MONITORING REPORT TEMPLATE[1]

EVRENCİK WPP – MONITORING REPORT OF 1ST MONITORING PERIOD

Document prepared by Sıla Duran – Sekans Enerji Limited Sirketi

02/12/2024

Monitoring Report Template (Version 1.1)[2]	
Name of project	Evrencik WPP
BCR Project ID	BCR-TR-152-1-001
Registration date of the project activity	06/05/2024
Project holder	Sekans Enerji Limited ŞTİ. Project Holder / Representative / Consultant Emniyet Evleri District, Eski Büyükdere Street, No: 1/1 Aparment No: 1B04 Kağıthane/İstanbul, Türkiye
Contact	Sekans Enerji Limited ŞTİ. Project Representative / Consultant Mrs. Sıla Duran sila@sekansdanismanlik.com Emniyet Evleri District, Eski Büyükdere Street, No: 1/1 Aparment No: 1B04 Kağıthane/İstanbul, Türkiye

[1] This form is for the monitoring report of projects using the BCR Program.
[2] The instructions in this form are a guide. Do not represent an exhaustive list of the information the preparer shall provide under each section of the template.

Monitoring Report Template (Version 1.1)[2]	
Version number of the Project Document applicable to this monitoring report	5 20/11/2024
Applied methodology	*CDM Approved ACM0002 Grid-connected electricity generation from renewable sources, version 22.0*
Project location (Country, Region, City)	*Evrencik Village of Kırklareli Province, Türkiye*
Project starting date	*14/10/2020*
Quantification period of GHG reductions/removals	14/10/2020 to 13/10/2027
Monitoring period number	*1st*
Monitoring period	14/10/2020 to 30/06/2022
Amount of emission reductions or removals achieved by the project in this monitoring period	322,687
Contribution to Sustainable Development Goals	**SDG7:** Ensure access to affordable, reliable, sustainable and modern energy for all **SDG8:** Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all **SDG13:** Take urgent action to combat climate change and its impacts
Special category, related to co-benefits	***Target 7.2:*** *By 2030, increase substantially the share of renewable energy in the global energy mix*

Monitoring Report Template (Version 1.1)[2]	
	Target 8.5: By 2030, achieve full and productive employment and decent work for all women and men **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. **Target 13.3:** Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

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1 General description of project

Evrencik WPP (hereafter referred as "Project") is a new built wind power plant, located in Kırklareli Province, Turkey owned by Evrencik Rüzgar Enerjisinden Elektrik Üretim Anonim Şirketi. The generation license of the project was issued on 13/01/2022 for 49 years. The project has an installed capacity of 129.60 MWm/129.60 MWe and the annual generation is estimated to be 518,400 MWh.

Project has been developed to have twenty-nine Nordex N149 / 4.0-4.5-4.8 turbines, twenty-four of them having a capacity of 4.5 MWm/4.5 MWe, three of them having a capacity of 4.0 MWm/4.0 MWe and two of them having a capacity of 4.8 MWm/4.8 MWe. The project activity includes Siemens and Winergy branded 3-phased, double fed asynchronous type generators with a power pf 4835 kW per unit and 50 Hz frequency. The electricity is transmitted to substation Vize TM, via an 18.24459 km, 154 kV transmission line.

The purpose of the Project is to produce renewable electricity using wind as the power source and to contribute to Turkey's growing electricity demand through a sustainable and low carbon technology. The project is displacing the same amount of electricity generated by the grid dominated by fossil fired power plants. The annual emission reduction estimated by the project is 328,924 tCO_2. During the crediting period, 2,302,467 tCO_2 are expected to be reduced.

Project has been developed to have twenty-seven Nordex N149 turbines, each having a capacity of 4.8 MWm/4.8 MWe. The electricity is transmitted to substation Vize TM, via an 18.24459 km, 154 kV transmission line.

The Project has started its commercial operation through the ministry acceptance of one turbine with the installed capacity of 4.8 MWm/4.8 MWe on 14/10/2020[3].

[3] Provisional Acceptance Document

1.1 Sectoral scope and project type

01 Energy industries (renewable - / non-renewable sources)

The project is not a grouped project.

1.2 Project start date

14/10/2020

1.3 Project quantification period

The first quantification period is for 7 years, from 14.10.2020 to 13.10.2027, including both dates.

1.4 Project location and project boundaries

The project activity is located in Sofular and Evrencik Villages of Vize District of Kırklareli Province, Türkiye. Coordinates of turbines in DD format is shown in the table below.

Table 1. Coordinates of the Turbines

Turbine No.	Latitude	Longitude
T1	41.649° N	27.684° E
T2	41.646° N	27.687° E
T3	41.645° N	27.691° E
T4	41.643° N	27.695° E
T5	41.642° N	27.699° E
T6	41.638° N	27.695° E
T7	41.656° N	27.698° E

T8	41.654° N	27.701° E
T9	41.65° N	27.701° E
T10	41.677° N	27.728° E
T11	41.658° N	27.694° E
T12	41.677° N	27.736° E
T13	41.674° N	27.738° E
T14	41.67° N	27.739° E
T15	41.672° N	27.727° E
T16	41.667° N	27.729° E
T17	41.663° N	27.731° E
T18	41.647° N	27.725° E
T19	41.647° N	27.729° E
T20	41.645° N	27.733° E
T21	41.635° N	27.748° E
T22	41.638° N	27.732° E
T23	41.631° N	27.752° E
T24	41.652° N	27.681° E

T25	41.655° N	27.677° E
T26	41.644° N	27.744° E
T27	41.639° N	27.745° E
T28	41.641° N	27.733° E
T29	41.634° N	27.732° E

Figure 1. Project Location

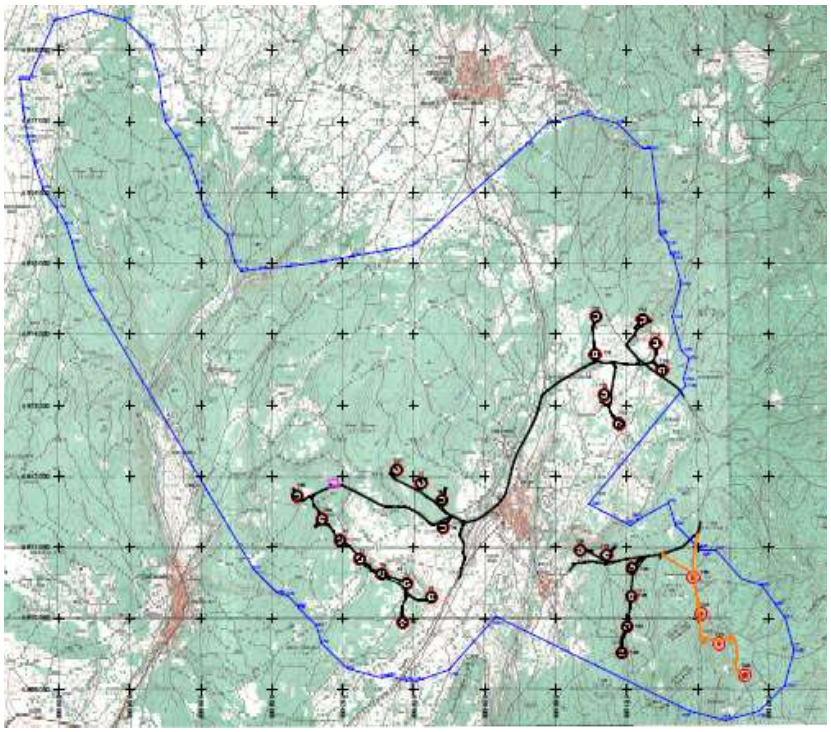


Figure 2. Project Layout

1.5 Summary Description of the Implementation Status of the Project

The project has an installed capacity of 129.60 MWm/129.60 MWe and the annual generation is estimated to be 518,400 MWh.

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

Project has been developed to have twenty-nine Nordex N149 / 4.0-4.5-4.8 turbines, twenty-four of them having a capacity of 4.5 MWm/4.5 MWe, three of them having a capacity of 4.0 MWm/4.0 MWe and two of them having a capacity of 4.8 MWm/4.8 MWe. The project activity includes Siemens and Winergy branded 3-phased, double fed asynchronous type generators with a power pf 4835 kW per unit and 50 Hz frequency. The electricity is transmitted to substation Vize TM, via an 18.24459 km, 154 kV transmission line.The Project has started its commercial operation through the ministry acceptance of one turbine with the installed capacity of 4.8 MWm/4.8 MWe on 14/10/2020.

Table 2. Key technical specifications of wind turbines and generators[4]

Turbines	
Parameter	**Value**
Brand	Nordex
Type	Nordex N149 / 4.0-4.5-4.8
Rater power	24 x 4.5 MWm/4.5 MWe + 3 x 4.0 MWm /4.0 MWe + 2 x 4.8 MWm/4.8 MWe
Rotor diameter	149.1 m
Cut-in / Cut-off wind speed	3 m/s - 26 m/s
Number of blades	3
Swept area	17460 m²
Hub height	164
Total installed capacity	129.60 MWm / 129.60 MWe
Generators	
Parameter	**Value**

[4] Ministry Acceptance Protocols

Brand	6 units WİNERGY
	21 units SİEMENS
Type	Double fed asynchronous generator
Phase	3-phased
Power	4835 kW
Voltage	690 V
Frequency	50 Hz
Revs per minute	1230

Additionally the measurements are performed by four measuring devices, which are the main (primary) measuring devices and the backup (secondary) measuring devices. The brand of power meters is EMH (LZQJ-XC). The measuring frequency of all devices is continuous. The meters are placed at the Powerhouse. Specifications of the meters are shown in the table below:

Table 3. Technical Specifications of the Meters

Meter	Brand	Type	Class	Serial No
Main-1	EMH	LZQJ-XC	0.5S	9420198
Main-2	EMH	LZQJ-XC	0.5S	9420200
Backup-1	EMH	LZQJ-XC	0.5S	9420199
Backup-2	EMH	LZQJ-XC	0.5S	9420201

Milestones of the project can be found in below table:

Milestone	Date
Commissioning Date	14/10/2020
Registration Date	06/05/2024
Quantification Period	14/10/2020 to 13/10/2027
Monitoring Period	14/10/2020 to 30/06/2022

The baseline scenario has been defined as the generation of the same amount of electricity by the national grid which is dominated by thermal power plants. The main emission source of electricity generation in fossil fuel fired power plants that are connected to Turkish National Grid is CO_2 as in baseline scenario. Compared to that baseline scenario, the project activity has positive influences on sustainable development in Türkiye.

The project activity utilizes long-term potential of wind energy, efficient technology to reduce GHG emissions as well as to diversifying and increasing security of the local energy supply and contributing to a sustainable development. The project contributes to technology and know-how transfer from Germany since the electricity generation technologies in Türkiye are currently dominated by fossil fuel power plants.

The project generated 508,571.61 MWh net electricity and reduced 322,687 tCO_2e amount of emission during the monitoring period of 14/10/2020 – 30/06/2020.

2 Title, reference and version of the baseline and monitoring methodology applied to the project

The United Nations approved consolidated baseline methodology applicable to this project is ACM0002: Grid-connected electricity generation from renewable sources --- Version 22.0[5] .

ACM0002 refers to the following tools:

TOOL 01: Tool for the demonstration and assessment of additionality, version 07.0.0 [6]

TOOL 07: Tool to calculate the emission factor for an electricity system, version 07.0[7]

TOOL 24: Common Practice, version 03.1[8]

TOOL 27: Investment Analysis, version 13.0[9]

3 Registry or participation under other GHG Programs/Registries

N/A

4 Contribution to Sustainable Development Goals (SGD)

The impact of the project activity on environmental and social aspects is shown below based on BioCarbon's SDS Tool v1.0.

The project is expected to contribute SDG 7, 8 and 13.

- **Goal 7 Affordable and Clean Energy**

[5] https://cdm.unfccc.int/UserManagement/FileStorage/R0IJ1X9LQ7W2GOYHSMBFCPE3VKZ685
[6] https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-01-v7.0.0.pdf
[7] https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-07-v7.0.pdf
[8] https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-24-v1.pdf
[9] https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-27-v13.pdf

The project produces electricity from renewable energy sources using wind as the power source and to contribute to Turkey's growing electricity demand through a sustainable and low carbon technology. The project displaces the same amount of electricity generated by the grid dominated by fossil fired power plants.

During the monitoring period, 508,571.61 MWh of net electricity generated by the project activity.

The project contributes to the following target 7.2. and following indicator 7.2.1.

- **Goal 8 Decent Work and Economic Growth**

During construction and operational period, the project has created employment opportunities for the local community. The project contributes to the economic development of the region by providing sustainable energy resources.

The positions at the wind projects require skilled workers, which can be achieved by adequate training. The project provides workers with a safe and healthy work environment and is not complicit in exposing workers to unsafe work environments.

The project activity provided long-term employment opportunities to 12 people.

The project contributes to the following targets 8.5.; 8.8.and following indicators 8.5.2.; 8.8.1.

- **Goal 13 Climate Action**

The project contributes to improve the environmental situation in the region and in the country as avoiding fossil fuel-based electricity enhances the air quality and help to reduce the adverse effects on the climate. Through renewable technologies and wind-based electricity sustainable and climate friendly development is promoted. While emission reduction is realized, technology transfer is also realized as benefitting from wind energy.

During the monitoring period, 322,687 tCO_2e of emissions reduced by the project activity.

The project contributes to the following target 13.3. and following indicator 13.3.2.

5 Compliance with Applicable Legislation

The project is not enforced by any laws or regulations. The project complies with the laws and regulations are listed below:

- Electricity Market Law (Enacted on 30/03/2013)
- Law on Utilization of Renewable Energy Resources for the Purpose of Generation Electricity (Enacted on 18/05/2005)
- Energy Efficiency Law (Enacted on 02/05/2007)
- Environment Law (Enacted on 25/11/2014)
- Forest Law (Enacted on 08/09/1956)

6 Climate change adaptation

According to BCR Standard v3.4:

"Project holder shall carry out actions related to climate change adaptation, demonstrating that these are derived from the GHG Project activities and so the project holder shall demonstrate that they:

(a) consider one or more of the strategic lines proposed in the National Climate Change Policies and/or focuses aspects outlined in the regulations of the country where the project is implemented;

(b) improve conditions for the conservation of biodiversity and its ecosystem services, in the areas of influence, outside the project boundaries; i.e., natural cover on environmentally key areas, biological corridors, water management in watersheds, among others;

(c) implement activities that generate sustainable and low-carbon productive landscapes;

(d) propose restoration processes in areas of specific environmental importance;

(e) design and implement adaptation strategies based on an ecosystem approach;

(f) strengthen the local capacities of institutions and/or communities to take informed decisions to anticipate negative effects derived from climate change (recognition of conditions of vulnerability); as well as to take advantage of opportunities derived from expected or evidenced changes."

Evrencik WPP contributes to climate change adaptation as written below:

(a) Türkiye aims to increase renewable energy sources in primary energy consumption by 20.4% by 2030[10]. The establishment of Evrencik WPP contributes to this goal by generating 508,571.61 MWh of energy from renewable energy source in this monitoring period. Also, Evrencik WPP contributes to the emission reduction NDC declared within the Paris Agreement by generating renewable energy and reducing Türkiye's emissions in electricity generation. In this monitoring period, the project achieved 322,687 tCO_2e of emission reductions.

(b) Regarding impact on ecological life in Project area, Ornithological and Ecological Evaluation Report[11] was prepared. Within the scope of the study, the observations made in projects site and its vicinity. The scientific data obtained from the observations and research carried out for different reasons in the past periods were also used. The fact that the facilities within the scope of project activity are located in a very small area there won't be any negative impact on the breeding ecology of any species.

(c) For the landscape of the Project área, in support of field observations, face-to-face interviews were conducted with the local residents living in the project area, and extensive literature reviews were also carried out

(d) There is no protection priority in terms of vegetation and plant species spreading in the area. Considering the areas where the turbines are installed, the feeding and sheltering habitats are far away from the project activity. There are no sensitive or naturally protected areas within the project site and around 10 km.

(e) No local endemic or rare species specific to the area were encountered in the project site.Its been reported that no negative impact was considered by the project activity.

(f) Within the scope of the National Rural Development Strategy[12], Türkiye aims to increase the employment of citizens living in rural areas. The establishment of Evrencik WPP and providing 12 local employment contributes to this goal of the country.

[10] https://iklim.gov.tr/db/turkce/dokumanlar/turkiye-cumhuriyeti--8230-102-20230512125223.pdf
[11] Akdeniz University Faculty of Science Biology Department, May 2013
[12] https://www.tarimorman.gov.tr/TRGM/Belgeler/UKKS-Strateji-Belgesi.pdf

7 Carbon ownership and rights

Project Holder

Individual or organization	**Sekans Enerji Limited ŞTİ.**
Contact person	Sıla Duran
Job position	General Manager
Address	Emniyet Evleri District, Eski Büyükdere Street, No: 1/1 Aparment No: 1B04 Kağıthane/İstanbul, Türkiye
Phone number	-
Email	sila@sekansdanismanlik.com

Other project participants

Individual or organization	**Evrencik Rüzgar Enerjisinden Elektrik Üretim Anonim Şirketi – Legal Owner of the Project**
Contact person	Halil İleri
Job position	Authorized Signatory
Address	Dumlupınar OSB District, Açelya Street No:2 Osmangazi/Bursa, Türkiye
Phone number	+90 224 225 55 50
Email	halil.ileri@edincikres.com

8 Environmental Aspects

BCR's "Sustainable Development Safeguards (SDS) Tool, v1.0" is applied to show the project's compliance with the environmental aspects.

Environment

1. Land use: Resource Efficiency and Pollution Prevention and Management

- During the construction phase of the project, negative effects on the local people regarding the land dispute were prevented by complying with expropriation laws and by keeping in constant communication with the citizens affected by the project site.
- Domestic wastes are properly stored and disposed of in accordance with the Waste Management Regulation.
- Wastewater produced by employees during operation is collected in an impermeable septic tank and later they are periodically transferred to wastewater treatment plant.
- Oil wastes are handled appropriately in closed containers and transported by licensed transporters to the licensed processing and disposal facilities.

2. Water

Due to the nature of the project activity, it does not cause any harm to the surrounding water resources. How to dispose of wastewater is shown in the section above.

3. Biodiversity and Ecosystems

Regarding impact on bird and bats carcasses and nests, an Ornithology Report was prepared, and it's been reported that no negative impact was considered.

4. Climate Change

Evrencik WPP contributes to climate change adaptation by generating electricity from wind energy, which is a renewable, clean and sustainable source. The project activity reduces the country's reliance on fossil fuels in electricity supply in this manner.

9 Socioeconomic Aspects

BCR's "Sustainable Development Safeguards (SDS) Tool, v1.0" is applied to show the project's compliance with the socioeconomic aspects.

Social

1. Human Rights

a. Labor and Working Conditions

Employee rights in Turkey are protected by the Labor Law. According to the Labor Law:

- Forced labor and child labor is prohibited.
- The employer is responsible for the safety of employees and the workplace. In this context, employees of power plants, which are classified as very dangerous workplaces, are required to receive OHS training every year.
- Every employer is obliged to give its employees the rights written in the Labor Law.

b. Gender Equality and Women Empowerment

Project Holder does not discriminate against gender during recruitment. There is no gender discrimination in relations with the local people.

c. Land Acquisition, Restrictions on Land Use, Displacement, and Involuntary Resettlement

During the construction phase of the project, negative effects on the local people regarding the land dispute were prevented by complying with expropriation laws and by keeping in constant communication with the citizens affected by the project site. No local people were forcibly displaced due to the project activity.

d. Indigenous Peoples and Cultural Heritage

There was no damage to the cultural heritage and no harm to indigenous people due to the project activity.

e. Community Health and Safety

Hazardous and domestic wastes generated by the project activity, which may harm the environment and the health of the local people if not disposed of properly, are disposed of properly in accordance with the Waste Management Regulation, thus preventing any harm to the health of the local people.

Areas that would threaten the safety of local people are surrounded by fences. There are warning signs in areas where there may be a safety hazard.

2. Corruption

There is no misuse of funds, fraudulent reporting, conflict of Interest, lack of transparency, weak regulatory oversight, lack of accountability mechanisms, environmental permitting corruption and subcontractor corruption in project activity.

3. Economic Impact

During construction and operational period, the project has created employment opportunities for the local community. The project contributes the economic development of the region by providing sustainable energy resources.

The positions at the wind projects require skilled workers, which can be achieved by adequate training. The project provides workers with a safe and healthy work environment and is not complicit in exposing workers to unsafe work environments.

10 Stakeholders' Consultation

The promotion of the Evrencik WPP project was made on 10/05/2022 with the participation of the local people and the representatives of the relevant institution in Evrencik Village of Vize Town, in Kırklareli Province.

The project was introduced to the local people and the questions of the participants were answered.

The announcement letters were put up on the public places and presented in the mukhtar's office. The meetings comprised of presentation that includes the Project information and record of comments. To ensure the communication of the meeting, project brochures were shared with the heads.

Agenda:

- Introduction of Project Representatives
- Introduction of the project activity
- Assessment of Impact of Project on Sustainability
- Q&A Session and Feedbacks

Local stakeholders were also informed on environment and social impacts on SDG elements of the project during the meetings.

It is important for the Project Owner to monitor the on-going stakeholder engagement process to ensure that consultation and disclosure efforts are effective, and stakeholders delivering grievances have been meaningfully consulted throughout the process. Therefore, Stakeholder Engagement Plan is executed by the Project Owner. The contact information of the plant responsible exist at the Mukhtar, the project owner and local community are always in touch. The project owner regularly checks with the Mukhtar if any complaint or a request exists. Any complaint or need from the local community could be received directly by the project owner and appropriate contributions or improvements are made to the local community.

Summary of comments received

Local people were employed during construction and are being employed during operation. Contribution to local economy and lead to improvement in living standards were also supported by the stakeholders. There was no negative comment from the participants during the meeting.

Consideration of comments received

The contact information of the plant responsible was shared with the stakeholders and it was stated that the project owner and local community would always be in touch. Additionally, the participants were informed about the ongoing grievance process.

11 REDD+ Safeguards

N/A

12 Special categories, related to co-benefits

N/A

13 Grouped Projects

N/A

14 Implementation of the project

14.1 Implementation status of the project

The project activity includes the operation of a wind power plant with a power of 129.60 MWm/129.60 MWe. Twenty-nine Nordex N149 / 4.0-4.5-4.8 turbines, twenty-four of them having a capacity of 4.5 MWm/4.5 MWe, three of them having a capacity of 4.0 MWm/4.0 MWe and two of them having a capacity of 4.8 MWm/4.8 MWe. The project generated 508,571.61 MWh net electricity and reduced 322,687 tCO_2e amount of emission during the monitoring period of 14/10/2020 – 30/06/2022.

The Project has started its commercial operation through the ministry acceptance of one turbine with the installed capacity of 4.8 MWm/4.8 MWe on 14/10/2020. According to Tool 10, the average lifespan of wind turbines is 25 years.

Nordex N149 / 4.0-4.5-4.8 turbine model was chosen for 29 turbines in the project, twenty-four of them having a capacity of 4.5 MW_m/4.5 MW_e, three of them having a capacity of 4.0 MW_m/4.0 MW_e and two of them having a capacity of 4.8 MW_m/4.8 MW_e. It is a three-bladed, variable-speed wind turbine generator with a rotor diameter of 149.1 m. The hub height of the turbines is 164 m. The project activity includes Siemens and Winergy branded 3-phased, double fed asynchronous type generators with a power pf 4835 kW per unit and 50 Hz frequency. The electricity is transmitted to substation Vize TM, via an 18.24459 km, 154 kV transmission line. The measurement was made at the substation before the electricity was supplied to the grid.

Evrencik Rüzgar Enerjisinden Elektrik Üretim Anonim Şirketi is the owner of the Project.[13]

[13] Generation License

14.2 Revision of monitoring plan

N/A

14.3 Request for deviation applied to this monitoring period

N/A

14.4 Notification or request of approval of changes

N/A

15 Monitoring system

15.1 Description of the monitoring plan

The objective of the monitoring plan is to ensure the complete, consistent, clear, and accurate monitoring and calculation of the emission reductions during the whole crediting period. The Project Owner is responsible for the implementation of the monitoring plan.

The Project Owner is responsible for the overall management of the monitoring procedures including recording, data collection, calculating emission reductions and project emissions.

All monitoring procedures and requirements of the proposed project activity are in accordance with the methodology ACM0002 "Grid-connected electricity generation from renewable sources" Version 22.0.

VCCs are quantified, monitored, reported, and verified, through application of the BCR Tool "Monitoring, reporting and verification (MRV), v1.0"

Parameters

Data and Parameters fixed ex-ante:

- EFgrid, OM, y
- EFgrid, BM, y
- EFgrid, CM, y

Data and Parameters to be monitored:

- EGfacility, y
- ERy
- Number of employments

Metering

The main source for electricity generation metering are the TEIAS meters installed and sealed by TEIAS. Since the TEIAS meters are sealed by TEIAS and are also the basis of invoicing, high accuracy and reliability is ensured. Also, the TEIAS meters have the ability to measure both the amount of electricity exported to the grid as well as the amount of electricity imported by the project activity, which provides an accurate and reliable measurement of the net electricity.

The measurements are performed by four measuring devices, which are the main (primary) measuring devices and the backup (secondary) measuring devices. The brand of power meters is EMH (LZQJ-XC). The measuring frequency of all devices is continuous. Detailed information of the meters are given below:

Meter	Brand	Type	Class	Serial No
Main-1	EMH	LZQJ-XC	0.5S	9420198
Main-2	EMH	LZQJ-XC	0.5S	9420200
Backup-1	EMH	LZQJ-XC	0.5S	9420199
Backup-2	EMH	LZQJ-XC	0.5S	9420201

The Project Owner enters the expected electricity generation on daily basis to the website of EPIAS which is the financial settlement center of TEIAS. The website of EPIAS is accessible to project owner with their unique user ID and password. The difference between the expected and generated electricity (imbalance) is costed the project owner at the end of each month. The electricity generation data is reported monthly. EPIAS records are used as the source of net generated electricity value and meter reading forms or OSF forms issued by TEIAS are used for the crosscheck.

The calibration are implemented in accordance with the related standard procedures (IEC-EN 62053-22 and 62053-23) by either Turkish Electricity Transmission Corporation

(TEIAS) or the provider company in the name of TEIAS. The meters are calibrated every ten years. Additionally, the meters are tested every two years.

Meter readings

According to the methodology applied, the electricity supplied to the national grid by the project and the electricity consumed by the project activity shall be monitored. The net electricity is the difference between the electricity supplied and consumed by the project and shall be taken into account for emission reduction calculations.

The website of EPİAŞ (https://cas.epias.com.tr/cas/login) is accessible to Project owner with their unique user ID and password. Once accessed, the Project owner is able to call electricity generation and consumption reports of their own projects. The same reports are used by the Project owner for invoicing TEİAŞ. The electricity generation data is reported monthly basis.

Once a month, the project participant performs data readings. The monthly results are recorded by the project participant both manually and electronically.

Data storage

Data are stored electronically, during the crediting period and at least two years after the last issuance of credits for the project activity in the concerning crediting period. The Project Participant is responsible for storage of data received from the measuring devices. The site manager is responsible for data aggregation.

Responsibilities for monitoring

The Project Owner is responsible for the operation and maintenance of the project activity and the installed equipment. The project owner is also responsible for the administration of the data, setting up a VER team who is responsible for monitoring all data required to estimate emission reductions. Emission reductions are calculated by the VER consultant, Sekans Enerji.

Quality assurance and quality control

The main source of measurement is the TEIAS meters, which are sealed by TEIAS and since it is subject to monthly invoicing high reliability and accuracy is secured. In accordance with the requirements of TEIAS, there are four meters installed at the site where the two of them are called the main meters and the other ones are as secondary meters. TEIAŞ is the main responsible for calibration and maintenance of the devices. TEIAŞ performs the necessary maintenance and calibration. Since the electricity

generation data is used for the billing and accounting between TEIAŞ and the project participant, the data is of high quality.

The primary source is the EPIAS records. Net electricity exported is crosschecked with Meter Reading Forms. EPIAS is the financial settlement center of TEIAS. The Meter Reading Forms are filled in by the project owner and approved by the governmental officers. Additionally, remote reading by the governmental body is also available. The website of EPIAS is accessible to Project Owner with their unique user ID and password. Once accessed, the Project Owner can call electricity generation for invoicing TEIAS. The electricity generation data is reported monthly.

Corrective actions and emergency preparedness

The Project Owner regularly checks the monitoring system for errors. In the case of errors, corrective actions are undertaken by the Project Participant, or if required, by the supplier of the monitoring equipment.

Data are stored electronically, during the crediting period and at least two years after the last issuance of credits for the project activity in the concerning crediting period. The Project Owner is responsible for storage of data received from the measuring devices.

During the monitoring period, no breakdown or serious maintenance work has been experienced. Ordinary maintenance activities have been executed.

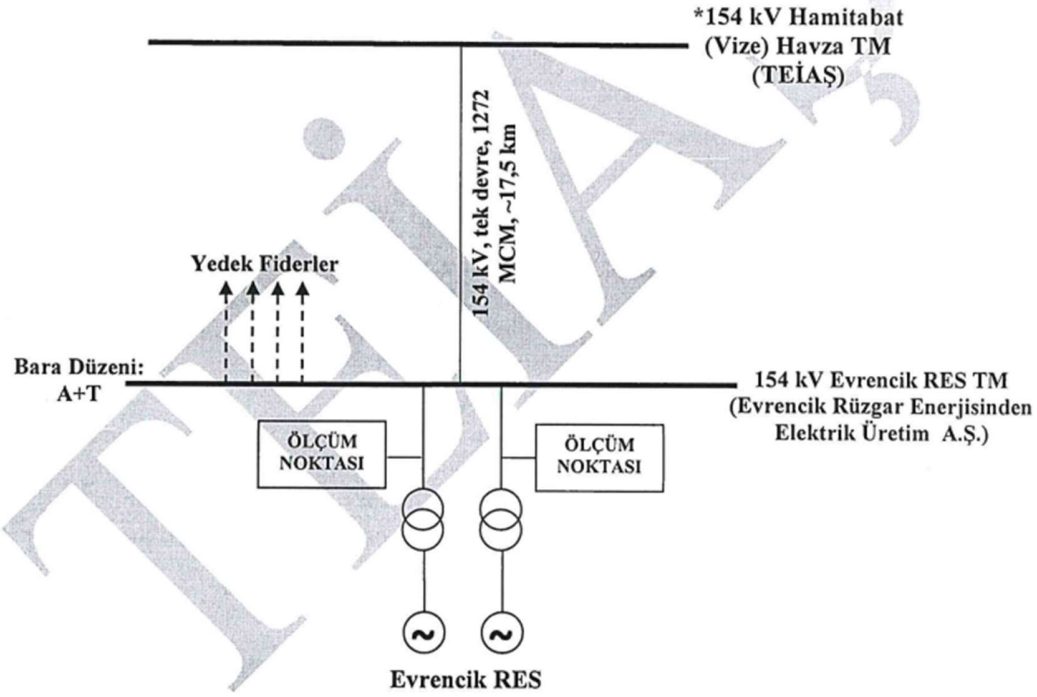


Figure 3. Evrencik WPP Diagram - Connection to the Grid

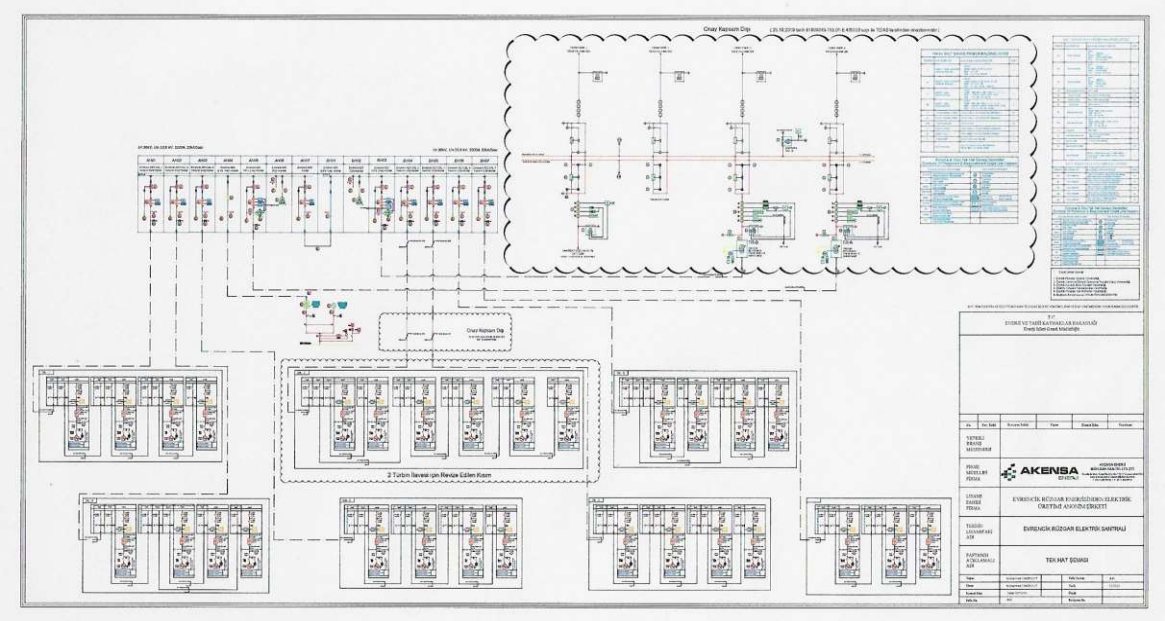
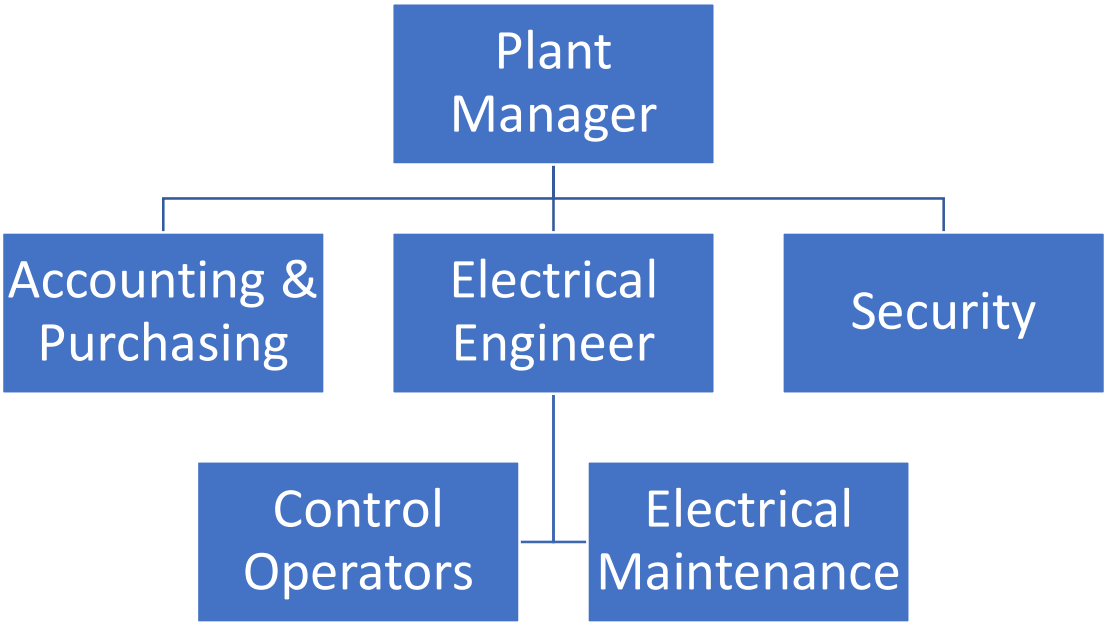


Figure 4. Single Line Diagram

Table 4. Organizational Chart



15.2 Data and parameters to quantify the reduction of emissions

Data and Parameters fixed ex-ante:

- $EF_{grid,OM,y}$
- $EF_{grid,BM,y}$
- $EF_{grid,CM,y}$

Data and Parameters to be monitored:

- $EG_{Pj,y}$
- ER_y
- Number of employment
- Quality of employment

15.2.1 Data and parameters determined at registration and not monitored during the monitoring period, including default values and factors

Data / Parameter	**$EF_{grid,CM,y}$**
Data unit	tCO2 / MWh
Description	Combined Margin Emission Factor of the Turkish National Grid. It's been published by Turkish Ministry of Energy and Natural Sources for 2021 on 18/03/2024.
Source of data used	Turkish Ministry of Energy and Natural Sources. See: https://enerji.gov.tr/evced-cevre-ve-iklim-turkiye-ulusal-elektrik-sebekesi-emisyon-faktoru
Value (s)	0.6345
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	Calculation of baseline emissions
Justification of choice of data or description of measurement	Official data published by Host Country's Ministry of Energy and Natural Sources

methods and procedures applied	
Additional comments	-

Data / Parameter	$EF_{grid,OM,y}$
Data unit	tCO2 / MWh
Description	Operating Margin Emission Factor of the Turkish National Grid. It's been published by Turkish Ministry of Energy and Natural Sources for 2021 on 18/03/2024.
Source of data used	Turkish Ministry of Energy and Natural Sources. See: https://enerji.gov.tr/evced-cevre-ve-iklim-turkiye-ulusal-elektrik-sebekesi-emisyon-faktoru
Value (s)	0.7279
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	Calculation of baseline emissions
Justification of choice of data or description of measurement methods and procedures applied	Official data published by Host Country's Ministry of Energy and Natural Sources
Additional comments	-

Data / Parameter	$EF_{grid,BM,y}$
Data unit	tCO2 / MWh
Description	Build Margin Emission Factor of the Turkish National Grid. It's been published by Turkish Ministry of Energy and Natural Sources for 2021 on 18/03/2024.

Source of data used	Turkish Ministry of Energy and Natural Sources. See: https://enerji.gov.tr/evced-cevre-ve-iklim-turkiye-ulusal-elektrik-sebekesi-emisyon-faktoru
Value (s)	0.3541
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	Calculation of baseline emissions
Justification of choice of data or description of measurement methods and procedures applied	Official data published by Host Country's Ministry of Energy and Natural Sources
Additional comments	-

15.2.2 Data and parameters monitored

Data / Parameter	$EG_{PJ,y}$
Data unit	MWh/yr
Description	Quantity of net electricity generation supplied by the project plant/unit to the grid in year y
Measured /Calculated /Default:	Measured
Source of data	Meters
Value(s) of monitored parameter	**Period** / **Volume (MWh)** **14.10.2020-31.12.2020** / 3,434.95 **01.01.2021-31.12.2021** / 287,920.62 **01.01.2022-30.06.2022** / 217,216.05 **Total** / 508,571.61

<table>
<tr><td>Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)</td><td>Baseline emission calculations</td></tr>
<tr><td>Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)</td><td>
<table>
<tr><th colspan="3">Evrencik WPP / TR-A</th></tr>
<tr><th>Parameters</th><th>Main Meters</th><th>Backup Meter</th></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>Location</td><td>On-site</td><td>On-site</td></tr>
<tr><td>Serial Number</td><td>9420198</td><td>9420199</td></tr>
<tr><td>Accuracy</td><td>0.5S</td><td>0.5S</td></tr>
<tr><td>Calibration Date</td><td>09/07/2020</td><td>09/07/2020</td></tr>
<tr><td>Latest Test Date</td><td>03/09/2022</td><td>03/09/2022</td></tr>
<tr><th colspan="3">Evrencik WPP / TR-B</th></tr>
<tr><th>Parameters</th><th>Main Meters</th><th>Backup Meter</th></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>Location</td><td>On-site</td><td>On-site</td></tr>
<tr><td>Serial Number</td><td>9420200</td><td>9420201</td></tr>
<tr><td>Accuracy</td><td>0.5S</td><td>0.5S</td></tr>
<tr><td>Calibration Date</td><td>09/07/2020</td><td>09/07/2020</td></tr>
<tr><td>Latest Test Date</td><td>03/09/2022</td><td>03/09/2022</td></tr>
</table>
</td></tr>
<tr><td>Measuring/ Reading/ Recording frequency</td><td>Monthly</td></tr>
<tr><td>Calculation method (if applicable)</td><td>The net electricity is the difference of the electricity supplied and consumed by the project and shall be taken into account for emission reduction calculations through EPIAS records. Thus, baseline emissions are based on the net electricity supplied to the grid.</td></tr>
</table>

QA/QC procedures applied	• Back-up meters are used for crosschecking the accuracy and all meters are periodically tested. • The metering devices are in line with the technical requirements which are set out by the Communiqué for Metering Devices to be used in the Electricity Market, which describes the minimum accuracy requirement the metering devices have to fulfill, which are categorized according to the installed capacity. The periodical test or maintenance is under the responsibility of TEİAŞ. Since TEİAŞ meters are sealed by distribution company the project proponent cannot intervene with the devices. • The net electricity export/supplied to a grid is the difference between the measured quantities of the grid electricity export and the import

Data / Parameter	**ER_y**
Data unit	tCO_2/yr
Description	Emission reductions by the project activity in year y (t CO_2/yr) In accordance with ACM0002, Version 22.0, baseline emissions include CO2 from electricity generation in power plants that are displaced due to the project activity. And baseline emissions correspond to emission reductions and are calculated as the net electricity generated by the project activity, multiplied with combined margin CO2 emission factor for grid connected power generation in year y.
Measured /Calculated /Default:	Both measured and calculated
Source of data	1. Meters 2. Turkish Ministry of Energy and Natural Sources

<table>
<tr><td>Value(s) of monitored parameter</td><td>

Period	Volume (tCO_2)
14.10.2020-31.12.2020	2,179
01.01.2021-31.12.2021	182,685
01.01.2022-30.06.2022	137,823
Total	322,687

</td></tr>
<tr><td>Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)</td><td>Baseline emission calculations</td></tr>
<tr><td>Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)</td><td>

Evrencik WPP / TR-A		
Parameters	Main Meters	Backup Meter
Brand	EMH	EMH
Type	LZQJ-XC	LZQJ-XC
Location	On-site	On-site
Serial Number	9420198	9420199
Accuracy	0.5S	0.5S
Calibration Date	09/07/2020	09/07/2020
Latest Test Date	03/09/2022	03/09/2022
Evrencik WPP / TR-B		
Parameters	Main Meters	Backup Meter
Brand	EMH	EMH
Type	LZQJ-XC	LZQJ-XC
Location	On-site	On-site
Serial Number	9420200	9420201
Accuracy	0.5S	0.5S
Calibration Date	09/07/2020	09/07/2020
Latest Test Date	03/09/2022	03/09/2022

</td></tr>
</table>

Measuring/ Reading/ Recording frequency	Monthly
Calculation method (if applicable)	Both measured and calculated. Emission reductions have been calculated as considering the EPIAS records for the net electricity generated and the emission factor for the grid, 0.6345 tCO2/MWh, published by the Ministry of Energy
QA/QC procedures applied	• Back-up meters are used for crosschecking the accuracy and all meters are periodically tested. • The metering devices are in line with the technical requirements which are set out by the Communiqué for Metering Devices to be used in the Electricity Market, which describes the minimum accuracy requirement the metering devices have to fulfill, which are categorized according to the installed capacity. The periodical test or maintenance is under the responsibility of TEİAŞ. Since TEİAŞ meters are sealed by distribution company the project proponent cannot intervene with the devices. • The net electricity export/supplied to a grid is the difference between the measured quantities of the grid electricity export and the import

Data / Parameter	**Number of Employment**
Data unit	Number
Description	Number of people permanently working for the operation of the project
Measured /Calculated /Default:	N/A
Source of data	Social Security System (SGK) records
Value(s) of monitored parameter	12

Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	To assess to contribution to SDG8.
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	Social Security System (SGK) records
Measuring/ Reading/ Recording frequency	Annually
Calculation method (if applicable)	-
QA/QC procedures applied	Social Security System (SGK) records

Data / Parameter	**Quality of Employment**
Data unit	Number of trainings provided
Description	Number of OHS and job-related training provided to the employees
Measured /Calculated /Default:	N/A
Source of data	Training Records
Value(s) of monitored parameter	At least one training per year
Indicate what the data are used for	To assess to contribution to SDG 8.

(Baseline/ Project/ Leakage emission calculations)	
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	Training Records
Measuring/ Reading/ Recording frequency	Annually
Calculation method (if applicable)	-
QA/QC procedures applied	OHS training is provided to all employees working at the power plant. It is mandatory to provide OHS training to employees at least once a year. Certificates of OHS training will be stored in the site area during the operation period. According to "Regulation on the Procedures and Principles of Employee's OHS Training" in official gazette No. 28648 on 15/05/2013, it is responsibility of PO to provide regular OHS trainings to employees. In addition to OHS trainings, the project owner provided job-related training the employees.

16 Quantification of GHG emission reduction / removals

16.1 Baseline emissions

According to the methodology baseline emissions include only CO_2 emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity. The methodology assumes that all project electricity generation above baseline levels would have been generated by existing grid-connected power *plants* and the addition of new grid-connected power plants. The baseline emissions are calculated as follows:

$$\boldsymbol{BE_y = EG_{PJ,grid,y} * EF_{grid,CM,y}}$$

where:

BE_y	Baseline emissions in year y (tCO_2)
$EG_{PJ,grid,y}$	Quantity of net electricity supplied to the grid as a result of the implementation of the CDM project activity in year y (MWh)
$EF_{grid,CM,y}$	Combined margin CO_2 emission factor for grid connected power generation in year y calculated by using the latest version of the "Tool to calculate the emission factor for an electricity system" (tCO_2/MWh)

BEy = 508,571.61 MWh * 0.6345 tCO2/MWh = 322,687 tCO2

Table 5. Baseline Emissions

Month	(A) Electricity supplied to the grid [MWh]	(B) Electricity consumed from the grid [MWh]	(C) = (A) - (B) EG (ID 8) Net electricity supplied to the grid [MWh]	EF [tCO_2/kWh]	Baseline emission: ER = EG * EF [$t\ CO_2$-eq]
Oct-20	461.97	5.43	456.54	0.6345	289.67
Nov-20	1,383.21	5.11	1,378.09	0.6345	874.40
Dec-20	1,604.89	4.58	1,600.32	0.6345	1,015.40
Jan-21	3,335.77	15.96	3,319.81	0.6345	2,106.42
Feb-21	754.87	33.82	721.06	0.6345	457.51
Mar-21	9,551.92	10.68	9,541.24	0.6345	6,053.91
Apr-21	11,464.75	20.73	11,444.02	0.6345	7,261.23
May-21	21,542.31	21.72	21,520.58	0.6345	13,654.81
Jun-21	8,558.99	81.07	8,477.92	0.6345	5,379.24
Jul-21	32,846.67	28.24	32,818.42	0.6345	20,823.29
Aug-21	29,392.78	37.53	29,355.25	0.6345	18,625.91
Sep-21	34,483.09	26.04	34,457.04	0.6345	21,862.99
Oct-21	48,955.21	8.62	48,946.59	0.6345	31,056.61
Nov-21	38,411.52	38.47	38,373.04	0.6345	24,347.70
Dec-21	48,958.52	12.88	48,945.64	0.6345	31,056.01
Jan-22	38,863.79	18.50	38,845.29	0.6345	24,647.34
Feb-22	34,843.81	14.88	34,828.93	0.6345	22,098.96
Mar-22	46,583.54	13.29	46,570.25	0.6345	29,548.83
Apr-22	36,866.12	27.80	36,838.32	0.6345	23,373.91
May-22	24,603.29	40.99	24,562.30	0.6345	15,584.78
Jun-22	35,588.70	17.75	35,570.95	0.6345	22,569.77
14.10.2020-31.12.2020	3,450.07	15.12	3,434.95	0.6345	2,179
01.01.2021-31.12.2021	288,256.38	335.76	287,920.62	0.6345	182,685
01.01.2022-30.06.2022	217,349.24	133.20	217,216.05	0.6345	137,823
Total	509,055.69	484.08	508,571.61	0.6345	322,687

16.2 Project emissions/removals

In accordance with the methodology ACM0002 Version 22.0, "Grid-connected electricity generation from renewable sources", no project emissions need to be considered. Project emissions apply only for geothermal power plants, solar thermal power plants and for some hydro power plants. Therefore,

$PE_y = 0$

16.3 Leakages

In line with the requirements of ACM0002 Version 22.0 "Grid-connected electricity generation from renewable sources", no leakage emissions are considered. The main emissions potentially giving rise to leakage in context of electric sector projects are emissions arising due to activities such as power plant construction and upstream emissions from fossil fuel use (e.g., extraction, processing and transport). These emission sources are neglected.

$LE_y = 0$

16.4 Net GHG Emission Reductions / Removals

Year	*Baseline emissions / removals (tCO_2e)*	*Project emissions / removals (tCO_2e)*	*Leakage emissions (tCO_2e)*	*Net GHG emission reductions / removals (tCO_2e)*
14.10.2020-31.12.2020	2,179	0	0	2,179
01.01.2021-31.12.2021	182,685	0	0	182,685
01.01.2022-30.06.2022	137,823	0	0	137,823
Total	322,687	0	0	322,687

16.5 Comparison of actual emission reductions with estimates in the project document

Vintage	Period	Total Days	Amount achieved during this monitoring period (tCO2e)	Amount estimated ex ante (tCO2e)	Difference (tCO2e)	Difference (%)
2020	14.10.2020-31.12.2020	79	2.179	71.192	- 69.013	-97%
2021	01.01.2021-31.12.2021	365	182.685	328.924	- 146.239	-44%
2022	01.01.2022-30.06.2022	181	137.823	163.110	- 25.287	-16%
Total		**625**	**322.687**	**563.226**	**- 240.539**	**-42,7%**

16.6 Remarks on difference from estimated value in the registered project document

The difference between achieved electricity generation and amount estimated ex ante -42.7% during the monitoring period. This marginal spread from the estimation is probably due to weather conditions.