

GOLD STANDARD FOR THE GLOBAL GOALS (GS4GG)
REPORT
-
VERIFICATION



Project Title:	60 MW Bandırma Wind Power Plant Project
Monitoring Period:	01/01/2020 to 31/12/2021 (Both days included)
GS project ID:	GS 744
Internal ID:	BELL_GS_VER_14022
Customer:	Bandırma Enerji ve Elektrik Üretim Ticaret A.Ş.
Date:	09/01/2024
Revision:	01.2

SUMMARY			
Reference No.	Date (first version)	Version No.	Date (last version)
BELL_GS_VER_14022	06/11/2023	01.2	09/01/2024
GS4GG Verification			
GS4GG Certified Product (sought):		GHG Emission Reductions	
GS4GG SDG Impact Statement (sought):		Impact Certification	
General Information			
Client	Bandırma Enerji ve Elektrik Üretim Ticaret A.Ş.		
Project Title	60 MW Bandırma Wind Power Plant Project		
Project Participants	Bandırma Enerji ve Elektrik Üretim Ticaret A.Ş.		
Project Location	Bandırma district, Balıkesir city, Republic of Turkey		
Contact Person	Ms. Emel Yasaroglu		
Monitoring Period	01/01/2020 to 31/12/2021 (both days included)		
GS4GG Version: GS4GG Principles and Requirements 1.2 GS4GG Activity Requirements: RE Activity Requirements v1.4 Applied Methodology Versions: ACM0002 “Grid-connected electricity generation from renewable sources” Version 12.1.0		GS4GG Sectoral Scope: 2 UNFCCC CDM Sectoral Scope: 1 Technical Area: 1.2	
Initial Monitoring Report Version: 01 Date: 02/11/2022		Final Monitoring Report Version: 05 Date: 08/01/2024	
GS Project Design Document: Version 08, dated 04/09/2012 GS Passport: Dated 04/09/2012 GS Transition Annex: 24/02/2020			
Estimated SDG Goals:			
SDG 6 (Clean water and sanitation): 7,824.504*10 ³ m ³ waste water avoidance for current monitoring period SDG 7 (Affordable and clean energy): 365,900.55 MWh for current monitoring period SDG 8 (Decent work and economic growth): No specific reference for the number of employment and trainings SDG 13 (Climate action): 217,682 tCO ₂ e for current monitoring period			
Actual SDG Goals achieved during current monitoring period:			
SDG 6 (Clean water and sanitation): 8,476.396*10 ³ m ³ waste water avoidance for current monitoring period SDG 7 (Affordable and clean energy): 396,266.89 MWh SDG 8 (Decent work and economic growth): 11 persons employed and 13 training sessions conducted SDG 13 (Climate action): 235,738 tCO ₂ e			
Selected Sustainable Development Goals (SDGs): 6, 7, 8 and 13			
Verification Summary			
LGAI Technological Center, S.A. (hereafter referred to as Applus+ Certification) has been contracted by Bandırma Enerji ve Elektrik Üretim Ticaret A.Ş. to perform the third verification of “60 MW Bandırma Wind Power Plant Project” applying the methodology ACM0002: “Grid connected electricity generation from renewable sources” Version 12.1.0. The management of Bandırma Enerji ve Elektrik Üretim Ticaret A.Ş. is responsible for the preparation of the GHG emissions data and the reported GHG emission reductions.			
A desk review and a site visit have been conducted to verify the data submitted in the monitoring report. Applus+ Certification confirms the following have been reviewed:			

- The GS Project Design Document Version 08, dated 04/09/2012^{/01/};
- Monitoring report^{/48/};
- The applied monitoring methodology^{/02/};
- Relevant decisions, clarifications and guidance from the CMP and the CDM Executive Board;
- The Gold Standard for Global Goals "Principles and Requirements" Version 1.2^{/12/} and GS4GG guideline and related Annex.
- All information and references relevant to the project activity's resulting in emission reductions.

Accordingly, total of 10 CARs and 03 CRs were issued all of which are listed and closed out as in the Appendix-1 of this report.

Bandırma Enerji ve Elektrik Üretim Ticaret A.Ş. has installed and commissioned 89.7 MWm and 87 MWe plant with 20 Vestas V90/3 MW turbines' generators each having a unit capacity of 3 MWm and 9 Vestas V112/3.3 MW turbines' generators each having a unit capacity of 3.3 MWm. That means, the current capacity of the project is 87 MWe and nine turbines (T-21, T-22, T-23, T-24, T-25, T-26, T-27, T-28 and T-29) had been included and commissioned on 14/12/2014 and 27/02/2015, respectively. However, the capacity addition (design change) process hasn't been initiated by PP in line with the Gold Standard rules and requirements, so the capacity addition component is not eligible and this verification has been handled without the capacity addition component. Gold Standard registered capacity of the project (60 MWe) is considered and the electricity generation and the emission reduction of the added nine turbines (T-21, T-22, T-23, T-24, T-25, T-26, T-27, T-28 and T-29) through SCADA screenshots^{/36/} has been excluded. The project is located in Bandırma district of Balıkesir city in Republic of Turkey. The electricity produced is fed into the national grid of Turkey and is transmitted to substation Akcalar TM, 154 kV bara.

The initial crediting period start date of the project as verified from the information provided on last verification report^{/17/} and Transition Annex^{/20/} document is 24/07/2015. The initial crediting period is from 24/07/2015 to 23/07/2022.

The project activity assists the sustainable growth by providing clean and green electricity to Turkish national grid. The project leads to reduce greenhouse gas emissions because it displaces electricity which would have otherwise generated from various sources dominated by fossil fuel fired power projects connected to Turkish national grid.

Applus+ Certification confirms that the project is implemented in accordance with the registered PDD^{/01/}, GS Passport^{/15/} and GS Transition Annex^{/20/}. The monitoring plan complies with the applied methodology ACM0002 Version 12.1.0^{/02/}, the Gold Standard for Global Goals "Principles and Requirements" Ver.1.2^{/12/} and other relevant GS4GG documents. The monitoring has been carried out in accordance with the monitoring plan. The monitoring system is in place and the emission reductions are calculated without material misstatements. Our opinion relates to the projects GHG emissions and the resulting GHG emission reductions reported and related to the valid and registered project baseline and monitoring and its associated documents. Based on the information reviewed and evaluated, Applus+ Certification confirms that the implementation of the project has supplied 396,266.89 MWh to grid and resulted in 235,738 tCO₂e emission reductions during period 01/01/2020 to 31/12/2021 (Both days included).

VERIFICATION TEAM					
Team Members		Type of Resource		Organization (for OEs)	
Lead Auditor: Mr. Anıl Söyler		☐ IR	☒ EI	☐ OE	Applus+ Certification
Technical Expert: Mr. Anıl Söyler		☐ IR	☒ EI	☐ OE	Applus+ Certification
Technical Reviewer and Technical Expert: Mr. David Lubanga		☐ IR	☒ EI	☐ OE	Applus+ Certification

ABBREVIATIONS	
AM	Approved Methodology
BM	Build Margin
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CDM EB	CDM Executive Board
CER	Certified Emission Reduction
CL/CR	Clarification Request
CM	Combined Margin
CMP	Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol
CP	Crediting Period
DNA	Designated National Authority
DOE	Designated Operational Entity
EF	Emission Factor
EIA	Environmental Impact Assessment
ER	Emission Reduction
FAR	Forward Action Request
GHG	Greenhouse Gas(es)
GS4GG (or GS)	Gold Standard for Global Goals
IPCC	Intergovernmental Panel on Climate Change
KP	Kyoto Protocol
MP	Monitoring Plan
MR	Monitoring Report
NGO	Non-Governmental Organization
SDG	Sustainable Development Goal
TAC	Gold Standard Technical Advisory Committee
OM	Operational Margin
PDD	Project Design Document
PP	Project Participant
UNFCCC	United Nations Framework Convention for Climate Change
VVB	Validation and Verification Body
VVS	Validation and Verification Standard

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1. INTRODUCTION

1.1 Objective

LGAI Technological Center, S.A. (hereafter referred to as Applus+ Certification) has been contracted by Bandırma Enerji ve Elektrik Üretim Ticaret A.Ş. to perform the third verification of "60 MW Bandırma Wind Power Plant Project" applying the methodology ACM0002 Version 12.1.0^{/02/}, Gold Standard for Global Goals "Principles and Requirements" Ver.1.2 and other relevant GS4GG guidelines for the period between 01/01/2020 and 31/12/2021 (both days included). Gold Standard projects must undergo periodic audits and verification of emission reductions as the basis for issuance of Gold Standard VERs.

The objective of the verification work is to assess the compliance with the requirements of paragraph 62 of the CDM Modalities and Procedures as well as the GS4GG guidelines and relevant Principles and Requirements. According to this assessment Applus+ Certification shall:

- Ensure that the project activity has been implemented and operated as per the registered PDD^{/01/}, GS passport^{/15/} and GS Transition annex^{/20/} and that all physical features (technology, project equipment, monitoring and metering equipment) of the project are in place;
- Ensure that the published MR^{/06/} and other supporting documents provided are complete, verifiable and in accordance with applicable CDM VVS for project activities version 03 for the project activity and Gold Standard i.e., and GS4GG requirements;
- Ensure that the actual monitoring systems and procedures comply with the monitoring systems and procedures described in the monitoring plan and the approved methodology;
- Evaluate the data recorded and stored as per the ACM0002 Version 12.1.0^{/02/}.

1.2 Scope

The verification scope encompasses an independent and objective review and ex-post determination of the monitored reductions in GHG emissions by the VVB. The verification is based on the submitted monitoring report, the registered PDD^{/01/} and GS passport^{/15/} as well as validation report^{/16/}, the applied monitoring methodology^{/02/}, relevant decisions, clarifications and guidance from the CMP and the EB, GS4GG guideline and any other information and references relevant to the project activity's resulting emission reductions. These documents are reviewed against the requirements of the Kyoto Protocol, the CDM Modalities and Procedures, GS4GG guidelines and relevant Principles and Requirements, as well as their related rules and guidance.

Based on the requirements in the CDM Validation and Verification Standard for project activities, version 3.0^{/10/}, CDM Project Standard for project activities, version 3.0^{/11/}, GS Validation and Verification Standard version 1.0^{/12/} and Gold Standard for Global Goals (GS4GG) version 1.2^{/12/} and other relevant GS4GG requirements including GHG Emissions Reductions & Sequestration Product Requirements version 2.1^{/13/} and Renewable Energy Activity Requirements version 1.4^{/14/}. Applus+ Certification has applied a rule-based approach for the verification of the project. The principles of accuracy, completeness, relevance, reliability and credibility were

combined with a conservative approach to establish a traceable and transparent verification opinion.

The verification considers both quantitative and qualitative information on emission reductions and the monitoring of sustainable parameters.

The verification is not meant to provide any consultancy towards the client. However, stated requests for clarifications, corrective and/or forward actions may provide input for improvement of the monitoring activities.

The only purpose of the verification and certification is its usage during the issuance process as part of the GS project cycle. Therefore, Applus+ Certification can't be held liable by any party for decisions made or not made based on the verification and certification opinion, which will go beyond that purpose.

1.3 Description of the project activity

Bandırma Enerji ve Elektrik Üretim Ticaret A.Ş. has installed and commissioned 89.7 MWm and 87 MWe plant with 20 Vestas V90/3 MW turbines' generators each having a unit capacity of 3 MWm and 9 Vestas V112/3.3 MW turbines' generators each having a unit capacity of 3.3 MWm. That means, the current capacity of the project is 87 MWe and nine turbines (T-21, T-22, T-23, T-24, T-25, T-26, T-27, T-28 and T-29) had been included on 14/12/2014 and 27/02/2015, respectively. However, the capacity addition (design change) process hasn't been initiated by PP in line with the Gold Standard rules and requirements, so the capacity addition component is not eligible and this verification has been handled without the capacity addition component. Gold Standard registered capacity of the project (60 MWe) is considered and the electricity generation and the emission reduction of the added nine turbines (T-21, T-22, T-23, T-24, T-25, T-26, T-27, T-28 and T-29) through SCADA screenshots^{/36/} has been excluded. The project is located in Bandırma district of Balıkesir city in Republic of Turkey. The electricity produced is fed into the national grid of Turkey and is transmitted to substation Akcalar TM, 154 kV bara.

The initial crediting period start date of the project as verified from the information provided on last verification report and Transition Annex document is 24/07/2015. The initial crediting period is from 24/07/2015 to 23/07/2022.

The project activity assists the sustainable growth by providing clean and green electricity to Turkish national grid and leads to reduce greenhouse gas emissions because it displaces electricity which would have otherwise generated from various sources dominated by fossil fuel fired power projects connected to Turkish national grid.

2. METHODOLOGY

Applus+ Certification approach to the verification is a two-stage process. In the 1st stage, Applus+ Certification completed a strategic review and risk assessment of the project's activities and processes in order to gain a full understanding of:

- Activities associated with all the sources contributing to the project emissions and emission reductions, including leakage if relevant;

- Protocols used to estimate or measure GHG emissions from these sources;
- Collection and handling of data;
- Controls on the collection and handling of data;
- Means of verifying reported data; and
- Compilation of the monitoring report.

Applus+ Certification applied a risk-based assessment of the parameters and data collection and handling processes for each of those parameters, describes the verification approach and the sampling plan.

In the 2nd stage, Applus+ Certification verified the implementation of the monitoring plan and the data presented in the Monitoring Report^{/48/} for the period in question. This involved interviewing PP representative during the site visit and a desk review of the Monitoring Report. This Verification Report describes the findings of this assessment.

2.1 Appointment of the assessment team

According to the sectoral scope / technical area and experience in the sectoral or national business environment, LGAI Technological Center, S.A. (Applus+ Certification) has composed a project assessment team in accordance with the appointment rules in the internal Quality Management System of LGAI Technological Center, S.A. (Applus+ Certification).

The composition of verification team shall be approved by the LGAI Technological Center, S.A. (Applus+ Certification) ensuring that the required skills are covered by the team.

The four qualification levels for team members that are assigned by formal appointment rules are as presented below:

- Lead Auditor (LA)
- Auditor in Training (AiT)/Technical Expert in training (TEiT)
- Technical Expert (TE)
- Technical Reviewer (TR)

The sectoral scope/technical area knowledge linked to the applied methodology/ies shall be covered by the verification team.

Name	Role	SS Coverage	TA Coverage	Financial aspect	Host country experience
Mr. Anıl Söyler	LA/TE	YES	YES	N/A	YES
Mr. David Lubanga	TR	YES	YES	N/A	N/A

The complete list of CVs is included as Appendix-2 of this report.

2.2 Document review

The basis for the verification activity is the monitoring report version 01, dated 02/11/2022^{/04/} which was submitted to the verification team on the same day. This monitoring report was revised due to the issued CARs and CLs, version 05 dated 08/01/2024^{/50/} being the final version. The monitoring report and the monitoring activities were assessed against the registered

PDD^{/01/}, the methodology ACM0002 version 12.1.0^{/02/}, the relevant CDM rules and regulations, CDM Validation and Verification Standard for project activities version 3.0^{/11/}, GS Validation and Verification Standard version 1.0^{/12/}, Gold Standard for Global Goals (GS4GG) version 1.2^{/12/}, the initial validation report^{/16//} and the second verification report^{/17/}.

The aim of the assessment in the desk review was to:

- Verify the completeness of the data and the information presented in the MR ^{/06/};
- Check the compliance of the MR with respect to the monitoring plan depicted in the Registered PDD^{/01/} and verify that the applied methodology was carried out. Particular attention to the frequency of measurements, the quality of the metering equipment including calibration requirements, and the quality assurance and quality control procedures were checked by the assessment team.
- Evaluate the data management and the quality assurance and quality control system in the context of their influence on the generation and reporting of emission reductions.

A list of all the documents that were reviewed can be found in Appendix-1 of this verification report.

2.3 On site assessment and follow up interviews

As a part of the verification, the on-site inspection has been performed by the verification team on 21/11/2022 and the details are given in Table 2-1 below:

Table 2-1: On-site visit details

Sr. No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Özşahin	Mr. Murat	Plant Senior Electricity Technican	21/11/2022	General aspects of the project, Changes since validation, Quality management system, Implementation of the monitoring plan, GHG emission reduction calculations, Involved personnel and responsibilities, Training and practice of the operational	Mr. Anıl Söyler
2.	Yaşaroğlu	Ms. Emel	Senior Environmental Specialist			
3.	Urkan	Mr. Yaşar	Plant Electricity Technican			
4.	Özmen	Mr. Zafer	Plant Electricity Technican			
5.	Öztürk	Ms. Hazal	Consultant			

Sr. No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
					personnel, Maintenance, Compliance to regulatory requirements, Environmental and social requirements, Project's contribution to sustainable development goals	
6.	Parlak	Mr. Emrah	Village Head (Mukhtar) Çakılköy Village		The impact of the project activity on the local stakeholders and effectiveness of grievance mechanism, Project's contribution to sustainable development goals	
7.	Turp	Mr. Mehmet Ali	Villager Çakılköy Village			
8.	Tütüncü	Mrs. Şahika	Villager Çakılköy Village			

The objective of the on-site assessment is to:

- Confirm the implementation and operation of the project;
- Review the data flow for generating, aggregating and reporting the monitoring parameters;
- Confirm the correct implementation of procedures for operations and data collection;
- Cross-check the information provided in the MR documentation with other sources;
- Check the monitoring equipment against the requirements of the registered PDD^{/01/} and the approved methodology, including calibrations, maintenance, etc.;
- Review the calculations and assumptions used to obtain the GHG data and ER;
- Identify if the quality control and quality assurance procedures are in place to prevent or correct errors or omissions in the reported parameters.

- Confirm the SDG goals/ Sustainable monitoring parameters as per the registered PDD/^{01/} and GS Passport/^{15/}.
- Check if there are any grievances and feedbacks from the local stakeholders during the monitoring period.

The local stakeholders stated in the Table 2-1 above were interviewed about the following issues and there hadn't been any complaint by the interviewed local stakeholders during the on-site visit:

- Noise and flickering affect due to the project activity
- Sufficiency of local employment
- Waste management practices implemented by PP
- Impact of the project on flora and fauna including bird life
- Livestock feeding activities

It was also concluded that the grievance mechanism is in place and this was also confirmed by the interviewed local stakeholders during the on-site verification visit. The document showing the contact details of the relevant person within PP with the signature of Çakilköy Village Mukhtar (Village Head) and dated as 21/11/2022/^{44/} was also provided to VVB and it could be confirmed that there hasn't been any complaint during the monitoring period by the interviewed local stakeholders in line with the handled interviews.

The logbook is available in Çakilköy Village Mukhtar (Village Head) office during the monitoring period as confirmed through the interviews with the local stakeholders including Mukhtar during the verification on-site visit. It could also be confirmed by the verification team that it is easier to access the Mukhtar (Village Head) office since Mukhtar is the representative of village, so it is deemed as acceptable and logical to place the grievance logbook in there.

2.4 Quality of evidences

Sufficient evidence covering the full verification period in the required frequency is available to verify the figures stated in the final MR Version 04 dated 08/01/2024/^{50/}. Specific cross-checks have been handled in cases that further sources are available. The data collection system meets the requirements of the monitoring plan as per the applied methodology. The calculations have also been reproduced by the verification team and the source data (EPIAS records) are presented by PP.

2.5 Reporting of findings

As an outcome of the verification process, the verification team can raise different types of findings.

Where a non-conformance arises the verification team shall raise a Corrective Action Request (CAR). A CAR is issued, where:

- Non-compliance with the monitoring plan or methodology are found in monitoring and reporting and has not been sufficiently documented by the project participants, or if the evidence provided to prove conformity is insufficient;
- Modifications to the implementation, operation and monitoring of the registered project activity has not been sufficiently documented by the project participants;
- Mistakes have been made in applying assumptions, data or calculations of emission reductions that will impact the quantity of emission reductions;
- Issues identified in a FAR during validation to be verified during verification or previous verification(s) have not been resolved by the project participants.

The verification team shall raise a Clarification Request (CR) if information is insufficient or not clear enough to determine whether the applicable CDM/GS requirements have been met.

All CARs and CRs raised during verification shall be resolved prior to submitting a request for issuance.

Forward Action Requests (FARs) may be raised during verification for actions where the monitoring and reporting require attention and/or adjustment for the next verification period.

According to these principles, total of 10 CARs and 03 CRs were issued all of which are listed in the Appendix-1 of this report.

2.6 Internal Quality Control

As a final step of verification, the final documentation including the verification report has to undergo an internal quality control by the Technical Reviewer. Each report has to be finally approved either by the VVB's Technical Manager or the Deputy. This approval process also includes another quality assurance check in terms of Administrative Review. In case one of these two persons is part of the verification team, the final approval can only be given by the person who is not a part of the verification team. If the documents have been satisfactorily approved, the Request for Issuance is submitted to the GS Registry along with the relevant documents.

3. VERIFICATION FINDINGS

3.1 FARs from Validation / Previous Verification

This is the third verification for the project activity. There are four FARs in total from the second verification process including its GS review stage as in below:

- a) "FAR-1: In-line with GS4GG Principles and Requirements, VVB and PP shall consider the rule below for future monitoring activities:

5.1.39: An annual update report shall be provided to GS -when successfully Transitioned to GS4GG (05/03/2020) for each monitoring year by the end of next calendar year for which verification is not completed."

The screenshots of uploading records of 2020 and 2021 annual reports have been provided. Hence, this FAR has been closed out.

- b) "FAR-2: During next Verification site visit, VVB shall ask for inputs from local stakeholders regarding the project activity impacts other than the Mukhtar."

Three local stakeholders from Çakılköy Village as detailed in Section 2.3 have been interviewed during the verification site visit on 21/11/2022 and there hadn't been any complaint by the interviewed local stakeholders. Hence, this FAR has been closed out.

- c) "FAR-3: As per provided evidence, ornithological monitoring for Safeguarding Principle 9.10 has been terminated since it is concluded that the project doesn't pose any risk, by the related governing authorities. However, during next monitoring period, PP is requested to conduct regular site vetting by appointed personnel for observation of nests and carcasses on project site and record the same."

The bird carcass and nest monitoring forms for 2020 and 2021 confirming about no carcass detected have been provided. Hence, this FAR has been closed out.

- d) "FAR-4: During on site visit, new logbook was provided to the Mukhtar. For that, in the next verification period, logbook should be checked by the VVB."

The signed declaration by Çakılköy Village Head (Mukhtar) dated as 21/11/2022^{/44/} and confirming about the availability of log book and that there hasn't been any complaint during the monitoring period has been provided. The photographic evidences of logbook has also been provided. Besides that, the same has also been confirmed during the verification site visit through the interviews with the local stakeholders and on-site visit observations. Hence, this FAR has been closed out.

3.2 Project Implementation in Accordance with the Registered Project Design Document

The project activity was fully implemented according to the description presented in registered PDD^{/01/}. The verification team confirms, through the visual inspection during the site visit that all physical features of the proposed project activity including data collecting systems and storage have been implemented in accordance with the PDD^{/01/}. Electricity meters were also seen during the on-site visit. That means, the project activity is completely operational and the same has been confirmed through on-site visit.

The project was operational as of 18/09/2009 as confirmed through the provided provisional acceptance protocols^{/39/} and during the initial and second verification periods. The implementation of the 1st phase (8 wind turbines) was on 18/09/2009, the 2nd phase (7 wind turbines) was on 16/10/2009, the 3rd phase (4 turbines) was on 30/06/2010 and the 4th phase (1 turbine) was on 11/08/2011. Nine turbines (T-21, T-22, T-23, T-24, T-25, T-26, T-27, T-28 and T-29) had been included and commissioned on 14/12/2014 and 27/02/2015, respectively. However, the capacity addition (design change) process hasn't been initiated by PP in line with the Gold Standard rules and requirements, so the capacity addition component is not eligible and this verification has been handled without the capacity addition component. Gold Standard registered capacity of the project (60 MWe) is considered and the net electricity generation and the emission reduction of the added nine turbines (T-21, T-22, T-23, T-24, T-25, T-26, T-27, T-28 and T-29) through SCADA screenshots^{/36/} has been excluded.

The relevant data set (EPIAS records^{/22/} from 01/01/2020 – 31/12/2021) has been checked by the verification team and each day of production is included in these readings. These readings

are exact and are the basis for billing. They are recorded and saved automatically by the relevant government authority and there is no base for any option of material information.

Level of materiality is ensured by application of "Guideline on the Application of Materiality in Verifications" version 02. To guarantee this level of assurance all data that is used in the GHG emission reduction calculations have been reviewed without any sampling.

According to the registered PDD^{01/}, the estimated annual emission reduction is 108,692 tCO₂e and corresponding total estimated amount for the monitoring period is 217,682 tCO₂e. The actual values achieved for the current monitoring period is 235,738 tCO₂e. The actual amount of emission reduction for the current monitoring period is 8.3% more than the estimated emission reduction amount. However, considering the yearly fluctuations in wind and the high uncertainty for wind speed estimation, the average increase throughout the monitoring period as 8.3% is deemed acceptable.

There hasn't been any significant breakdown during the monitoring period except for the scheduled maintenance activities as checked through the EPIAS records^{22/}, TEIAS Meter Reading Forms^{21/} and during the verification site visit.

The project's turbines geo-coordinates were also checked by the verification team through the review of generation licence^{37/} and during the verification site visit as already confirmed during the previous verification processes.

Furthermore, double counting issue has also been assessed and the verification team has also checked the I-REC Registry (<https://evident.app/I-REC/device-register/table>) and this project isn't available within I-REC Registry database as of this verification report date. Similarly, VCS project database (<http://vcsprojectdatabase.org/#/home>), VCS project database (<https://registry.verra.org/app/search/VCS/All%20Projects>), Bio Carbon registry (<https://biocarbonregistry.com/en/projects/>), ICR registry (<https://www.carbonregistry.com/explore/projects>), Social Carbon registry (https://wilder.earth/social_carbon), UCR registry (<https://www.ucarbonregistry.io/>), Cercarbono registry (<https://www.ecoregistry.io/>) and GCC project database (https://projects.globalcarboncouncil.com/pages/submitted_projects) were checked and this project isn't available within any of these registries, either. Given that CDM projects are not applicable in Turkey and the project does not appear on domestic REC scheme, I-REC, VCS, BioCarbon, ICR, Social Carbon, UCR, Cercarbono and GCC registries, it could be confirmed that no RECs and other VER carbon credits are being issued for the project at the time of this verification.

3.3 Compliance of the Monitoring Plan with the Monitoring Methodology

The monitoring plan applied by the project activity is in accordance with the approved methodology, ACM0002 version 12.1.0^{02/}.

During the verification, all relevant monitoring parameters included in the registered PDD^{01/} have been verified with regard to the appropriateness of the applied measurement/determination method, the correctness of the values applied for ER calculation,

the accuracy, and applied QA/QC measures. The relevant monitoring requirements of the applied methodology have also been met.

Therefore, it could be confirmed by the verification team that the monitoring plan mentioned in the monitoring report is in line with the applied methodology, ACM0002 version 12.1.0^{/02/}.

3.4 Completeness of Monitoring

The monitoring has been carried out in accordance with the monitoring plan contained in the registered PDD^{/01/}. During the course of verification, all relevant monitoring parameters have been verified with regard to the appropriateness of the applied measurement / determination method and applied QA/QC procedures. It is confirmed that the monitoring parameters have been measured / determined without material misstatements.

The actual monitoring including the monitoring techniques has been reviewed by the verification team during the verification site visit and through the document review and the same has been compared against the requirements of the monitoring plan in the registered documents and has been found in line with the monitoring plan.

a. Data and parameters fixed ex ante or at renewable of crediting period

$EF_{grid,OM,y}$, $EF_{grid,BM,y}$ and $EF_{grid,CM,y}/EF_{CO2,grid,y}$ are the ex-ante fixed parameters in line with the registered PDD^{/01/} as in below:

$EF_{grid,OM,y}$ (Relevant SDG: SDG-13) = 0.6579 tCO₂e/MWh

$EF_{grid,BM,y}$ (Relevant SDG: SDG-13) = 0.4059 tCO₂e/MWh

$EF_{grid,CM,y}$ (Relevant SDG: SDG-13) = 0.5949 tCO₂e/MWh

The emission intensities CO, NMVOC and NO_x are also the ex-ante fixed parameters in line with the Transition Annex^{/20/} as in below:

Emission intensity of CO (Relevant SDG: SDG-13) = 0.131 tons/GWh

Emission intensity of NMVOC (Relevant SDG: SDG-13) = 0.033 tons/GWh

Emission intensity of NO_x (Relevant SDG: SDG-13) = 2.312 tons/GWh

b. Data and parameters monitored

In line with the applied methodology^{/02/}, the only data/parameter to be monitored is the amount of net electricity exported to the grid by the project activity ($EG_{facility,y}$). The sustainable development indicators and safeguarding principles indicated in the registered GS Passport^{/15/} and the Transition Annex^{/20/} for the third verification are as follows:

- Air quality
- Quality of employment
- Quantitative employment and income generation
- Water quality and quantity
- Other pollutants (Noise)

- Biodiversity
- Soil condition (Hazardous wastes)
- Balance of payments and investment
- Technology transfer and technological self-reliance

As there are no missing parameters, it could be concluded that the monitoring is complete. The detailed assessment of monitoring parameters have been given in the Section 3.5 of the report.

c. Implementation of sampling plan

No sampling approach is used by the PP and all data that is used in the GHG emission reduction calculations have been reviewed by the verification team without any sampling.

d. Compliance with the calibration frequency requirements for measuring instruments

The net electricity is measured continuously by one main electricity meter at the grid interface and recorded monthly. There is also one back-up electricity meter. During the validation, calibrated meters were installed as per the relevant regulations. The initial calibration of the electricity meters was done on 18/09/2009 as confirmed during the previous verification periods. Although the calibration of the meters is valid for 10 years in line with the relevant legal regulation¹, nevertheless, in case of irregular difference between main and cross-check backup meters, TEIAS responsible are informed for the intervention. That means, TEIAS (grid company) is responsible for the calibration and maintenance of the devices. The meter tests for the currently available meters were performed on 12/04/2019, 11/08/2021 and 25/05/2023, respectively. All these meters are bi-directional (meter the energy in two directions – generation and consumption).

The currently available meters used are in line with the regulatory requirements for electricity meters and both are EMH brand (LZQJ-XC model) and accuracy class is 0.2s with the serial number of 7019993 and with the serial number of 7019994 for the main meter and back-up meter, respectively as confirmed through the provided meter photos^{/27/}, meter test protocols^{/26/} and on site visit as in below. All documents regarding meter quality and test have been presented for the third verification period.

The electricity meters have been controlled and maintained by the grid owner. The quantity of net electricity delivered to the grid has been calculated with the EPIAS (the financial settlement centre of TEIAS) records provided to the PP by TEIAS. All readings and billings are done via EPIAS records^{/22/}.

There are always internal reviews of the metered data which is checked by different parties. SCADA system is available from which daily reports are taken. The data collected daily is saved in plant manager computer and backed up. Sample logbooks were checked and there were no differences in data.

¹ <https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=6381&MevzuatTur=7&MevzuatTertip=5>

All data collected as part of monitoring will be archived electronically by the PP and be kept at least for 2 years after the end of the last crediting period.

Therefore, it could be confirmed by the verification team that the calibration process is appropriate and correct as traceability is ensured.

3.5 SDG Outcomes Monitoring

The sustainability measures are in line with Section G of the registered GS Passport^{/15/} and Transition Annex^{/20/}. For verification of sustainability parameters in the current monitoring period, document review, on-site visit observations and interviews with local stakeholders were employed.

The compliance check of the parameters indicated in the registered GS Passport^{/15/}, the monitoring plan of the registered PDD^{/01/} and the Transition Annex^{/20/} have been carried out, as follows in Table 3-1 below:

Table 3-1: Sustainability monitoring parameters

No.	Indicator	Chosen Parameter	Way of Monitoring (When)	Compliance Check
1	Air quality (SDG-13 Target: 13.3 Indicator: 13.3.1)	Reduction in amount of CO, NMVOC and NO _x emissions	Based on net annual electricity generation and ex-ante fixed respective emission factors (Annually)	The net electricity generation has been checked from the EPIAS records and the emission intensities of CO, NMVOC and NO_x emissions due to electricity generation are taken as 0.131 tons/GWh, 0.033 tons/GWh and 2.312 tons/GWh, respectively as fixed ex-ante in the Transition Annex^{/20/}. Therefore, total of 52.04 tons of CO, 13.14 tons of NMVOC and 916.02 tons of NO_x emission reduction (avoidance) has been achieved during this monitoring period in line with the provided and checked calculations.
2	Air quality (SDG-13 Target: 13.3 Indicator: 13.3.1)	Reduction in CO ₂ emissions	Based on net annual electricity generation and ex-ante fixed respective grid emission factors (Annually)	The net electricity generation has been checked from the EPIAS records and the grid emission factor (EF_{grid,CM,y}) is taken as 0.5949 tCO₂e/MWh as fixed ex-ante in the registered PDD^{/01/}. As a result, 235,738 tCO₂e CO₂ emission reduction has been

No.	Indicator	Chosen Parameter	Way of Monitoring (When)	Compliance Check
				achieved during this monitoring period in line with the provided and checked calculations.
3	Quantity of net electricity generation supplied by the project (SDG 7 Target: 7.2 Indicator: 7.2.1)	EG _{facility,y}	Through the TEIAS (grid company) and electricity meters (Continuous measurement and at least monthly recording)	The net electricity generation has been checked from the EPIAS records ^{/22/} , TEIAS Meter Reading Forms ^{/21/} (cross check records) and the provided values in the ER calculations found to be correct. Besides that, capacity addition (design change) process hasn't been initiated by PP in line with the Gold Standard rules and requirements, so the capacity addition component is not eligible and this verification has been handled without the capacity addition component. Gold Standard registered capacity of the project (60 MWe) is considered and the electricity generation and the emission reduction of the added nine turbines (T-21, T-22, T-23, T-24, T-25, T-26, T-27, T-28 and T-29) SCADA screenshots ^{/36/} has been excluded. Please also see Section 3.6 for further details.
4	Quality of employment (SDG-8 Target: 8.8 Indicator: 8.8.2)	Number trainings given to the employees	Through the training records/certificates for all employees and interviews with the employees (Annually (Each monitoring period))	As per the training records and certificates ^{/28/} checked, the trainings were on basic HSE, occupational diseases, hygiene, lockout tagout and manual lifting dated 20/02/2020, 19/03/2020, 21/04/2020, 11/05/2020, 10/07/2020, 11/02/2021, 26/04/2021, 26/04/2021, 26/05/2021, 27/05/2021, 29/06/2021, 27/07/2021, 31/08/2021, 22/09/2021 and 15/12/2021 and 13 training sessions had been conducted and all 11 staff

No.	Indicator	Chosen Parameter	Way of Monitoring (When)	Compliance Check
				had been given the trainings. The safety equipment was also in place in line with the on-site verification site visit observations. The social security payment records^{/29/} covering 30 days/month have been provided. Besides that, there hadn't been any complaint by the project site employees regarding working hours and fair payment during the on-site verification site visit.
5	Quantitative employment and income generation (SDG 8 Target: 8.8 Indicator: 8.8.2)	Number of employment	Social security system records (Each monitoring period)	As per the social security records ^{/29/} checked and handled interviews during the verification site visit, 11 employees have been employed including the subcontractor security staff and 8 of them are local employees.
6	Water quality and quantity (SDG 6 Target: 6.3 Indicator: 6.3.1)	Average Amount of Cooling Wastewater Avoided annually	Based on net annual electricity generation and ex-ante fixed respective wastewater avoidance from potential cooling water operations calculated by taking Total Waste Water Discharged by Thermal Power Plants in the related reference year (Annually)	The net electricity generation has been checked from the EPIAŞ records and the average amount of waste water discharged per GWh is taken as $21.4 \times 10^3 \text{ m}^3/\text{GWh}$ as fixed ex-ante in the registered GS Passport^{/15/} and Transition Annex^{/20/}. Therefore, total of 8,476,396 m^3 ($8,476.396 \times 10^3 \text{ m}^3$) wastewater discharge avoidance has been achieved during this monitoring period in line with the provided and checked calculations. Besides that, the sewage is transferred by sewage truck to local municipality sewage system as per the "Regulation on Control of Water Contamination" and the wastewater transfer and

No.	Indicator	Chosen Parameter	Way of Monitoring (When)	Compliance Check
				disposal receipts dated as 13/02/2020, 23/09/2020, 22/03/2021, 08/07/2021, 27/09/2021, 09/12/2021 ^{/30/} were also provided to VVB.
7	Biodiversity (Safeguarding Principle: 9.10)	Number of bird strikes to the turbines	Regular site vetting by appointed personnel for observation of nests and carcasses on project site (Monthly)	The project hasn't significant impact on the birds and surrounding environment in line with the ornithology reports prepared by the relevant technical experts and dated as 06/01/2015, 10/01/2016 and 01/07/2016 ^{/25/} . Besides that, there hasn't been any complaint by the interviewed local stakeholders regarding this issue during the on-site visit and there hasn't been any bird carcass observed by the project site staff during this monitoring period in line with the Bird Carcass Monitoring Form dated as 01/07/2022 ^{/42/} and the signed letter by PP dated as 01/07/2022 ^{/46/} .
8	Other pollutants (Safeguarding Principle 9.4)	Noise level during operation of the project activity	The interviews with the head of village and local people (Each verification period)	There hasn't been any complaint by the interviewed local stakeholders including Çakilköy Mukhtar (Village Head) regarding the noise due to the project activity during the on-site visit.
9	Landscape modification and soil (Safeguarding Principle 9.1)	Soil condition (Hazardous waste)	The head of village and receipt of transfer of waste oil (Once during the verification period)	The hazardous waste declaration forms provided to Ministry of Environment and Urbanization for 2020, 2021 and 2022 ^{/31/} years have been provided. The hazardous waste storage area including waste oil and the domestic waste containers have also been seen during the on-site visit. Besides that, there hasn't been any complaint by the interviewed

No.	Indicator	Chosen Parameter	Way of Monitoring (When)	Compliance Check
				local stakeholders regarding this issue during the on-site visit.
10	Balance of payments and investment (Safeguarding Principle 7.2)	Amount of imported energy source	Annual electricity generation records (Annually)	The net electricity generation has been checked from the EPIAS records ^{/22/} , TEIAS Meter Reading Forms ^{/21/} (cross check records) and the provided values in the ER calculations found to be correct. Besides that, capacity addition (design change) process hasn't been initiated by PP in line with the Gold Standard rules and requirements, so the capacity addition component is not eligible and this verification has been handled without the capacity addition component. Gold Standard registered capacity of the project (60 MWe) is considered and the electricity generation and the emission reduction of the added nine turbines (T-21, T-22, T-23, T-24, T-25, T-26, T-27, T-28 and T-29) SCADA screenshots ^{/36/} has been excluded. That means, the referred electricity amount (396,266.89 MWh) has been generated through the renewable wind source instead of the fossil fuel.
11	Technology transfer and technological self-reliance (Safeguarding Principle 6.2)	Purchased equipment	Review of purchase agreements (Annually)	The invoices ^{/43/} of technological alarming system for turbines dated 11/01/2020 and newly purchased artificial intelligence based software dated 05/07/2022 have been provided to the VVB. There hasn't been any invoice for 2021 due to the economic impacts of COVID-19 and economic fluctuation in Turkey

No.	Indicator	Chosen Parameter	Way of Monitoring (When)	Compliance Check
				in 2021.

The project contributes to SDG-6 (Clean Water and Sanitation with $8,476.396 \times 10^3 \text{ m}^3$ wastewater avoidance), SDG 7 (Affordable and Clean Energy with 396,266.89 MWh net electricity generation), SDG 8 (Decent Work and Economic Growth with total 11 employed staff during the recent year of operation period (8 of them are local) and 13 training sessions conducted) and SDG-13 (Climate Action with achieved emission reduction of 235,738 tCO₂e) during the monitoring period.

The relevant signed declaration by PP and dated as 10/09/2023^{/45/} confirming about no legal contest or dispute that has arisen with the project during the monitoring period has also been provided. Besides that, there hasn't been any occupational injury during the monitoring period in line with the information by PP and there hadn't been any complaint by the interviewed project site staff regarding this issue during the on-site verification site visit, either.

Therefore, based on the on-site visit observations, handled interviews and provided and checked documents, it can be confirmed that sustainability parameters are monitored in line with the registered GS Passport^{/15/}, the monitoring plan of the registered PDD^{/01/} and the Transition Annex^{/20/} under Gold Standard for the Global Goals.

3.6 Assessment of Data and Calculation of Greenhouse Gas Emission Reductions

EPIAS records^{/22/} have been presented to VVB for all months of the monitoring period and all data in emission reductions table are checked with these records. EPIAS records^{/22/} are the main data source whereas TEIAS meter reading protocols^{/21/} through on-site electricity meters have been utilized as the cross-check data source. The capacity addition (design change) process hasn't been initiated by PP in line with the Gold Standard rules and requirements, so the capacity addition component is not eligible and this verification has been handled without the capacity addition component. Gold Standard registered capacity of the project (60 MWe) is considered and the net electricity generation and the emission reduction of the added nine turbines (T-21, T-22, T-23, T-24, T-25, T-26, T-27, T-28 and T-29) SCADA screenshots^{/36/} has been excluded.

The net electricity generated during the current monitoring period was as follows in Table 3-2 below:

Table 3-2: Net electricity generation

Period	Amount	Compliance check
01/01/2020 – 31/12/2020	Export to Grid: 310,520.18 MWh Import from Grid: 554.73 MWh Export to Grid by Additional Nine Turbines: 109,026.31 MWh	Monthly EPIAS records ^{/22/} and SCADA screenshots of additional nine

Period	Amount	Compliance check
	Import from Grid by Additional Nine Turbines: 271.791 MWh Net Electricity Supplied to Grid by Registered Project (Twenty Turbines): 201,210.94 MWh	turbines ^{/36/}
01/01/2021 – 31/12/2021	Export to Grid: 301,078.60 MWh Import from Grid: 427.16 MWh Export to Grid by Additional Nine Turbines: 105,743.85 MWh Import from Grid by Additional Nine Turbines: 330.333 MWh Net Electricity Supplied to Grid by Registered Project (Twenty Turbines): 195,055.96 MWh	Monthly EPIAS records ^{/22/} and SCADA screenshots of additional nine turbines ^{/36/}
Total	Export to Grid: 611,598.78 MWh Import from Grid: 1,1163.86 MWh Export to Grid by Additional Nine Turbines: 214,770.15 MWh Import from Grid by Additional Nine Turbines: 602.12 MWh Net Electricity Supplied to Grid by Registered Project (Twenty Turbines): 396,266.89 MWh	Monthly EPIAS records ^{/22/} and SCADA screenshots of additional nine turbines ^{/36/}

VVB confirms that the data used for emission reductions are correct. The grid emission factor taken is 0.5949 tCO₂/MWh and the value is same as fixed ex-ante in the registered PDD^{/01/}.

VVB also confirms that the methods and formulae used for calculating baseline emissions are in line with the applied methodology^{/02/} and the registered PDD^{/01/}. The net electricity generation is multiplied with the grid emission factor to arrive at the emission reductions.

The grid emission factor and data and parameters available before validation are also applied in line with the registered PDD ^{/01/} and baseline excel sheet for validation.

According to the registered PDD^{/01/}, the estimated emission reduction for this monitoring period would be 217,682 tCO₂e corresponding to the monitoring period. However, the project in operation totally reached emission reduction of 235,738 tCO₂e in this period and this parameter contributes to indicator 13.3.1 within SDG-13.

The vintage break-up of the emission reductions during the current monitoring period are as follows in Table 3-3 below:

Table 3-3: Emission reduction values

Period	Emission reductions (tCO ₂ e)
01/01/2020 - 31/12/2020	119,700
01/01/2021 - 31/12/2021	116,038

The calculations have been reproduced by the verification team and the source data (EPIAS records^{/22/}, TEIAS Meter Reading Forms^{/21/} (cross check records) and SCADA screenshots of additional nine turbines^{/36/}) are presented by PP.

The baseline emissions (BE_y) by the project activity for the monitoring period:

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

$$EG_{PJ, y} = 396,266.89 \text{ MWh}$$

$$EF_{grid, CM, y} = 0.5949 \text{ tCO}_2\text{e/MWh}$$

$$BE_y = 235,738 \text{ tCO}_2\text{e (Rounded down value)}$$

As per the applied methodology, ACM0002 version 12.1.0^{/2/}, no project and leakage emissions are applicable in wind power projects.

Therefore, Emission Reduction (ER) = Baseline emissions – Project emissions

$$ER_y = BE_y - PE_y$$

$$ER_y = 235,738 \text{ tCO}_2\text{e} - 0$$

$$ER_y = 235,738 \text{ tCO}_2\text{e}$$

3.7 Management and Operational System

The monitoring responsibilities including the data measurement, collection, verifying, archiving etc. have been clearly defined in the registered PDD^{/01/}. The same practice is followed onsite and it is confirmed by the verification team during the verification site visit. The data related to ER calculation as well as data monitoring, collection process etc. have been internally reviewed by the management of the monitoring team regularly.

The information flow of each parameter has been verified by the verification team via interviewing with responsible personnel and through the document review.

It's verified during the site visit, the monitoring procedure as well as the internal quality management and control procedures are stipulated in the registered PDD^{/01/}. The monitoring personnel have been interviewed by the verification team and it's confirmed that the monitoring is implemented in line with the registered PDD^{/01/}.

All the data and documents, either hard copies or soft copies, will be kept by the PP for two years after the end of the last crediting period.

4. REFERENCE

LIST OF DOCUMENTS	
S. No.	Document/Evidence/Reference/Web link, Version, Date
01	Registered PDD version 08 dated 04/09/2012
02	ACM0002 version 12.1.0
03	Verification Service Agreement dated 16/06/2022
04	Monitoring Report version 01 dated 02/11/2022
05	Monitoring Report version 02 dated 23/06/2023
06	Monitoring Report version 03 dated 02/10/2023
07	ER Calculation Excel Sheet version 01 dated 02/11/2022
08	ER Calculation Excel Sheet version 02 dated 23/06/2023
09	ER Calculation Excel Sheet version 03 dated 02/10/2023
10	CDM Validation and Verification Standard For Project Activities version 3.0
11	CDM Project Standard For Project Activities version 3.0
12	Gold Standard for Global Goals version 1.2 GS Validation and Verification Standard version 1.0
13	GHG Emissions Reductions & Sequestration Product Requirements version 2.1
14	Renewable Energy Activity Requirements version 1.4
15	GS Passport dated 04/09/2012
16	Final Validation Report version 04 dated 10/12/2013
17	Second Verification Final Report version 3.0Aa dated 25/05/2021
18	Second Verification GS Issuance Review Final Document
19	Gold Standard for Global Goals Transition Review Final Document dated 05/03/2020
20	Gold Standard for Global Goals Transition Annex
21	TEIAS Monthly Reading Protocols dated 01/2020 – 12/2021
22	EPIAS Screenshots dated 01/2020 – 12/2021
23	Project Introductory File dated 05/2011
24	EIA Not Necessary Decision dated 03/04/2009
25	Ornithology Reports dated as 06/01/2015, 10/01/2016 and 01/07/2016
26	Meters Test Reports dated 12/04/2019, 11/08/2021 and 25/05/2023
27	Electricity Meters' Photos
28	Training Records and Certificates dated 20/02/2020, 19/03/2020, 21/04/2020, 11/05/2020, 10/07/2020, 11/02/2021, 26/04/2021, 26/04/2021, 26/05/2021, 27/05/2021, 29/06/2021, 27/07/2021, 31/08/2021, 22/09/2021 and 15/12/2021 (As detailed in the Section 4.6)
29	Social Security Records for PP Site Employees
30	Wastewater Transfer and Disposal Receipts dated as 13/02/2020, 23/09/2020, 22/03/2021, 08/07/2021, 27/09/2021, 09/12/2021
31	Hazardous Waste Declaration Forms Provided to Ministry of Environment and Urbanization dated 2020, 2021 and 2022
32	Hazardous Waste Storage Area Photographic Evidences
33	Waste Water Storage Tank Photographic Evidences

34	Domestic Waste Storage Container Photographic Evidences
35	Single Line Diagram
36	Scada Program Screenshoots of Electricity Generation and Consumption of Additional Nine Turbines
37	Electricity Generation Licence dated 31/12/2007 and 09/07/2015 (Initial Issuance & Last Amendment)
38	Technical Description Documents of Vestas V90/3 MW and Vestas V112/3.3 MW Turbines
39	Provisional Acceptance Protocols dated 18/09/2009, 16/10/2009, 30/06/2010, 11/08/2011, 14/12/2014 and 27/02/2015
40	Annual Reports to GS by PP dated as 22/07/2022 and 26/12/2022
41	Screenshots of 2020 And 2021 Annual Reports through the Sustaincert Account
42	Bird Carcass Monitoring Form dated 01/07/2022 (Confirming About There Hasn't Been Any Observed Bird Carcass During the Monitoring Period)
43	The Invoices of Technological Alarming System dated as 11/01/2020 for Turbines and Newly Purchased Artificial Intelligence Based Software dated as 05/07/2022
44	Signed Letter by Çakılköy Village Head (Mukhtar) dated as 21/11/2022 (About the Contact Details of PP Relevant Staff in case of Any Complaint and Availability of Logbook)
45	Signed Letter by PP (About No Dispute or Legal Case During Monitoring Period) dated as 10/09/2023
46	Signed Letter by PP (Confirming About There Hasn't Been Any Observed Carcass During the Monitoring Period) dated 01/07/2022
47	Site Photos
48	Monitoring Report version 04 dated 15/11/2023
49	ER Calculation Excel Sheet version 04 dated 15/11/2023
50	Monitoring Report version 05 dated 08/01/2024

5. FINAL VERIFICATION STATEMENT

Applus+ Certification has been engaged by Bandırma Enerji ve Elektrik Üretim Ticaret A.Ş. to perform the third verification (1st CP) of the “60 MW Bandırma Wind Power Plant Project”.

The management of Bandırma Enerji ve Elektrik Üretim Ticaret A.Ş. is responsible for the preparation of the GHG emissions data and the reported GHG emissions reductions on the basis set out within the project’s monitoring plan in the registered PDD^{/01/} and the applied methodology, ACM0002 Version 12.1.0^{/02/}.

The verification approach was based on the requirements as defined under the Kyoto Protocol, Marrakesh accord, as well as those defined by the CDM Executive Board and Gold Standard. Our approach is risk-based, drawing on an understanding of the risks associated with reporting GHG emissions data and the controls in place to mitigate these. The verification can confirm that:

- the project is operated as planned and described in the registered PDD^{/01/};
- the monitoring plan is as per the applied methodology^{/02/};
- the monitoring in Monitoring Report^{/48/} is as per the registered PDD^{/01/} and approved by GS4GG;
- the development and maintenance of records and reporting procedures are in accordance with the registered monitoring plan;
- the installed equipment being essential for generating emission reduction runs reliably and is calibrated appropriately;
- the monitoring system is in place and generates GHG emission reductions data;
- the GHG emission reductions are calculated without material misstatements.

In our opinion, the GHG emission reductions for “60 MW Bandırma Wind Power Plant Project” for the monitoring period 01/01/2020 to 31/12/2021 (both days included) as reported in Monitoring Report^{/48/} prepared on the basis of the project’s Monitoring Plan are fairly stated.

Based on the information we have seen and evaluated, we confirm the following statement:

Reporting period: 01/01/2020 to 31/12/2021 (Both days included)

Verified emissions in the above reporting period:

Leakage emissions	0 tCO ₂ e equivalents
Project emissions	0 tCO ₂ e equivalents
Baseline emissions	235,738 tCO ₂ e equivalents
Emission reductions	235,738 tCO ₂ e equivalents (GS VERs)

Applus+ Certification also confirms the following based on the results of document review and on-site assessment:

Vintage	SDG 6 (Clean Water and Sanitation)	SDG 7 (Affordable and Clean Energy, net electricity)	SDG 8 (Decent Work and Economic Growth)	SDG 13 (Climate Action) Gold Standard Voluntary Emission Reductions (GS VERs)
01/01/2020 to 31/12/2020	4,244.00*10 ³ m ³ waste water avoidance	201,210.94 MWh	2 training sessions conducted for all 11 employees & 11 staff employed	119,700 tCO ₂ e
01/01/2021 to 31/12/2021	4,232.40*10 ³ m ³ waste water avoidance	195,055.96 MWh	11 training sessions conducted for all 11 employees & 11 staff employed	116,038 tCO ₂ e
Total (01/01/2020 to 31/12/2021) (Both days included)	8,476.396*10 ³ m ³ waste water avoidance	396,266.89 MWh	13 training sessions conducted for all 11 employees & 11 staff employed	235,738 tCO ₂ e

Date: 09/01/2024

Lead Auditor: Mr. Anıl Söyler

Tech. Expert: Mr. Anıl Söyler

Tech. Reviewer: Mr. David Lubanga

Approver (*Applus+ Certification VVB Technical Manager*)

Mr. Agustín Calle de Miguel

ASSESSMENT TEAM	
Lead Auditor: Mr. Anıl Söyler	Technical Reviewer: Mr. David Lubanga
Signature: 	Signature: 
Approver: Mr. Agustín Calle de Miguel	
Signature: 	

Appendix 1: Corrective Action Request/Clarification Request/Forward Action Request resolution table

Type:	☐ CAR ☒ CL/CR ☐ FAR	Number:	01
Raised by:	Anıl Söyler	Ref. to checklist in above tables:	-
Description of the audit finding		Date:	27/02/2023
Please clarify the annual report status of the project along with the relevant evidence.			
Project Participant's response		Date:	02/10/2023
An Annual Report for 2020 and 2021 have already been uploaded to SC App. Annual Report for 2022 will be uploaded by the end of this year, if required.			
Documentation provided as evidence by Project Participant			
Uploading Evidences of Annual Reports for 2020 and 2021			
Auditor's assessment comment		Date:	02/11/2023
Ok Closed (The screenshots of 2020 and 2021 annual reports have been provided).			

Type:	☐ CAR ☒ CL/CR ☐ FAR	Number:	02
Raised by:	Anıl Söyler	Ref. to checklist in above tables:	-
Description of the audit finding		Date:	27/02/2023
a) Please provide the following records with regards to the sustainability monitoring parameters: - The evidence about the hazardous waste storage area - The photographic evidences of waste water storage tank - The waste water transfer and disposal records associated with the monitoring period - The hazardous waste declaration forms associated with the monitoring period - The domestic waste transfer and disposal records associated with the monitoring period - The social security records of PP site staff for the monitoring period - The bird monitoring ornithology reports - The noise assessment report, if any - The purchase agreements within the context of technology transfer and technological self-reliance - The document regarding the contact details of responsible staff within the context of PP in case of any complaint by local stakeholders b) Please provide the provisional acceptance of all turbines and final version of generation licence.			
Project Participant's response		Date:	02/10/2023
a) - The evidence about the hazardous waste storage area has been provided to VVB. - The photographic evidence of wastewater storage tank has been provided to VVB. - The wastewater transfer and disposal records have been provided to VVB. - The hazardous waste declaration forms have been provided to VVB. - The social security records of PP site staff have been provided to VVB. - Ornithology reports have been provided to VVB. - The noise assessment reports (Noise measurement studies were carried out during the construction period) have been now provided to VVB.			

- The purchase agreements have been provided to VVB.
 - Mukhtar (head of village) has all the contact information of the responsible staff from the project activity. Whenever a complaint arises from the local people or Mukhtar himself arises a concern regarding the project activity, they can directly contact the relevant responsible persons.
- The signed document confirming that they have the contact details of responsible staff has been now provided.
- b) Provisional acceptance of all turbines and final version of generation licence have been now provided.

Documentation provided as evidence by Project Participant

Supporting Documents

Auditor's assessment comment	Date:	02/11/2023
a) - Ok Closed (The photographic evidences of the hazardous waste storage area have been provided). - Ok Closed (The photographic evidences of the wastewater storage tank have been provided). - Ok Closed (The wastewater transfer and disposal receipts dated as 13/02/2020, 23/09/2020, 22/03/2021, 08/07/2021, 27/09/2021, 09/12/2021 have been provided). - Ok Closed (The hazardous waste declaration forms for 2020, 2021 and 2022 have been provided). - Ok Closed (The photographic evidences of domestic waste containers have been provided). - Ok Closed (The project hasn't significant impact on the birds and surrounding environment in line with the ornithology reports prepared by the relevant technical experts and dated as 06/01/2015, 10/01/2016 and 01/07/2016. There hadn't been any complaint by the interviewed local stakeholders regarding this issue during the verification site visit, either). - Ok Closed (There hasn't been any noise assessment report during the monitoring period. However, there hadn't been any complaint by the interviewed local stakeholders regarding this issue during the verification site visit). - Ok Closed (The invoices within the context of technology transfer and technological self-reliance and dated as 11/01/2020 and 05/07/2022 have been provided) - Ok Closed (The signed document by Çakılıköy Village Head (Mukhtar) regarding the contact details of responsible staff within the context of PP in case of any complaint by local stakeholders and dated as 21/11/2022 has been provided). b) Ok Closed (The provisional acceptance of all turbines and final version of generation licence have been provided).		

Type:	☐ CAR	☒ CL/CR	☐ FAR	Number:	03
Raised by:	Anıl Söyler			Ref. to checklist in above tables:	-
Description of the audit finding				Date:	27/02/2023
In total, there are four FARs from the second verification process including its GS review stage as in below:					
e) "FAR-1: In-line with GS4GG Principles and Requirements, VVB and PP shall consider the rule below for future monitoring activities: 5.1.39: An annual update report shall be provided to GS -when successfully Transitioned to GS4GG (05/03/2020)- for each monitoring year by the end of next calendar year for which verification is not completed.					
f) "FAR-2: During next Verification site visit, VVB shall ask for inputs from local stakeholders regarding the project activity impacts other than the Mukhtar."					

g) "FAR-3: As per provided evidence, ornithological monitoring for Safeguarding Principle 9.10 has been terminated since it is concluded that the project doesn't pose any risk, by the related governing authorities. However, during next monitoring period, PP is requested to conduct regular site vetting by appointed personnel for observation of nests and carcasses on project site and record the same."		
h) "FAR-4: During on site visit, new logbook was provided to the Mukhtar. For that, in the next verification period, logbook should be checked by the VVB."		
Project Participant's response	Date:	02/10/2023
a) An Annual Reports for 2020 and 2021 have already been uploaded to SC App. Annual Report for 2022 will be uploaded by the end of this year, if required. b) Regarding the 3rd verification of the Bandırma WPP, site visit with VVB conducted physically and local stakeholders other than the Mukhtar also participated in the site visit. No negative feedback has been received from Mukhtar and stakeholders. Related evidence has been provided to VVB. c) The monitoring way are determined as the PP to conduct and record regular site vetting by appointed personnel for observation of nests and carcasses on project site and record now. Also, related document (Carcass Form) is provided to VVB. d) The photographic evidence of the new logbook has been provided to VVB.		
Documentation provided as evidence by Project Participant		
Supporting Documents		
Auditor's assessment comment	Date:	02/11/2023
a) Ok Closed (The screenshots of 2020 and 2021 annual reports have been provided). b) Ok Closed (Three local stakeholders from Çakılıköy Village have been interviewed during the verification site visit on 21/11/2022 and there hadn't been any complaint by the interviewed local stakeholders). c) Ok Closed (Bird carcass and nest monitoring forms for 2020 and 2021 have been provided). d) Ok Closed (The signed declaration by Çakılıköy Village Head (Mukhtar) dated as 21/11/2022 and confirming about the availability of log book and there hasn't been any complaint during the monitoring period has been provided. The photographic evidences of logbook has also been provided. Besides that, the same has also been confirmed during the verification site visit through the interviews with the local stakeholders and on-site visit observations).		

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	01
Raised by:	Anıl Söyler	Ref. to checklist in above tables:	-
Description of the audit finding	Date:	27/02/2023	
a) Please correct the MR in line with the Gold Standard MR template and guideline including the header and footer. b) Please include Table-1 and Table-2 in the MR considering the current monitoring period.			
Project Participant's response	Date:	02/10/2023	
a) MR in line with the Gold Standard MR template and guideline including the header and footer is corrected. b) Table-1 and Table-2 have been revised. Employment information has been provided.			
Documentation provided as evidence by Project Participant			
Revised MR			
Auditor's assessment comment	Date:	02/11/2023	
a) Ok Closed (MR has been revised by PP accordingly). b) Ok Closed (Table-1 and Table-2 in the MR have been revised by PP accordingly).			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	02
Raised by:	Anıl Söyler	Ref. to checklist in above tables:	-
Description of the audit finding		Date:	27/02/2023
a) Please include the project operational lifetime in the Section A.1 of the MR in line with the registered PDD. b) Please include the host country information in the Section A.2 of the MR.			
Project Participant's response		Date:	02/10/2023
a) Section A.1. of the MR is revised to include the project operational lifetime. b) The host country information is stated in the Section A.2 of the MR.			
Documentation provided as evidence by Project Participant			
Revised MR			
Auditor's assessment comment		Date:	02/11/2023
a) Ok Closed (Section A.1 of the MR has been revised by PP accordingly). b) Ok Closed (Section A.2 of the MR has been revised by PP accordingly).			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	03
Raised by:	Anıl Söyler	Ref. to checklist in above tables:	-
Description of the audit finding		Date:	27/02/2023
a) Please include the crediting period type of the project in the Section A.4 of the MR. b) Please correct the crediting period of the project in the GS registry.			
Project Participant's response		Date:	02/10/2023
a) Crediting period type of the project is added in the Section A.4 of the MR. b) Correction of the crediting period the project was done in the registry.			
Documentation provided as evidence by Project Participant			
Revised MR			
Auditor's assessment comment		Date:	02/11/2023
a) Ok Closed (Section A.4 of the MR has been revised by PP accordingly). b) Ok Closed (The crediting period information in the GS registry has been revised).			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	04
Raised by:	Anıl Söyler	Ref. to checklist in above tables:	-
Description of the audit finding		Date:	27/02/2023
Please provide all the data that is determined only once for the crediting period but are used after registration of the project in the Section D.1 of the MR in line with the registered PDD.			
Project Participant's response		Date:	02/10/2023
All the data that is determined only once for the crediting period but are used after registration of the project has been added in the Section D.1 of the MR in line with the registered PDD.			
Documentation provided as evidence by Project Participant			

Revised MR		
Auditor's assessment comment	Date:	02/11/2023
Ok Closed (Section D.1 of the MR has been revised by PP accordingly).		

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	05
Raised by:	Anıl Söyler	Ref. to checklist in above tables:	-
Description of the audit finding		Date:	27/02/2023
a) Please provide the photographic evidences of electricity meters. b) Please provide the meter test protocols for all electricity meters covering the monitoring period along with the meter change protocols, if any. c) Please clarify in the Section C of the MR if there is any change with the registered monitoring plan in terms of data aggregation. d) Please include the roles and responsibilities of the personnel within the context of the monitoring in the Section C of the MR.			
Project Participant's response		Date:	02/10/2023
a) The photographic evidence of electricity meters is provided to VVB. b) The meter test protocols, and meter change protocol are provided to VVB. c) Section C is revised to include requested information. d) Section C is revised to include requested information.			
Documentation provided as evidence by Project Participant			
Supporting Documents and Revised MR			
Auditor's assessment comment		Date:	02/11/2023
a) Ok Closed (The photographic evidences of electricity meters have been provided and the same has also been confirmed during the verification site visit). b) Ok Closed (The meter test protocols dated as 12/04/2019, 11/08/2021 and 25/05/2023 have been provided). c) Ok Closed (Section C of the MR has been revised by PP accordingly). d) Ok Closed (Section C of the MR has been revised by PP accordingly).			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	06
Raised by:	Anıl Söyler	Ref. to checklist in above tables:	-
Description of the audit finding		Date:	27/02/2023
a) Please include the meter test dates in the Section D.2 of the MR along with the relevant evidence. b) Please include the person/entity responsible for the calibration in the Section D.2 of the MR. c) Please provide the single line diagram of the project as a separate reference document. d) Please include all sustainability monitoring parameters in the Section D.2 of the MR in line with the registered Passport and Transition Annex of the project. e) Please include monitored values of all monitoring parameters. f) Please include the details of handled trainings in the Section D.2 of the MR including the scope and date of the trainings. g) Please include the details of employment including the local ones in the Section D.2 of the MR.			
Project Participant's response		Date:	02/10/2023

a) The meter test dates are included in the Section D.2 of the MR. b) Section D.2. is revised to include requested information. c) The single line diagram of the project has been now provided to VVB. d) All sustainability monitoring parameters in the Section D.2 of the MR are in line with the registered Passport and Transition Annex of the project now. e) Monitored values has been provided. f) Section D.2 is revised to include the details of handled trainings. g) The details of employment have been provided.		
Documentation provided as evidence by Project Participant		
Revised MR and Supporting Documents		
Auditor's assessment comment	Date:	02/11/2023
a) Ok Closed (Section D.2 of the MR has been revised by PP accordingly). b) Ok Closed (Section D.2 of the MR has been revised by PP accordingly). c) Ok Closed (The single line diagram of the project has been provided). d) e) f) g) Ok Closed (Section D.2 of the MR has been revised by PP accordingly).		

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	07
Raised by:	Anıl Söyler	Ref. to checklist in above tables:	-
Description of the audit finding		Date:	27/02/2023
a) Please provide the EPIAS screenshot records and TEIAS meter reading records for the whole monitoring period. b) Please provide the complete ER Calculation Excel Spreadsheet including all relevant sustainability monitoring parameters and in line with the registered documents. c) Please provide all ER values as an integer value in the ER Calculation Excel Spreadsheet. d) Please use round down function for the vintage sub-total and final ER values. e) Please include the comparison of all SDG impacts in the ER Calculation Excel spreadsheet. f) Please correct the vintage base and total ER values throughout the MR based on the revisions.			
Project Participant's response		Date:	02/10/2023
a) EPIAS and TEIAS records are provided to VVB. b) The complete ER Calculation Excel Spreadsheet are provided c) ER values have been provided as an integer value. d) Round down function has been used for the vintage sub-total and final ER values e) Comparison of all SDG impacts has been now added. f) Vintage base and total ER values have been corrected throughout the MR			
Documentation provided as evidence by Project Participant			
Revised MR & Revised ER Calculations Excel Spreadsheet			
Auditor's assessment comment		Date:	02/11/2023
a) Ok Closed (EPIAS screenshot records and TEIAS meter reading records have been provided). b) Ok Closed (ER Calculation Excel Spreadsheet has been revised accordingly). c) Ok Closed (ER Calculation Excel Spreadsheet has been revised accordingly). d) Ok Closed (ER Calculation Excel Spreadsheet has been revised accordingly).			

- e) Ok Closed (ER Calculation Excel Spreadsheet has been revised accordingly).
 f) Ok Closed (MR has been revised accordingly).

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	08
Raised by:	Anıl Söyler	Ref. to checklist in above tables:	-
Description of the audit finding		Date:	27/02/2023
Please include all relevant safeguarding principles in the Section F of the MR along with the relevant details and in tabular format instead of Section D.2.			
Project Participant's response		Date:	02/10/2023
All relevant safeguarding principles are included in the Section F of the MR.			
Documentation provided as evidence by Project Participant			
Revised MR			
Auditor's assessment comment		Date:	02/11/2023
Ok Closed (Section F of the MR has been revised by PP accordingly).			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	09
Raised by:	Anıl Söyler	Ref. to checklist in above tables:	-
Description of the audit finding		Date:	27/02/2023
a) Please include baseline value or estimation of baseline situation of each SDG Impact in the Section E.1 of the MR along with the relevant details. b) Please include project value or estimation of project situation of each SDG Impact in the Section E.2 of the MR along with the relevant details. c) Please include the calculation of net benefits or direct calculation for each SDG impact in the Section E.3 of the MR d) Please include the comparison of all SDG impacts in the Section E.5 of the MR. e) Please include the explanation of calculation of value estimated ex ante calculation of approved PDD for this monitoring period in the Section E.5.1 of the MR. f) Please include the remarks on increase in achieved emission reductions in the Section E.6 of the MR based on the revisions.			
Project Participant's response		Date:	02/10/2023
a) Section E.1. has been revised. b) Section E.2. has been revised. c) Section E.3. has been revised. d) Section E.5. has been revised. e) Section E.5.1. has been revised. f) Section E.6. has been revised.			
Documentation provided as evidence by Project Participant			

Revised MR		
Auditor's assessment comment	Date:	02/11/2023
a) Ok Closed (Section E.1 of the MR has been revised by PP accordingly). b) Ok Closed (Section E.2 of the MR has been revised by PP accordingly). c) Ok Closed (Section E.3 of the MR has been revised by PP accordingly). d) Ok Closed (Section E.5 of the MR has been revised by PP accordingly). e) Ok Closed (Section E.5.1 of the MR has been revised by PP accordingly). f) Ok Closed (Section E.6 of the MR has been revised by PP accordingly).		

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	10
Raised by:	Anıl Söyler	Ref. to checklist in above tables:	-
Description of the audit finding		Date:	27/02/2023
a) Please provide the signed letter of the Mukhtar that he has received the logbook and there is no negative comments from the stakeholders. b) Please clarify if there are any grievances during the monitoring period in the Section G.1 of the MR. c) Please include the current status of the ongoing communication details with the local stakeholders in the Section G.1 of the MR. d) Please clarify the remote audit reference in the Section G.1 of the MR. e) Please provide the signed and sealed letter on company letterhead about any legal contest or dispute that has arisen with the project during the monitoring period.			
Project Participant's response		Date:	02/10/2023
a) The signed letter of the Mukhtar has been now provided. b) Section G.1. is revised to include requested information. c) Section G.1. is revised to include requested information. d) Remote audit reference has been corrected in Section G.1. e) The necessary document has been now provided to VVB.			
Documentation provided as evidence by Project Participant			
Revised MR and Signed Letter by Village Head (Mukhtar)			
Auditor's assessment comment		Date:	02/11/2023
a) Ok Closed (The signed document by Çakılıköy Village Head (Mukhtar) regarding the contact details of responsible staff within the context of PP in case of any complaint by local stakeholders and dated as 21/11/2022 has been provided). b) Ok Closed (Section G.1 of the MR has been revised by PP accordingly). c) Ok Closed (Section G.1 of the MR has been revised by PP accordingly). d) Ok Closed (Section G.1 of the MR has been revised by PP accordingly). e) Ok Closed (The signed letter by PP confirming about non-availability of any legal contest or dispute that has arisen with the project during the monitoring period and dated as 10/09/2023 has been provided).			

Appendix 2: Audit Team CVs

Mr. Anil Söyler	Mr. Anil Söyler has done Bsc. in Environmental Engineering. He has completed his Bachelor degree in Middle East Technical University, Turkey. He has more than 15 years of professional experience in environmental management, monitoring and auditing, waste and waste water management, environmental and social impact assessment, GHG emission report and projects' validation and verification, environmental reports, team and client relationship management and quality management systems and has been involved in the validation/verification services of more than 100 GHG emission reduction projects in total. He has also been involved in both national and international projects supported by IFC, World Bank and EBRD. Mr. Anil Söyler is based in Ankara, Turkey.
Mr. David Lubanga	Mr. David Lubanga is a trained engineer with over 10 years' experience as a GHG auditor. His experience in the field includes assessment of renewable energy projects, energy efficiency, energy audits and waste management and waste to energy. He is a certified auditor for ISO 50001 and 14064-2. He has successfully audited more than 300 GHG (CDM/VCS/GS) projects in different countries around the world. David holds a BSc. in Biochemical Engineering from Jacobs University Bremen (Germany), and a MSc in Environmental Resource Management from Brandenburg Technical University Cottbus (Germany), and Sheffield Hallam University (England). He has undergone additional professional training in Renewable energies, Renewable Energy and Finance, Energy Efficiency and waste management in Scotland, Germany and Austria.