Being Prepared for Disasters	1
	7	OHS	4
	8	The COP28 UN Climate Change Conference	2
	9	OHS	3
	10	OHS	4
	11	OHS	1
	12	Driving in Winter Conditions	3
	13	Health and Safety During Ramadan	4

	14	Carbon Transparency Project	4	18/03/2024
	15	22 April Earth Day (Planet Against Plastic)	3	16/04/2024
	16	Driving Safety Training in Rainy Weather	3	16/04/2024
	17	Driving Safety	2	12/05/2024
	18	Sleep Disorders and Ergonomics	2	12/06/2024
	19	2023 Sustainability Report	2	12/07/2024
	20	Main Hazards at Solar Power Plant Project Sites	2	12/08/2024
	21	Driving Safety Training in Rainy Weather	3	15/09/2024
	22	COP 26 Conference of the Parties	2	10/11/2024
	23	ISO 50001 - Energy Management System	3	12/10/2024
	24	Fire - Safety Training	5	22/10/2024
	25	OHS	7	22/10/2024
	26	OHS	7	23/10/2024
	27	OHS	2	04/12/2024
	28	OHS	2	05/12/2024
	29	OHS - Sustainability	3	30/12/2024
	30	What to Do to Protect Yourself from Illnesses During the Winter Months	3	15/01/2025
	31	World Economic Forum - Global Risks Report - 2025	3	17/02/2025
	32	Health and Safety During Ramadan	2	11/03/2025
	33	Effective Waste Management	4	14/04/2025
	34	What You Need to Know About Disaster Preparedness	3	13/05/2025
Monitoring frequency	Annually (Once at the end of the 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			
Additional comment	-			

Relevant SDG	SDG 7: Affordable and clean energy
Indicator/Safeguarding Principle	Target: 7.2 by using renewable energy systems Indicator: 7.2.1
Data / Parameter	EG _{facility,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	202,959 MWh/year
Measurement methods and procedures	Regarding the electricity meters: two meters are placed (one main and one reserve) at the Şadıllı WPP which meters the electricity transferred to TEİAŞ substation. These meters are sealed by TEİAŞ and intervention by project proponent is not possible. The fact that two 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 buyers. EPIAŞ is the main data source, and the data are cross-checked with the SCADA data obtained from the project site. Measured hourly and readings monthly. Monthly settlement notifications of PMUM (Piyasa Mali Uzlaştırma Merkezi) consist hourly electricity production and withdrawn from the grid. Since the meters are reading electricity supplied to the system and withdrawn from the system separately, the net electricity amount supplied to the grid is calculated by electricity supplied minus electricity withdrawn which is be taken from monthly settlement notifications. In addition, the electricity generation data are cross-checked with EPIAŞ invoices. Thanks to TEİAŞ's remote reading system, the meter data are published on the EPIAŞ website at the end of each month and checked by the project owner. Once the data are verified, they are also published on the EPIAŞ website and accessed by the project owner. The data published on the EPIAŞ website also serve as the basis for the invoices. After cross-checking the EPIAŞ data and the meter reading data, the

	minimum of the two values is used for emission reduction calculations in order to ensure a conservative approach. After confirming the accuracy of the data, Çanres Elektrik issues and delivers the invoice to EPIAŞ. The above described measurement method follows Article 81 of the official regulation "Electricity Market Balancing And Settlement Regulation"³⁴
Monitoring frequency	Monthly
QA/QC procedures	According to the Article 2 of the Communiqué of Meters in Electricity Sector³⁵: <i>'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.'</i> Therefore, Ministry of Trade and Industry (Ministry is responsible from control and calibration of the meters. Also according to Article 11 of this Communiqué, meters shall be in class of 0.5s, which means error interval for measuring is in +- 0.5% range which is well acceptable according to rules. Paragraph b) of the Article 9 of the 'Regulation of Metering and Testing of Metering Systems'³⁶ (Regulation) of Ministry states that: <i>' b) Periodic tests of meters of electricity, water, coal gas, natural gas and current and voltage transformers are done every 10 years.'</i> Therefore, periodic calibration of the meters is conducted every 10 years. Periodic test of the meters is also carried out once every 2 years. Also according to Article 67 (page 20) of this regulation, the calibration shall be done in calibration stations which have been tested and approved by Ministry of Trade and Industry. Article 10 d) of Communiqué requires the meters shall be three phase four wire and Article 64 of Regulation clearly states how calibration shall be

³⁴ See, http://www.epdk.gov.tr/documents/elektrik/mevzuat/yonetmelik/elektrik/dengeleme_uzlastirma/DUYson.doc page 55

³⁵ See, <http://www.epdk.org.tr/documents/10157/81c16fc9-7777-46d6-a1bf-15c5ac8795c7>

³⁶ See, <http://www.mevzuat.adalet.gov.tr/html/21179.html>

	performed for this kind of meters. On 03.10.2019, both main and backup meters have been changed as their official seals were expired. After 03.10.2019, following meters are being used³⁷. The specification of current electricity meters are provided below: Current Main Electricity Meter with accuracy class of 0.5 S. Manufacturer: EMH Brand-Model: LZQJ-XC Serial Number: 8088831 Date of installation 03/10/2019 Date of calibration (First Index Procokol)³⁸ : 03/10/2019 Validity of calibration: 03/10/2029 Year of Manufacture: 2018 Last Test Date: 22/11/2023 Current Back-up Electricity Meter with accuracy class of 0.5 S. Manufacturer: EMH Brand-Model: LZQJ-XC Serial Number: 8088832 Date of installation: 03/10/2019 Validity of calibration: 03/10/2029 Date of calibration (First Index Protocol)³⁹ : 03/10/2019 Year of Manufacture: 2018 Last Test Date: 22/11/2023 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
Additional comment	Plant Manager is responsible for monitoring data.

³⁷ See, "Sayaç Değişim Protokolü" has been provided to VVB.

³⁸ 2019 ANA SAYAÇ İLK ENDEKS VE TEST BELGESİ

³⁹ 2019 YEDEK SAYAÇ İLK ENDEKS VE TEST BELGESİ

Relevant SDG Indicator/Safeguarding Principle	SDG 8: Decent work and economic growth Target: 8.8 by employment and decent work Indicator: 8.8.2
Data / Parameter	Quantitative employment and income generation
Unit	
Description	Number of employments
Source of data	Social security records
Value(s) applied	The Project employs 9 people during operation. Social security records of all different 9 employees have been provided.
Measurement methods and procedures	Social Security System (SGK) records. Project owner has employed workers from the local villages in the Şadılı WPP.
Monitoring frequency	Each monitoring period.
QA/QC procedures	SGK records of employees are provided during each monitoring period
Purpose of data	Employment and decent work for all
Additional comment	-

Relevant SDG Indicator/Safeguarding Principle	SDG 7: Affordable and clean energy Target: 7.2 by using renewable energy systems Indicator: 7.2.1
Data / Parameter	Balance of payments and investment
Unit	
Description	Savings on natural gas imports
Source of data	Monthly meter readings
Value(s) applied	According to TEİAŞ; 19,568,140 thousand m ³ natural gas is consumed for electricity generation in 2018. In 2018 Electricity generation amount from natural gas is 92,483 GWh. Since Turkey imports 99.16% of consumed natural gas, it is calculated that for 1 GWh electricity generation 209,809.44 m ³ natural gas is imported in 2018. Avoidance of around 42,582,662 m ³ natural gas import during MP by generation of project activity, which is worth about 9,523,951 EUR during MP.

Measurement methods and procedures	TEİAŞ statistics for natural gas share in the electricity mix shall help to demonstrate the high import dependency. Amount of annual net electricity generation, which is calculated by monthly settlement notifications of EPIAŞ based on monthly meter readings, is used to calculate correspondent amount of currency saved by project activity with help of above calculated factor.
Monitoring frequency	Annually
QA/QC procedures	
Purpose of data	Ensure access to affordable, reliable, sustainable, and modern energy.
Additional comment	

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

NA

D.4. Implementation of sampling plan

Not Applicable

SECTION E. CALCULATION OF SDG IMPACTS

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

Used Formulas:

FOR SDG 13

There is no similar activity to combat with climate change on project site and nearby area for baseline situation. This project generates clean energy which also does not cause greenhouse gas emission during electricity generation. In this monitoring period, the estimated emission reduction in the baseline scenario is 133,660 tCO₂.

Realized estimated baseline emissions.

Estimated BE in Baseline 28/09/2023-31/12/2023= (29,151 MWh) x (0.6482 tCO₂/MWh) = 18,895 tCO₂

Estimated BE in Baseline 01/01/2024-31/12/2024= (112,000 MWh) x (0.6482 tCO₂/MWh) = 72,598 tCO₂

Estimated BE in Baseline 01/01/2025-31/07/2025= (65,052 MWh) x (0.6482 tCO₂/MWh) = 42,167 tCO₂

Total: 133,660 tCO₂

EG_{baseline} is considered as zero.

The energy generating equipment is not transferred from or to another activity. Therefore, leakage is also considered as "0".

LE_y = 0

The baseline project activity involves the generation of electricity by a wind power plant therefore project activity does not result in greenhouse gas emissions.

PE_y = 0

Therefore, Net Estimated GHG Emission Reductions and Removals are calculated as follows:

$$ER_y = BE_y - PE_y = 133,660 \text{ tCO}_2\text{e} - 0 \text{ tCO}_2\text{e} - 0 = 133,660 \text{ tCO}_2\text{e/yr.}$$

FOR SDG 6

The project activities replace 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. Amount of wastewater to be discharged to the environment is decreased.

Estimated Amount of Avoided Cooling Wastewater Discharge by Project Activity per year in Baseline = Estimated Annual Electricity Generation of Project Activity within in MP in Baseline x Estimated Average Amount of Wastewater Discharged per each GWh Electricity Generation in Baseline

Estimated Avoid of Cooling Wastewater Discharge in Baseline 28/09/2023-31/12/2023= (29.15 GWh) x (24.69 m³/GWh) = 720 x 1000 m³

Estimated Avoid of Cooling Wastewater Discharge in Baseline 01/01/2024-31/12/2024= (112 GWh) x (24.69 m³/GWh) = 2,766 x 1000 m³

Estimated Avoid of Cooling Wastewater Discharge in Baseline 01/01/2025-31/07/2025= (65.05 GWh) x (24.69 m³/GWh) = 1,606 m³ x 1000 m³

Total: 5,091 x 1000 m³

The project is estimated to avoid of 5,091 x 1000 m³ cooling wastewater discharge to the environment during this monitoring period in baseline.

Additionally, the project activity causes a domestic wastewater discharge, which is calculated as follow:

Estimated Amount of Wastewater Discharged by Project Activity per year in Baseline
= Number of employees x Daily water usage per worker x
Number of days

Estimated Amount of Wastewater Discharged by Project Activity in Baseline 28/09/2023-31/12/2023= (9) x (0,15 m³) x (95) = 0.1283 x1000 m³

Estimated Amount of Wastewater Discharged by Project Activity in Baseline
 $01/01/2024-31/12/2024 = (9) \times (0,15 \text{ m}^3) \times (365) = 0.4928 \times 1000 \text{ m}^3$

Estimated Amount of Wastewater Discharged by Project Activity in Baseline
 $01/01/2025-31/07/2025 = (9) \times (0,15 \text{ m}^3) \times (212) = 0.2862 \times 1000 \text{ m}^3$

Total Estimated Amount of Wastewater Discharged by Project Activity in Baseline:
 $0.9072 \times 1000 \text{ m}^3$

Daily wastewater discharge of a person is found to be 0.150 m^3 by the TURKSTAT.

So that,

Estimated Net Amount of Avoided Wastewater Discharge by Project Activity in Baseline
= Estimated Amount of Avoided Cooling Wastewater Discharge by Project Activity in
Baseline - Estimated Amount of Generated Domestic Wastewater Discharge by Project
Activity in Baseline

Net Estimated Amount of Avoided Wastewater Discharge by Project Activity in Baseline=
 $5,091 \times 1000 \text{ m}^3 - 0.9072 \times 1000 \text{ m}^3 = 5,091 \times 1000 \text{ m}^3/\text{year}$.

FOR SDG 7

The estimated annual electricity generation forming the basis for emission reduction calculation is 112,000 MWh as indicated in the generation license. The estimated total electricity generation in the baseline scenario for this monitoring period is 206,203 MWh. Estimated electricity generation amount for a 1-day baseline= $112 \text{ MWh} / 365 \text{ days} = 306,849 \text{ MWh/days}$

Baseline estimated electricity generation $28/09/2023-31/12/2023 = 306,849 \text{ MWh/days} \times 95 \text{ days} = 29,151 \text{ MWh}$

Baseline estimated electricity generation $01/01/2024-31/12/2024 = 306,849 \text{ MWh/days} \times 365 \text{ days} = 112,000 \text{ MWh}$

Baseline estimated electricity generation $01/01/2025-31/07/2025 = 306,849 \text{ MWh/days} \times 199 \text{ days} = 65,052 \text{ MWh}$

Balance of Payments and Investment:

With 206,203 MWh estimated power generation, the project is expected to avoid around 43,263,281 m³ natural gas import each year by generation of project activity in baseline, which is estimated worth about 9,676,177 EUR per year in baseline.

Estimated annual avoided natural gas import in baseline has been calculated as follows:

Estimated Avoided Natural Gas Import in baseline=((Amount of Natural Gas Combusted for Electricity Generation)/(Amount of Electricity Generated with Natural Gas) X (Share of Import for Natural Gas Consumption in Turkey) x (Estimated Net Annual Electricity Generation of Project Activity in baseline)

Value Avoided Imported Natural Gas by Project Activity (TL) has been calculated as follows:

Value Avoided Imported Natural Gas by Project Activity (TL)
=Amount of Avoided Imported Natural Gas by Project Activity (m³) x Price of Gas (TL/m³) in Turkey

Value Avoided Imported Natural Gas by Project Activity (EUR) has been calculated as follows :

Estimated Value Avoided Imported Natural Gas by Project Activity (EUR) =(Value Avoided Imported Natural Gas by Project Activity (TL))/(EUR/TL (rate of Exchange for 2018))

Estimated Value Avoided Imported Natural Gas by Project Activity (EUR) in baseline 28/09/2023-31/12/2023= (29.15 GWh x 209,809 m³/GWh x 1.27 TL/m³)/ 5.66 EUR/TL= 1,367,912 EUR

Estimated Value Avoided Imported Natural Gas by Project Activity (EUR) in baseline 01/01/2024-31/12/2024= (112 GWh x 209,809 m³/GWh x 1.27 TL/m³) / 5.66 EUR/TL = 5,255,662 EUR

Estimated Value Avoided Imported Natural Gas by Project Activity (EUR) in baseline 01/01/2025-31/07/2025= (65.05 GWh x 209,809 m³/GWh x 1.27 TL/m³) / 5.66 EUR/TL = 3,052,604 EUR

FOR SDG 8

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 as following target:

Target 8.5: "By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value."

Target 8.8: "Protect labor rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment".

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

FOR 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. In this monitoring period, the emission reduction by project activity is 131,553 tCO₂.

ER 28/09/2023-31/12/2023= (36,116 MWh) x (0.6482 tCO₂/MWh) = 23,409 tCO₂

ER 01/01/2024-31/12/2024= (109,912 MWh) x (0.6482 tCO₂/MWh) = 71,242 tCO₂

ER 01/01/2025-31/07/2025= (56,931 MWh) x (0.6482 tCO₂/MWh) = 36,901 tCO₂

Total: 131,553 tCO₂

EG is considered as zero.

The energy generating equipment is not transferred from or to another activity. Therefore, leakage is also considered as "0".

LE_y = 0

The project activity involves the generation of electricity by a wind power plant therefore project activity does not result in greenhouse gas emissions.

$$PE_y = 0$$

Therefore, Net GHG Emission Reductions and Removals are calculated as follows:

$$ER_y = BE_y - PE_y = 131,553 \text{ tCO}_2\text{e} - 0 \text{ tCO}_2\text{e} - 0 = 131,553 \text{ tCO}_2\text{e/yr.}$$

FOR SDG 6

The project activities replace 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. Amount of wastewater to be discharged to the environment is decreased. SDG 6 parameter has been evaluated and discharge wastewater is negligible during the monitoring period. Therefore, wastewater value is zero for this part.

Amount of Avoided Cooling Wastewater Discharge by Project Activity per year =
Annual Electricity Generation of Project Activity within in MP x Average Amount of
Wastewater Discharged per each GWh Electricity Generation

Avoid of Cooling Wastewater Discharge 28/09/2023-31/12/2023= (36.12 GWh) x
(24.69 m³/GWh) = 892 x 1000 m³

Avoid of Cooling Wastewater Discharge 01/01/2024-31/12/2024= (109,91 GWh) x
(24.69 m³/GWh) = 2,714 x 1000 m³

Avoid of Cooling Wastewater Discharge 01/01/2025-31/07/2025= (56.93 GWh) x
(24.69 m³/GWh) = 1,406 m³ x 1000 m³

Total: 5,011 x 1000 m³

The project is estimated to avoid of 5,011 x 1000 m³ cooling wastewater discharge to the environment during this monitoring period in baseline.

Additionally, the project activity causes a domestic wastewater discharge, which is calculated as follow:

Estimated Amount of Wastewater Discharged by Project Activity per year in Baseline
= Number of employees x Daily water usage per worker x
Number of days

Estimated Amount of Wastewater Discharged by Project Activity in Baseline
28/09/2023-31/12/2023= (9) x (0,15 m³) x (95) = 0.1283 x1000 m³

Estimated Amount of Wastewater Discharged by Project Activity in Baseline
01/01/2024-31/12/2024= (9) x (0,15 m³) x (365) = 0.4928 x1000 m³

Estimated Amount of Wastewater Discharged by Project Activity in Baseline
01/01/2025-31/07/2025= (9) x (0,15 m³) x (212) = 0.2862 x1000 m³,

Total Estimated Amount of Wastewater Discharged by Project Activity in Baseline:
0.9072 x 1000 m³

Daily wastewater discharge of a person is found to be 0.150 m³ by the TURKSTAT.

So that,

Estimated Net Amount of Avoided Wastewater Discharge by Project Activity in Baseline
= Estimated Amount of Avoided Cooling Wastewater Discharge by Project Activity in
Baseline - Estimated Amount of Generated Domestic Wastewater Discharge by Project
Activity in Baseline

Net Amount of Avoided Wastewater Discharge by Project Activity= 5,011 x 1000 m³ –
0.9072 x 1000 m³ = 5,011 x 1000 m³/year.

FOR 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. The number of employees has been reached via the Social Security Institution records. 9 different workers. All employees at the plant are provided Health&Safety Trainings annually. Thus 34 training has been conducted during the present monitoring period.

FOR SDG 7

The project generates 202,959 MWh for the whole monitoring period (673 days) and contributes to share of low-cost / must-run sources. There is no natural gas import caused by the Project.

Electricity Generation for:

28/09/2023-31/12/2023= 36,116 MWh

01/01/2024-31/12/2024= 71,242 MWh

01/01/2025-31/07/2025= 36,901 MWh

25-day electricity production calculation for September (28/09/2023 – 30/09/2025):

Number of days in September= 30

Number of days in September included in the MP=3

Electricity Generation in September =12,061.17 MWh

Electricity production for the 3 days of September = 12,061.17 MWh/ 30 days x 3 days= 1206,12 MWh

Balance of Payments and Investment:

With 202,959 MWh power generation, the project is expected to avoid around 42,582,662 m³ natural gas import each year by generation of project activity, which is worth about 9,523,951 EUR.

Avoided natural gas import in has been calculated as follows:

Avoided Natural Gas Import=((Amount of Natural Gas Combusted for Electricity Generation)/(Amount of Electricity Generated with Natural Gas) X (Share of Import for Natural Gas Consumption in Turkey) x (Net Annual Electricity Generation of Project Activity)

Value Avoided Imported Natural Gas by Project Activity (TL) has been be calculated as follows:

Value Avoided Imported Natural Gas by Project Activity (TL)
=Amount of Avoided Imported Natural Gas by Project Activity (m³) x Price of Gas (TL/ m³) in Turkey

Value Avoided Imported Natural Gas by Project Activity (EUR) has been be calculated as follows :

Value Avoided Imported Natural Gas by Project Activity (EUR) =(Value Avoided Imported Natural Gas by Project Activity (TL))/(EUR/TL (rate of Exchange for 2018))

Value Avoided Imported Natural Gas by Project Activity (EUR) 28/09/2023-31/12/2023= (36.12 GWh x 209,809 m³/GWh x 1.27 TL/m³)/ 5.66 EUR/TL= 1,694,764 EUR

Value Avoided Imported Natural Gas by Project Activity (EUR) 01/01/2024-31/12/2024= (109,912 GWh x 209,809 m³/GWh x 1.27 TL/m³) / 5.66 EUR/TL = 5,157,666 EUR

Value Avoided Imported Natural Gas by Project Activity (EUR) 01/01/2025-31/07/2025= (56.93 GWh x 209,809 m³/GWh x 1.27 TL/m³) / 5.66 EUR/TL = 2,671,521 EUR

E.3. Calculation of leakage

LE_y is 0, as it is not considered according to ACM0002. PE_y is 0 because project is a wind power generation activity.

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	131,553 tCO ₂	0 tCO ₂	131,553 tCO ₂
7	Electricity Generation	0 MWh 9,523,951 EUR natural gas import	202,959 MWh 0 EUR natural gas import	202,959 MWh Avoidance of 9,523,951 EUR natural gas import
8	Quantitative Employment And Income Generation &	0	9 people employed at the end of the monitoring period and 34 trainings are conducted	9 people employed at the end of the monitoring period and 34 trainings are conducted

	Qualitative Employment			
6	Water Quality	Around 5,011 x1000 m ³ cooling wastewater discharge.	0m ³ domestic wastewater discharge	Avoidance around 5,011 x1000 m ³ wastewater discharge.

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 ⁴⁰ achieved during this monitoring period
13	133,660 tCO ₂	131,553 tCO ₂
7	206,203 MWh 9,676,177 EUR	202,959 MWh 9,523,951 EUR
8	All employees at the plant are provided Health&Safety Trainings annually. Quantitative Employment and Income Generation: The project provides between 5 and 34 trainings are and 15 employments.	9 people employed at the end of the monitoring period conducted
6	Avoidance around 5,091 x1000 m ³ wastewater discharge.	Avoidance around 5,011 x 1000 m ³ wastewater discharge.

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

Estimated annual emission reduction in ex ante calculation of registered PDD is 72,598 tCO₂/y, which corresponds to 133,660 tCO₂ for 673 days. And actual emission reduction

⁴⁰ Whenever emission reductions are capped, both the original and capped values used for calculations must be transparently reported. Use brackets to denote original values.

achieved during this monitoring period is 131,553 tCO₂ (for 28/09/2023 – 31/07/2025, 673 days).

Estimated annual electricity generation calculation of registered PDD is 112,000 MWh/y, which corresponds to 206,203 MWh for 673 days. And actual electricity generated achieved during this monitoring period is 202,959 MWh (for 28/09/2023 – 31/07/2025, 673 days).

Estimated annual natural gas import avoided calculation of registered PDD is 5,247,852 EUR/y, which corresponds to 9,676,177 EUR for 673 days. And actual natural gas import avoided during this monitoring period is 9,523,951 EUR (for 28/09/2023 – 31/07/2025, 673 days).

Estimated annual amount of avoided wastewater discharge calculation of registered PDD is 2,761,3 x1000 m³/y, which corresponds to 5,091 x1000 m³ for 673 days. And actual avoided wastewater discharge achieved during this monitoring period is 5,011 x1000 m³ (for 28/09/2023 – 31/07/2025, 673 days).

In terms of employment and trainings: The project provides between 5 and 15 employments in the ex-ante estimation, while in practice 9 people were employed and 34 trainings were conducted during this monitoring period.

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

Initial investment analysis, which was made during the validation process of the project, has 112,000 MWh annual electricity generation according to the feasibility study. The Project IRR calculations were carried out for two scenarios which are IRR with carbon credits and IRR without carbon credits. Project IRR was 5.0% with carbon credits and it was 4.2% without carbon credits. The benchmark discount rate was determined as 8.4%.

In this monitoring period, the annual electricity generation is 110,074 MWh (corresponding to 202,959 MWh for 673 days). However, there is a difference between estimated electricity generation value, which is 111,834 MWh (206,203 MWh for 673 days), and actual electricity generation value, which is 110,074 MWh (202,959 MWh for

673 days), calculated as -1.57% . This difference is due to the change in wind potential. Hence, the project IRR has been checked by using the actual electricity generation which is 202,959 MWh. According to this, the project IRR is calculated lower than the benchmark (8.4%). Consequently, the difference in electricity generation is not impacting the additionality of the project since the calculated IRR with actual annual generation is well below the benchmark.

The estimated emission reduction in ex ante calculation is 133,660 tCO₂ for this monitoring period whereas the actual emission reduction achieved during this monitoring period is 131,553 tCO₂. The difference between these two values is -1.58% , and a slight decrease in emission reductions is observed in this monitoring period. This situation is considered to be due to the change in wind potential. As the change in emission reductions is less than 10% each year in this monitoring period, the claimed emission reduction for this monitoring period is accepted as the actual monitored value (131,553 tCO₂).

Estimated values for electricity generation, and natural gas import avoided calculation of registered PDD are 206,203 MWh, and 9,676,177 EUR respectively for this monitoring period. Actual values are 202,959 MWh, and 9,523,951 EUR respectively. The values such as emission reduction and natural gas import avoided are calculated directly based on electricity generation. Therefore, net difference between estimated and actual values is -1.57% for electricity generation, CO₂ and natural gas import avoided. This difference is also due to the change in wind potential.

Amount of avoided wastewater discharge calculation is also related with the electricity generation, and it is also expected that there will be a difference between estimated and actual values because of the wind potential. Estimated amount of avoided wastewater discharge is $5,091 \times 1000 \text{ m}^3$ and actual value is $5,011 \times 1000 \text{ m}^3$ during the monitoring period. So, the net difference between estimated and actual amount of avoided wastewater discharge for the project activity is -1.57% .

In terms of social co-benefits, the project was expected to provide between 5 and 15 employments, while in practice 9 people were employed and 34 trainings were conducted during this monitoring period, which is aligned with the ex-ante estimation.

SECTION F. SAFEGUARDS REPORTING

Relevant SDG Indicator/Safeguarding Principle	Other Safeguarding Principle: 9.1 Landscape Modification and Soil
Data / Parameter	Other
Unit	N/A
Description	Erosion risk control at new roads
Source of data	Observation
Value(s) applied	According to the interview with Sadilli WPP personnel, there is no problem with erosion at the new roads. The roads are maintained regularly.
Measurement methods and procedures	Visual inspection whether the roads have caused significant erosion.
Monitoring frequency	Only once during the first verification for second crediting period
QA/QC procedures	-
Purpose of data	Soil Condition
Additional comment	-

Relevant SDG Indicator/Safeguarding Principle	Other Safeguarding Principle: 9.2 Vulnerability to Natural Disaster
Data / Parameter	Other
Unit	N/A
Description	Earthquake risk
Source of data	EIA study ⁴¹
Value(s) applied	In the HSE (occupational health and safety) trainings, all employees are informed related to the earthquake. Employees are provided with earthquake awareness trainings on what to do during and after an earthquake. Please see the training documents about the earthquake.

⁴¹EIA Study Documents

Measurement methods and procedures	Earthquake insurance is taken out for the project.
Monitoring frequency	Only once during the first verification for second crediting period
QA/QC procedures	-
Purpose of data	Soil Condition
Additional comment	-

Relevant SDG Indicator/Safeguarding Principle	Other Safeguarding Principle: 9.4 Release of pollutants
Data / Parameter	Other Pollutants
Unit	N/A
Description	a) Noise level during operation of the project activity. b) Waste oil amount c) Solid household waste
Source of data	a) Interview with the head of village b) Removal receipts c) Garbage bins' photos
Value(s) applied	a) During the site visit, it was conducted a meeting with head of village and stakeholders. According to the interview, no negative feedback has been received regarding noise. b) Solid household waste from daily operations is disposed of properly. Waste oil etc. (gearbox oil waste, oil filters etc.) is collected on site and disposed by licensed companies according to legal requirements. Removal receipts and garbage bins' photos are checked. c) Garbage bins' photos are provided. The waste dates for hazardous/non-hazardous waste during the monitoring period are as follows: • Septic Tank Service: 19/09/2023 • 2023 Waste Declaration Form: 16/02/2024 • Septic Tank Service: 29/10/2024 • 2024 Waste Declaration Form: 19/02/2025 • Septic Tank Service: 27/01/2025
Measurement methods and procedures	a) The noise level from turbines is interviewed to the head of village b) Receipts of transfer of waste oil are checked c) Garbage bins' photos are checked
Monitoring frequency	a) At least once for each monitoring period

	b) At least once for each monitoring period c) At least once for each monitoring period
Purpose of data	Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss.
Additional comment	-

Relevant SDG Indicator/Safeguarding Principle	Other Safeguarding Principle:9.10 High Conservation Value Areas and Critical Habitats
Data / Parameter	Biodiversity
Unit	N/A
Description	Impact on bird migration routes
Source of data	Letter from the personnel or Ornithology report
Value(s) applied	PP conducted an assessment of the impact of project on bird life during reproduction period in 2020. After that, it was decided that Ornithology report is repeated every 3 years. Therefore, new ornithology report ⁴² are completed for the year 2025. According to the findings of the studies, It has been observed that the mortality effect of turbines on birds in the Sadilli WPP is very low.
Measurement methods and procedures	No bird mortality. The ornithological study states that the project is not expected to have a negative impact on birds.
Monitoring frequency	Once in a monitoring period
QA/QC procedures	-
Purpose of data	Preventing bird collisions.
Additional comment	-

Relevant SDG Indicator/Safeguarding Principle	Other Safeguarding Principle: 4. Cultural Heritage, Indigenous Peoples, Displacement and Resettlement
Data / Parameter	Livelihood of the Poor
Unit	N/A
Description	Land acquisition

⁴² Şadilli RES 2025 Karkas Raporu

Source of data	Interview with stakeholders
Value(s) applied	100% of the land acquisition process has been completed. These land acquisitions were carried out in accordance with the law and land owners were fairly compensated. In addition, this situation was discussed with local people during the site visit. Local people stated that they had no problems in this regard and that everything was carried out fairly and that they were satisfied with this.
Measurement methods and procedures	Interviews to check whether the process is carried out properly according to legal requirements and that land owners are compensated fairly.
Monitoring frequency	Only once during the first verification for second crediting period
QA/QC procedures	-
Purpose of data	Land acquisition ^{43 44}
Additional comment	-

Relevant SDG Indicator/Safeguarding Principle	Other Safeguarding Principle: 4 Cultural Heritage, Indigenous Peoples, Displacement and Resettlement
Data / Parameter	Livestock feeding
Unit	N/A
Description	Livestock feeding
Source of data	Interview with stakeholders
Value(s) applied	During the site visit, interview with the local people has been carried out and there is no negative comment about the project activity and the livestock feeding. No access limitation at the Project site for livestock.
Measurement methods and procedures	No access limitation at the Project site for livestock.
Monitoring frequency	Continuously.

⁴³ Balıkesir Orman Bölge Müdürlüğü - Çanakkale Kısmı

⁴⁴ İstanbul Orman Bölge Müdürlüğü - Tekirdağ Kısmı

QA/QC procedures	-
Purpose of data	Livestock feeding
Additional comment	-

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.

For the Sadilli WPP, stakeholder engagement procedure for this monitoring period (28/09/2023 – 31/07/2025) was conducted with the headman of Elmali village and the three local stakeholders who were man and woman from Elmali Village onsite on 26/08/2025.

Since this project is in second crediting period and project will not have different impacts from previous vintages, currently the grievance mechanism does mainly rely on the existed grievance mechanism by using logbook as same with previous monitoring periods. Logbook is located in headman of the Elmali village.

As validated during the site visit, mukhtar (head of the village) had already taken the contact information of Company Executive of the company so that the stakeholders are able to reach company executive whenever they have any complaints, suggestions or ideas about the project. Headman is the contact person between the project owner and the stakeholders. The contact information of project owner is listed on the first page of the logbook. Stakeholders can always reach the headman if they have any grievances or suggestions, so the grievance mechanism is carried out in a healthy way. During the site visit, it is validated that there were no negative comments from the stakeholders. There is no grievance received related to the project during this monitoring period.

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