Verification and certification report form for CDM project activities

(Version 04.0)

Complete this form in accordance with the instructions attached at the end of this form.

BASIC INFORMATION	
Title and UNFCCC reference number of the project activity	Nhon Hoa 2 Wind Power Project
Scale of the project activity	☒ Large-scale ☐ Small-scale
Version number of the verification and certification report	1.3
Completion date of the verification and certification report	15/02/2024
Monitoring period number and duration of this monitoring period	Monitoring Period # 01 30/11/2021 To 31/12/2022 (Both Dates included)
Version number of the monitoring report to which this report applies	1.0 Dated 06/01/2023 1.1 Dated 16/06/2023 2.0 Dated 12/12/2023 2.1 Dated 21/01/2024
Crediting period of the project activity corresponding to this monitoring period	30/11/2021 to 29/11/2026, 5 years (1st crediting period).
Project participants	Monsoon Sustainability Co., Ltd.
Host Party	Socialist Republic of Vietnam
Applied methodologies and standardized baselines	ACM 0002 Version 21.0: "Consolidated methodology for grid-connected electricity generation from renewable sources".
Mandatory sectoral scopes	1: Energy industries (renewable/non-renewable sources)
Conditional sectoral scopes, if applicable	Not applicable.
Estimated amount of GHG emission reductions or GHG removals for this monitoring duration in the registered PDD	**146,959 tCO_2e**

Certified amount of GHG emission reductions or GHG removals for this monitoring period	Amount before 1 January 2013	Amount from 1 January 2013 until 31 December 2020	Amount from 1 14 October 2021 to 31 December 2022
	0	0	171,098 tCO_2e

Name and UNFCCC reference number of the VVB	Bureau Veritas India Pvt Ltd. E-0009
Name, position and signature of the approver of the verification and certification report	 Anantha Prabhu Upunda

SECTION A. Executive summary

Bureau Veritas India Pvt. Ltd. has performed the 1st Verification of the Nhon Hoa 2 Wind Power Project along with Validation (i.e. Combined Validation and Verification) on the basis of specific criteria i.e. Gold Standard GS4GG as well UNFCCC criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria refer to Article 12 of the Kyoto Protocol, the Gold Standard rules and modalities and the subsequent decisions by the GS Secretariat, CDM Executive Board, as well as the host country criteria.

The main purpose of the project activity is to generate renewable electrical energy through sustainable means using wind power, to utilize the generated output for selling it to the grid and to contribute to climate change mitigation efforts. This renewable energy will partially substitute the electricity currently evacuated into the grid by the thermal power plants, thus contributing to the sustainable development of the region socially, environmentally, and economically.

The proposed project activity has a total installed capacity of 50 MW with 10 wind turbine generators of each 4.2 MW capacity and 02 wind turbine generators of 4 MW capacity each are connected to the national grid. A dedicated substation with a power transformer rated at 56 MVA to step up the grid 220KVA.

The annual estimated electricity generation by the Project Activity, also referred to as “Power Generation Capacity”, is 164,834 MWh and the annual estimated emission reductions are 135,655 tCO_2e.

The Verification scope is defined as an independent and objective review of the project design document. The verification scope is defined as an independent and objective review and ex-post determination of the monitored GHG emission reductions, and consisted of the following three phases: i) desk review of the project design, the baseline and monitoring plan; ii) follow-up interviews with project stakeholders; iii)resolution of outstanding issues and the issuance of the final verification report and opinion. The overall verification, from Contract Review to Verification Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.

In summary, Bureau Veritas Certification confirms that the project is implemented as planned and described in approved/submitted revised project design documents. Installed equipment’s being essential for generating emission reduction run reliably and are calibrated appropriately. The monitoring system is inplace and the project is generating GHG emission reductions. The GHG emission reductions are calculated without material misstatements, and the emission reductions verified totalize 171,098 tCO_2e for the monitoring period.

Our opinion relates to the projects' GHG emissions and resulting GHG emission reductions reported and related to the valid and registered project baseline, approved/submitted revised monitoring plan and its associated documents.

Reporting period:	30/11/2021 to 31/12/2022	
Baseline emissions:	171,098	t CO_2 equivalents
Project emissions:	000,000.00	t CO_2 equivalents
Leakage emissions:	000,000.00	t CO_2 equivalents
Emission Reductions:	171,098	t CO_2 equivalents

SECTION B. Verification team, technical reviewer and approver

B.1. Verification team member

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of VVB or outsourced entity)	Involvement in			
						Desk/document review	On-site inspection	Interviews	Verification findings
1.	Team Leader	IR	Desai	Ram	Bureau Veritas (B) Sdn Bhd	Yes	No	Yes	Yes
..	Technical Expert								
..	Financial/ Other Expert								
..	Trainee								

B.2. Technical reviewer and approver of the verification and certification report

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of VVB or outsourced entity)
1.	Technical reviewer	**IR**	**NGUYEN**	**Hong-linh**	**Bureau Veritas Vietnam**
…	**….**				
1	Approver	**IR**	**Prabhu**	**Anantha**	**Bureau Veritas India**

SECTION C. Application of materiality

C.1. Consideration of materiality in planning the verification

With reference to Guideline on Application of Materiality in Verification, EB69 annex 6 /Ref-B9/, it's defined by guideline that materiality threshold for project activities achieving a total emission reduction or removal less than 300,000 tons of carbon dioxide shall be 2 percent (2%).

Given that annual total emission reduction of this project fall into criteria less than 300,000 tons per annum ,verification team applied 2 % materiality threshold while conducting verification of Monitoring Data provided by PP for the monitoring period 30/11/2021 to 31/12/2022.

No.	Risk that could lead to material errors, omissions or misstatements	Assessment of the risk		Response to the risk in the verification plan and/or sampling plan
		Risk level	Justification	
1.	Risk of human error in transferring monitoring data from automatic data logged (primary sources) to calculation spreadsheet (secondary sources). This including transferring of data for these parameter	LOW	Since PP has established relevant monitoring system at the operational control centre where monitored value from the monitoring equipment is directly extracted and used for calculation in spreadsheet and there is no manual intervention is required. The monitored value will be wrong only when the equipment is faulty or	Cross-checking data used in calculation spreadsheet against primary sources (e.g., original data stored by automatic data logger in the monitoring system and or internal logbook.) at the project site verified to confirm that there is no error exists in the monitored and transferred data impacting ER Calculations.

			recording erroneous values. Organization has data verification and validation system and hence the risk is considered LOW.	
2.	Human error in providing incorrect calculation formulae in calculation spreadsheet	LOW	The Calculation is done using the SCADA System and formulae is validated hence no manual interventions are seen while calculating emission reductions in Spreadsheets. The Risk of error in Calculating ER in Spreadsheet is considered LOW.	Conducting calculation formulae check at stage of document review prior to onsite inspection covering these calculations • Baseline Emission • Project Emission • Total Emission Reduction
3.	Error due to delay of calibration on monitoring equipment	Medium	This is the 1st Verification of the project and hence there could be issues regarding stabilization of monitoring system, calibration of monitoring equipment's, verification team stillforesee possibility that some monitoring equipment may have initial problems and integration issues that leading to error of monitoring parameters. The risk identified as Medium	Conduct cross-checking with latest certification of calibration against calibration plan defined in registered PDD and monitoring plan for all monitoring equipment's. 100% Sampling is possible and hence no risk.
4.	Risk related to error in data logger or malfunctioning As well as failure / malfunctioning of the Monitoring equipment's which went unnoticed.	HIGH	Highly automated system may pose a risk of loss of data, malfunctioning of data loggers, failure of Monitoring equipment's,and risk of complacency / dependence on the automated system	Conduct cross-checking all monitoring data submitted to verification against real automatic data logger and its supporting system at the site. This is included physical inspection of data collection system to ensure monitoring data are securely stored by these following component at the site. • Related meters (e.g., Electricity meter, flow/temp/pressure transmitter) that send monitoring data automatically to data logger & SCADA System • Data logger running on intranet based data collection system or SCADA system • Computer that operator filled in daily/weekly record • Uninterrupted Power Supporting equipment (UPS)

C.2. Consideration of materiality in conducting the verification

As per the "para 326 of VVS version 03.0**/Ref-B10/** , the project activity is a large-scale CDM project activity achieving total emission reduction or removal less than 300,000 tons of carbon dioxide, as such a 2.0 percent materiality threshold is applied.

The verification team began by assessing the nature, scope, and complexity of the project activity through a strategic analysis of all relevant activities. The verification of pertinent data and the monitoring mechanism, both of which are critical in terms of materiality, were conducted using a risk-based approach.

To verify the accuracy and correctness of monitored data, verification team has utilized sampling approach. The sample size for the verification of monitored data was determined as per the International Accreditation Forum (IAF): Guidance on the Application of ISO/IEC Guide 62:1996: 'General Requirements for Bodies Operating Assessment and Certification/registration of Quality Systems'**/Ref- B16/**. In line with the mentioned IAF guidance, the sample size from the verification body should be square root of the total monitored Data Points /sample size. Based on this approach verification team has made a sample plan and utilized the same during verification site visit to cross check the Electricity generation and export reports, Invoices etc. which are the input to the calculation Baseline emission, Leakage emissions, project emissions and Emission reductions.

Following Data set was verified using systematic sampling method to avoid any materiality threat while verifying data. A simple random sampling approach is used for selecting the data set for verification.

SECTION D. Means of verification

D.1. Desk/document review

The overall verification, from Contract Review to Verification Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.

In order to ensure transparency, a verification report was customized for the project, according to the Version 1.2 of the GS4GG Principles and requirements issued by the Gold Standard as well as version 03.0 of the Clean Development Mechanism Validation and Verification Standard for project activities, issued by CDM Executive Board after its 111th meeting on 9th September 2021 **/Ref-B10/**. The Verification Report shows, in a transparent manner, criteria (requirements), means of verification and the results from verifying theidentified criteria. The verification report serves the following purposes:

- It organizes, details and clarifies the requirements of the Gold Standard project is expected to meet;
- It ensures a transparent verification process where the verifier will document how a particular requirement has been verified and the result of the verification.

The assessment of the project documentation provided by the project participant is based upon both quantitative and qualitative information on emission reductions. Quantitative information comprises the reported numbers in the monitoring report (MR) version 01 dated 06/01/2023 **/Ref-P5/, /**, version 2.1 dated 21/01/2024 **/Ref-P44/** and emission reduction calculation spreadsheet version 02 dated 06/01/2023 **/Ref-P6/.** Qualitative information comprises information on internal management controls, calculation procedures, and procedures for transfer of data, frequency of emissions reports, and review and internal audit of calculations. In addition to the monitoring documentation provided by the project participants, the VVB reviews:

(a) The registered PDD and the monitoring plan, including any approved revised monitoring plan and/or changes from the registered PDD, and the corresponding validation opinion **/Ref-P1&P2&P43/**;

(b) The validation report **/Ref-P42/**

(c) Stakeholder Consultation /**Ref-P3**/;

(d) SDG Impact Assessment (Tool) /**Ref-P7/**

(e) The applied monitoring methodology **/Ref-B8/**;

(f) Relevant decisions, rules , clarifications and guidance from the Gold Standard, CMP and the CDM Executive Board ;

(g) Other information and references relevant to the project activity's resulting emission reductions (e.g. IPCC reports, laboratory analysis or national regulations).

D.2. On-site inspection

Duration of on-site inspection: 09/01/2023 to 12/01/2023				
No.	**Activity performed on-site**	**Site location**	**Date**	**Team member**
1.	**Management Interview:** - Project Design and implementation. - Technical Equipment and operation - Compliance with National Laws and regulations. - Early consideration - Additionality - Local stakeholder consultation and resolution of their concerns - Supporting data, evidence and documentation - Environmental Impacts - Monitoring System at site	Chu Don and Ia Phan communes, Chu Puh district, GiaLai province, Vietnam	10/01/2023	Ram M. Desai
2.	**Site Visit:** - Project Site Round – Plant Room, Substations, Transformer yard, Wind panel field. Etc.		11/01/2023	Ram M. Desai
3.	**Document Review:** - Pre-project documents like FSR, various Approvals, Environmental Assessment Study documents, etc; - Financial Additionality documents. - Prior consideration. - PLF study report. - Implementation - QA/QC procedures - Qualification & Training - Monitoring records - Cross-check data - ER calculations		11/01/2023	Ram M. Desai
4.	**Close Meetings** - Summary of Findings - Follow up actions		12/01/2023	Ram M. Desai

D.3. Interviews

No.	Interviewee		Date	Subject	Team member
	Name of Stakeholder	**Affiliation**			
1.	Mr. Hiep	local government	10 – 11/01/2023	LSC Process / Concerns / Feedback etc.	Ram M. Desai
2.	Ms. Nhat	Fatherland Committee (Vice President)			
3.	Mr. Hung	Farmers Union (President)			
4.	Mr. Hau (Kinh)	Common Stakeholder			
5.	Mr. Thuong (Gia Rai)	Common Stakeholder			
6.	Mr. Siu Bac (J'Rai people of Chu Don,)	Common Stakeholder			
7.	Mr. Hoang	People Committee of Ia Pham			
8.	Mr. Siu Giap	village head of Plei Thoh Nhueng			
9.	Mr. Ha	President of Chu Don PCC and			
10.	Mr. Minh Bi Thu Dang	Party Secretary			
11.	Mr. Vu Thi Phuong	Nhon Hoa 2 Wind Power Project	11/01/2023	Project Implementation and Technical Requirement	Ram M. Desai
12.	Mr. Angus McEwin	Monsoon Sustainability Co. Ltd.			
13.	Mr. James Bairstaw	Monsoon Sustainability Co. Ltd.			
14.	Ms. Thanh Nhat Ho	Monsoon Sustainability Co. Ltd.			

D.4. Sampling approach

There was no sampling used during current verification period.

D.5. Clarification requests (CLs), corrective action requests (CARs) and forward action requests (FARs) raised

Areas of verification findings	No. of CL	No. of CAR	No. of FAR
Compliance of the monitoring report with the monitoring report form	0	0	0
Compliance of the project implementation and operation with the registered PDD	0	0	0
Post-registration changes	0	0	0
Compliance of the registered monitoring plan with the methodologies including applicable tools and standardized baselines	0	0	0
Compliance of monitoring activities with the registered monitoring plan	0	0	0
Compliance with the calibration frequency requirements for measuring instruments	0	0	0
Assessment of data and calculation of emission reductions or net removals	0	2	0
Assessment of reported sustainable development co-benefits	0	0	0
Global stakeholder consultation	0	0	0
Others (please specify)	0	0	0
Total	0	2	0

SECTION E. Verification findings

E.1. Compliance of the monitoring report with the monitoring report form

Means of verification	Verification team conducted an offsite document review of PP submitted Document i.e. Monitoring report and ER Spreadsheet, prior to the site visit. The objective of the Document review is to verify that the Monitoring Report prepared is in accordance with the latest Gold Standard as well as UNFCCC guideline for completion of Monitoring report and the information provided in the Monitoring report is consistent. PP used Monitoring report form version 1.1 Dtd, 14/10/2020 which is available on the Gold Standard Website.
Findings	During Verification for monitoring period #1it was confirmed that monitoring report and its later revisions submitted by PP are in compliance with the latest available of monitoring report form published on the Gold Standard website. In addition, details provided in the Monitoring Report are found in accordance with the Instructions for filling out the monitoring report form.
Conclusion	Based on the above Means of validation it confirmed that - PP has most recent monitoring report template from the Gold Standard website - Completion of Monitoring Report is in accordance with the Guidance to complete the Monitoring Form. This complies with the requirement of para 352 – 353 of CDM validation and verification standard for project activities, Version 03.0 (CDM-EB111-A02).

E.2. Remaining forward action requests from validation and/or previous verifications

There were 08 FARs raised during Preliminary Review process and out of them FAR#02 is applicable for this verification. The due diligence on the reported FAR is done during onsite Validation and Verification Visit and the outcome is recorded in the Validation Report **/Ref-P41/** Section Appendix 6.

E.3. Compliance of the project implementation and operation with the registered project design document

Means of verification	The purpose of the project activity is to generate electricity based on renewable and clean energy source i.e. by utilizing the Wind power potential available in the Gia Lai Province of Vietnam and to supply the same to meet the energy demand in host country Vietnam. The technology involved in the project is Wing Turbine Generator (WTG) turns wind energy into electricity using the aerodynamic force from the rotor blades directly into electricity. The project design includes installation of totally 12 wind turbine generators (WTG's) (with

10 Turbines of 4.2 MW and 2 turbines of 4.0 MW capacity). The detailed technical specification of WTG's is defined in the following table

Parameters	Value		Units
Turbines model	V150	V150	–
Rated power output	4.2	4.0	MW
Number of WTGs	10	02	–
Rotor			
Rotor Diameter	150		m
Swept area	17,671		m^2
Rotational direction	Clockwise (front view)		–
Hub Height	120.9		m

The project activity is expected to result in a reduction in the anthropogenic emissions of greenhouse gases (GHG's) into the atmosphere, which is estimated to be approximately 135,655 tCO_{2e} per year, by displacing the equivalent amount of electricity generation through the operation of fossil fuels-based power plants in grid.

Nhon Hoa 2 Wind Power Project is validated as a greenfield grid-connected wind power plant project located in Chu Don and Ia Phan communes, Chu Puh district, Gia Lai province, Vietnam. Geo-coordinates of the installed Wind Turbine Generators (WTG's) are provided below and are confirmed during the site visit using GPS Map Camera Lite app from android mobile. Geocoordinates provided in the PDD section A.2 are found correct and real.

WTG No.	Latitude	Longitude
NH2 - T1	13˚33'23.96"N	108˚4'28.24"E
NH2 - T2	13˚33'14.02"N	108˚4'29.14"E
NH2 - T3	13˚33'7.35"N	108˚4'49.87"E
NH2 - T4	13˚32'56.64"N	108˚4'46.66"E
NH2 - T5	13˚32'37.35"N	108˚4'11.70"E
NH2 - T6	13˚31'56.72"N	108˚4'23.16"E
NH2 - T7	13˚32'32.57"N	108˚4'27.28"E
NH2 - T8	13˚31'52.53"N	108˚4'35.28"E
NH2 - T9	13˚31'44.46"N	108˚4'42.55"E
NH2 - T10	13˚31'32.50"N	108˚4'43.09"E
NH2 - T11	13˚33'6.07"N	108˚4'21.50"E
NH2 - T12	13˚32'59.30"N	108˚4'13.61"E

The project has a total installed capacity of 50 MW, with a predicted power generation of 164,834 MWh per annum.

The entire electricity generated by the wind power plant is fed into the Vietnam national grid without any Greenhouse Gas (GHG) emissions. The operational lifetime of the wind farm is 20 years. Currently the electricity supplied by the grid is relatively carbon intensive, with a combined margin emission factor of 0.8230 tCO_2/MWh. The electricity generation through this project will be resulted in the emission reductions on account of electricity generation by 135,655 tCO_{2e}/year and total emission reduction for the 1st crediting period of 5 years will be 678,273 tCO_{2e}.

The validation team hereby confirms that the project description in latest **PDD /Ref-P2&P43/** is accurate and complete in all respects and that there are no major changes to the project activity/design or boundary as compared to the webhosted PDD. Project has been put into operation and the electricity generated is supplied to Vietnam electricity Grid according to the signed Power Purchase Agreement (PPA) **/Ref-P13/** on 14th October 2021. 12 units of wind turbines with an installed capacity of 50 MW and capable of delivering approximately 164,834 MWh per annum. This was confirmed using SCADA generation logs, invoices to EVN and operational Data verified during site visit. **/Ref-P20/, /Ref-P21/, /Ref-P22/.**

[Power System]
Using a 220 kV line, the electricity generated by the project is delivered to a grid substation, where it is then delivered to EVN Grid, as shown in the single line diagram **/Ref-P15/.**

During verification site visit it was note that a combined substation for Nhon Hoa 2 and Nhon Hoa 2 Wind Power project is established, and which is in accordance with Connection agreement PP has signed with the electricity authority. It is understood that the first energy export to the grid by Nhon Hoa 2 Wind project was on 14/10/2021, during this 7 wind turbines were connected to the grid and subsequently remaining six turbines were also connected on 22nd October 2021 **/Ref-P14/.**

PP has provided main meter and back up meters for monitoring energy generation and energy export to the grid, this is confirmed against the Approved Single line diagram and found satisfactory. In order to operate, control and monitor wind turbines PP has installed SCADA system, which is provided by VESTAS. System monitors turbine operations and active power generation and export to grid.

Based on the power generated since COD it is noted that seasonal variation is predominantly affecting energy generation and it is confirmed that during summer season, wind speed is five meter per second and during winter season ten meter per second. With this seasonal variation it is confirmed that power generated during summer season is 10 – 20% of total capacity and 50 – 90% of capacity during winter season.

Active power generation graphs are maintained in the SCADA System provides instantaneous monitoring of the power generated by each individual wind turbine it is also observed that measure measurement scheduler has been installed which provides power factor at 30 minutes interval and set points for each wind turbine has been established to ensure safe operation off turbines

Electricity generation data monitored in SCADA system for the first monitoring period i.e. from the COD date was verified through monthly meter reading i.e. joint meter reading with EVN and import and export electricity production minutes.

Total MWh generated as per meter is multiplied by 0.99956 to arrive at the final export quantity of electricity, which is as per the PPA agreement **/Ref-P13**/, and this is reflected in monthly meter reading excel sheet

[Metering System]
Main Meters and Back up meters are installed for the Project to monitor the electricity generated, exported to the grid, and imported from the grid. According to the Monitoring Diagram in Section C.3 of the Monitoring Report **/Ref-P15/**,

[Management and Operation]
The PP has carried out the project operations in accordance with the approved revised PDD. The monitoring organization has been established, and all monitoring personnel have been trained. The information provided in Monitoring Report Section C.3 was thoroughly verified, and it was discovered that those involved in the monitoring and measurement of project activity have received adequate training and are aware of their roles, responsibilities, and reporting requirements. PP has created specific reporting formats to report individua parameters against each role.

PP has established two types of monitoring arrangements: manual data monitoring and electronic data monitoring. The parameters monitored by these types of arrangements are listed in the table below.

Type of Monitoring Arrangement	Parameters Monitored	Remark
Manual Monitoring	- Calibration Requirements - Emission Reduction Spread sheet (based on the Manual and Electronic Monitoring Data) - Electricity Invoice data - Maintenance and Breakdown data - Change Control Process	- PP has maintained suitable records to demonstrate compliance towards established Monitoring plan. - Verified these records and foundmaintained satisfactorily.
Electronic Monitoring	- Electricity Consumption and Generation by the Wind Power Plant - Electricity Export to Grid - Electricity Import from Grid - Electricity Cross over between	- PP has installed electronic monitoringdevices at relevant locations. During onsite verification key monitoring locations were verified and the data monitoring is verified using SCADA control system to operate renewable energy plant. - Instrumentation provided to monitor these parameters is found correct andas per the revised PDD. There is no deviation noted during Verification. - PP has also installed an instantaneous data logging system for key parameters to avoid manual errors. Continuously measured and monitored data is stored SCADA system database. Data logging frequency is also found satisfactory.

The meter reading records for all meters are based on data collected by the PP on a continuous basis and on a monthly basis. Every month, PP submits invoices to EVN based on the Joint meter readings as well as monthly import and export electricity production minutes to confirm the amount of electricity exported to and imported from the grid.
Based on above verification it is concluded that the management and operation system is effective and there are no material errors observed except one issue of Back up level 2- meter readings are not tallying with level 1 meter for December 2022 which was reported as CAR # 01.

Findings	CAR #1
Conclusion	Corresponding to the paragraph 354 of VVS for PA version 3.0, Bureau Veritas confirms that: The implementation of the Project is consistent with the registered PDD. The Project is operated as per the registered PDD by the PP. Information (data and variables) provided in the monitoring report that is NOT different from that stated in the registered PDD.

E.4. Post-registration changes

E.4.1. Temporary deviations from the registered monitoring plan, applied methodologies, standardized baselines or other methodological regulatory documents[1]

Not Applicable

E.4.2. Corrections

Not Applicable

[1] Other standards, methodologies, methodological tools and guidelines (to be) applied in accordance with the applied (selected) methodologies are collectively referred to as the other (applied) methodological regulatory documents).

E.4.3. Changes to the start date of the crediting period

Yes, as per preliminary design review document it was noted that PP had identified 01/11/2021 as the start date of crediting period, however this is found changed to 14/10/2021. This change was verified using legal document i.e. COD **/Ref-P13/** certificate where electricity authority of host country issues certificate and confirms that the project is now ready to be connected to the grid and start exporting electricity to the grid as connection agreement.

However, the Project Design Certification date is on 29/11/2023 and the maximum period for Retroactive Certification is two years prior to the date of Project Design Certification (i.e., Principles and Requirements, version 1.2, paragraph 5.1.37). Therefore, it is understood that the Project start date of the Crediting Period should be 30/11/2021 as per the requirements.

Thus, the change in the crediting period is found to be transparently described by PP in the monitoring report section B.2.3 and revised PDD validated by the VVB.

E.4.4. Inclusion of a monitoring plan

Not Applicable

E.4.5. Permanent changes from registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines or other methodological regulatory documents

Not Applicable

E.4.6. Changes to the project design

Not Applicable

E.4.7. Changes specific to afforestation and reforestation project activities

Not Applicable

E.5. Compliance of the registered monitoring plan with applied methodologies, applied standardized baselines, and other applied methodological regulatory documents

Means of verification	The verification team verified the monitoring plan, including the data and parameters to be monitored, the measurement procedures, the monitoring frequency, and the quality control/quality assurance procedures, as described in the revised PDD. The Monitoring Plan presented in the Monitoring Report adheres to the Approved Consolidated Methodology, namely ACM 0002, Version 21.0 as well as relevant parameters which are identified to demonstrate the projects contribution towards sustainable development goals (SDG). All relevant parameters are satisfactorily identified and monitored.
Findings	No Issues identified
Conclusion	Corresponding to the paragraph 357 - 359 of CDM validation and verification standard for project activities, Version 03.0 (CDM-EB111-A02), Bureau Veritas Certification can confirm that the monitoring plan is in accordance with the approved methodology including applicable tool(s) applied by the Project.

E.6. Compliance of monitoring activities with the registered monitoring plan

E.6.1. Data and parameters fixed ex ante

Means of verification	PP has established and described the monitoring plan in the PDD section B.7.1. From the assessment of the monitoring plan, it is concluded that PP has identified all those relevant parameters which are required by the Applied large-scale methodology to develop the project activity i.e. ACM 0002 Version 21.0 as well as relevant SDG indicators prescribed

by the Gold Standard in GS4GG Principle and Requirements. PP has selected following SDG indicators for the monitoring

- 4 – As per the requirement of this SDG indicator it is expected that project shall improve / increase the number of personnel having relevant skills required for the operation and maintenance of the Wind Turbines, SCADA System and other high risk maintenance activities associated with the project.
  PP continuously arrange training programs for direct Employee and contractors so that their skills are upgraded in the field of Project monitoring, Operations, Controls, HSE etc. during this monitoring period it is observed that 15 such employees and contracts are trained for improving their skills. Adequate training arrangements were demonstrated by PP, and it is confirmed that relevant records of training are maintained.
- 7.2.1 – Renewable energy share in the total final energy consumption – Project contributes to the increased renewable energy share in host country electric grid. This is found in accordance with national power Development Plan VII of host country Vietnam under document No. 7795/TTg-DN.
- 8.5 – Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all – Project provides employment opportunities in operation phase of the project, and this will be monitored throughout the crediting period.
- 13– Take urgent action to combat climate change and its impacts – under thisSDG goal PP has selected indicator 13.2 Integrate climate change measures into national policies, strategies and planning for monitoring sustainable contribution by the proposed project in terms of reduction in Baseline emissions due to the implementation of renewable energy power plants in country, this is in accordancewith host country objectives.

According to the methodology, and GS4GG, the relevant monitoring parameters for this project activity are

$EGP_{j,grid,Y}$: Quantity of net electricity generation supplied by the project plant to the grid in the monitoring period (this parameter as per the methodology has to be monitored according to the "EB 96 Annex 5 Baseline, project and/or leakage emissions from electricity consumption and monitoring of electricity generation" v3)

This parameter is also helps in monitoring the contribution towards SDG 7.2.1 i.e. renewable energy share in the total final energy consumption – Since the Electricitygenerated and exported to grid is equal to the **$EGP_{j,grid,Y}$**.
The validation team confirms that the above parameter, required by ACM 0002, is included by the project participant in the monitoring plan of the PDD at section B.7.1 therein
The monitoring plan has stated that measurement of **$EGP_{j,grid,Y}$** will be done by bi- directional energy meters installed at the sub-station located at the project site. Bi- directional energy meters monitors both electricity supplied to and drawn from the grid and the energy meters record value of net electricity export by the project activity (i.e. export minus import from grid). The measurement is on a continuous basis and is recorded every month. The energy meter readings are further crosschecked with the EVN Sub Station Meters and then the monthly bill is raised.
The export Electricity meters will undergo calibration according to procedures that follow industry standard practice;

Under SDG 4.1 – Quality Education – Substantially increase the number of youth and adults who have relevant skills for employment (Number of people)
To demonstrate how the project activity helps in contributing sustainability in terms of providing Quality education which helps in increasing the number of adults and youth with improved skills necessary for the employment purpose.

PP has selected measure of number of people receiving relevant skill-based trainings during ongoing operations and maintenance. This shall be monitored using training records.

Under SDG 8.5 – Total number of employment opportunities generated by the project activity –
To demonstrate how the project activity helps in contributing sustainability in terms of To demonstrate contribution to SDG8- 8.5 "By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value'. PP has selected number of employment opportunities generated by the project throughout crediting period as the monitoring

parameter and monitors the Gender wise employment opportunities (i.e. employee recruited Male & Female) provided during project operation phase. The arrangement for the monitoring found satisfactory. This also provides opportunity of employment for the local people residing in the province and neighboring area of Nhon Hoa 2 Wind Power Project Plant.

Under SDG 13.2.2 – GHG Emission reduction per year

The purpose of this parameter is to monitor "Climate Action – PP shall be monitoring the GHG Emission reduction per year by means of net electricity supplied by project to grid is multiplied by the grid emission factor published (CV263/BDKH) by Department of Climate Change – Ministry of Natural Resources and Environment. The Monitoring requirement is found clearly defined in the PDD Section B.6.2. This is found in accordance with the Approved Methodology ACM0002, Version 21.0 applied by the PP for development of this proposed greenfield wind energy project.

Under SDG 7.2.1- Renewable energy share in total final energy consumption (MWh of Electricity generation)

PP has established suitable method to monitor and record the outcome against this indicator. Electricity produced and supplied to Grid shall be monitored using bidirectional meters and SCADA System. Net Electricity exported by project shall be monitored on monthly basis The monitoring plan described in the PDD meets the monitoring requirements of the Gold Standard GS4GG Principles and Requirements as well as ACM 0002 methodology Version 21.0 along with the tools referred to by the methodology.

Apart from the Monitoring parameters to be monitored Ex-post, there are few parameters which PP has fixed Ex-ante and these parameters are defined in the PDD section B.6.3. PP has identified following parameters which are fixed Ex-ante and does not need monitoring.

- **$EF_{grid,OM,y}$** - Operating Margin CO_2 emission factor for the electricity system in year y – PP has applied value 0.9239 tCO_2/MWh, this value is obtained from the Published Report on Grid Emission Factor for Vietnam Grid and the report is published by the DNA of Vietnam i.e. The Ministry of Natural Resource and Environment (MONRE), by using the latest data available for the past three recent years 2019, 2020 and 2021. The historical data on electricity generation in the Vietnam Grid is sourced from "National electricity system regulation center". Based on the assessment of the published report by MONRE it is confirmed that the Calculation of the Operating Margin emission Factor is correct, please refer to the Section D.4.6 above in this report for the validation of Grid Emission Factor. The Calculation presented in the MONRE report is in accordance with the "Tool to calculate the emission factor for an electricity system, version 07.

- **$EF_{grid,BM,y}$** - Build Margin CO_2 emission factor for the electricity system in year y – PP has applied value 0.5202 tCO_2/MWh, this value is obtained from the Published Report on Grid Emission Factor for Vietnam Grid and the report is published by the DNA of Vietnam i.e. The Ministry of Natural Resource and Environment (MONRE),by using the latest data available for the past year 2021. The historical data on electricity generation in the Vietnam Grid is sourced from "National electricity system regulation center". Based on the assessment of the published report by MONRE it is confirmed that the Calculation of the Build Margin emission Factor is correct, please refer to the Section D.4.6 above in this report for the validation of Grid Emission Factor. The Calculation presented in the MONRE report is in accordance with the "Tool to calculate the emission factor for an electricity system, version 07.
- **$EF_{grid,CM,y}$** - Combined Margin CO_2 emission factor for the electricity system in year y – PP has applied value 0.8230 tCO_2/MWh, this value is obtained from the Published Report on Grid Emission Factor for Vietnam Grid and the report is published by the DNA of Vietnam i.e. The Ministry of Natural Resource and Environment (MONRE), by using the latest data available for the past year 2021. The historical data on electricity generation in the Vietnam Grid is sourced from "National electricity system regulation center". Based on the assessment of the published report by MONRE it is confirmed that the Calculation of the Combined Margin emission Factor is correct, please refer to the Section D.4.6 above in this report for the validation of Grid Emission Factor. The Calculation presented in the MONRE report is in accordance with the "Tool to calculate the emission factor for an electricity system, version 07.

Ex ante determination of SDG Impacts:

As per the Gold standard requirement it is must that every project uses latest version of

SDG Impact Tool for assessing the quantified impacts of the selected SDG goals by the project activity. VVB validator reviewed the submitted SDG Impact tool by the PP and concluded that the correct tool is applied, and the impact assessment is done correctly to determine following quantified impacts against selected SDG goals. Quantification is found real and relevant supporting evidence are provided to justify the claims

SDG	SDG Impact	Values estimated in ex-ante calculation of SDG Impact tool	Achievement During the Selected monitoring Period
SDG 4	Quality Education – Substantially increase the number of youth and adults who have relevant skills for employment (Number of people)	14	14
SDG 7	Affordable and Clean Energy – Net amount of electricity generated and supplied to grid (MWh)	164,834 per annum	207,902 i.e. equivalent to 178,977 per annum
SDG 8	Decent work and Economic Growth – Number of jobs created	27	27
SDG 13	Climate Action – Emission Reductions (tCO2e)	135,655 per annum	Total emission reductions - 171,098 tCO2e i.e. equivalent to 147,294 tCO2e per annum

PP has established a comprehensive Management structure for executing established monitoring plan and it is explained in the section B.7.3.3 to B.7.3.6 of PDD. These sections provide enough guidance on following topics
Management Structure and Roles and responsibility of Operational and maintenance team.

- Monitoring Equipment and Installation – This is explained using a single-line diagram that has been approved by the EVN. In this diagram, key monitoring equipment and the installation locations of that equipment are defined for the purposes of clarity and increasing the monitoring effectiveness. The documents for the Power Purchase Agreement and the Connection Agreement have been reviewed, and it has been determined that this is in compliance with both of those agreements.

- Data recording, collection, and reporting – This section, which is in line with the implementation of the project, explains the details regarding the frequency of monitoring, the type of records, the recording arrangement, as well as backup and archival procedures.

- Emergency procedures for monitoring system – This section explains how the project will follow alternative mechanisms for monitoring electricity export without causing any disruption to the monitoring regime in the event that the main metres installed for monitoring energy export to the grid fail to function properly. This arrangement is also in accordance with the Power Purchase Agreement and Connection Agreement that PP signed with EVN.

Monitoring Parameters from assessment of Safeguarding Principle:

Following the completion of an investigation into the safeguarding principles that are pertinent to the GS project by PD, it has been determined, that there is only one parameter that is applicable and that it must be included in the monitoring plan.

PP has also explained the monitoring arrangement for the applicable Safeguarding principles. There is only one Safeguarding principle identified which needs to be monitored and monitoring arrangements are explained in the PDD section B.7.1.

Monitoring Parameter against Safeguarding Principle	Assessment of Monitoring arrangements
Principle 9.5 Hazardous and Non-hazardous Waste	PD has established and implemented compliant Onsite hazardous and non-hazardous waste management (collection & disposal mechanism) process to avoid any pollution impacts due to the waste generated from project activity. This waste management system shall be monitored on regular basis for its effectiveness during operation phase. This includes segregation of waste, storage in appropriate bins and disposal through authorized waste handlers This was demonstrated during Onsite Visit to the plant area and hence found

	Safeguarding Principle 3.0 - Community Health, Safety and Working Conditions: satisfactory in level of implementation. PP has established - Waste collection contracts and manifests to demonstrate quantity of waste disposed in controlled manner - Environmental performance reports by 3rd party in accordance with local legal requirements i.e. Law on Environmental Protection 72/2020/QH14; Decree No. 08/2022/ND-CP; Circular No. 02/2022/TT-BTNMT - PP has established and implemented compliant HSE Management System to ensure that Project complies with the local legal requirement from HSE performance point of view. - The system also includes provision of regular HSE Trainings to staff and contractors, providing PPE and ensure that safe work conditions are maintained all the time. - Occupational health and safety plan is found established and followed on continual basis. - Verified relevant HSE Training records during monitoring period. - Provision of Safety performance report by O&M Contractor as one of the key requirement from contractual point of view. With is assessment it is concluded that Safeguarding principal identification and assessment is appropriate and in accordance with the project implementation. VVB Validator herewith confirm that PP's assessment on Safeguarding principle is correct and hence acceptable, thus FAR#3 is reviewed and closed.
Findings	No finding raised.
Conclusion	Corresponding to the paragraph 361 of VVS for PA version 3.0, Bureau Veritas Certification confirms that data and parameter fixed ex-ante has been correctly listed.

E.6.2. Data and parameters monitored

Means of verification

Verification Team verified Data and Parameters fixed ex-ante through following documents

- Monitoring Report
- Revised PDD submitted for validation
- Validation Report Available
- Approved Consolidated Methodology for the Large Scale projects ACM 0002, Version 21.0.

Based on the information provided in Revised PDD it was observed that PP has identified following data parameters fixed ex-ante :

Operational Parameter	Data Parameter as per monitoring plan	Frequency of Monitoring	Monitoring Arrangement	Accuracy Class and Calibration Frequency and status
Number of people (SDG4)	Capacity building – training provided by the project	Once per monitoring period	The total number of persons receiving technical training was calculated based on the training records or training plans of the project. PP has maintained List of Training provided and number of persons attended those trainings during monitoring period. Trainings provided are found relevant to the project operation, maintenance and Heath and Safety Verified following documents: - Training Plans - List of Training conducted and persons attended trainings.	-
$EG_{PJ,facility,I,y}$ (SDG 7)	Access to affordable and clean	Continuous	- PP has established Main Meter (231C) and Back up meters (231DP1), (332DP2) these meters are connected	- **Main Meter 232C** Accuracy class – 0.2s Sr. No.- 20015970 Cal Frequency – Once Year

		energy services		to SCADA system where the instantons reading is captured and aggregate quantity of the energy generation and export to grid is compiled to raise invoice to EVN at the end of each month after completion of joint meter readings by both parties . Invoices were reviewed in detailed to confirm the monthly energy generation and export to the grid and it is also confirmed that PD has transferred these values to the emission spreadsheet correctly and Emission reductions are calculated using this parameter - PP is monitoring Electricity import and electricity export through bidirectional meter and the net export is accounted for calculating emission reduction calculation. Monthly data is presented by the PP during Validation and verification visit and it is confirmed that during 1st monitoring period PP has accounted 214, 567 MWh of electricity export to the grid and this is confirmed using Minutes of monthly meeting with EVN, Invoices and Joint Meter reading records.	Last Calibration – 10/08/2023 (Valid till 31/08/2026) Cal Certificate # 23/CPC ETC-PXĐL - **Back Up Meter 232DP1** Accuracy class – 0.5s Sr. No.- 21000515 Cal Frequency – Once every 3 Years Last Calibration – 12/07/2021 (Valid till 31/07/2024) Cal Certificate # 21/0449/ĐL2.28 - **Back Up Meter 332DP2** Accuracy class – 0.5s Sr. No.- 21000549 Cal Frequency – Once every 3 Years Last Calibration – 12/07/2021 (Valid till 31/07/2024) Cal Certificate # 21/0449/ĐL2.33
	Number of employees (SDG 8)	Number of people employed directly due to the project activity	Continuous / Once during monitoring period	- This information is sourced from the employment records, which were transparently provided by the PP during onsite validation / verification event. - From records it is confirmed that PP has employed 27 direct employees during Operation phase. Payroll records confirmed as the official document to confirm this monitoring parameter and it is found correct. There is no deviation is noted in the monitoring of the parameter.	- Not Applicable.
	ERy tCO2e/year (SDG 13)	Annual emission reduction	Continuous / Once during monitoring period	The Quantification of emission reduction is based on the monitored values against monitoring parameter $EG_{PJ,facility,I,y}$ and ex ante parameter $EF_{grid,CM,y}$ using equation provided in the approved methodology applied by the PP i.e. ACM0002 Version 21.0. The Calculation approach presented in the monitoring report is found aligned to the methodological requirement, hence accepted. During this monitoring period PP has accounted 171,098 tCO_2e emission reductions and this is correctly explained in the ER spreadsheet **/Ref-P6/**	- Not Applicable

Monitoring of Safeguarding principles during project operation phase.
Based on the validated PDD and Monitoring report it is observed that PP has identified two safeguarding principles and included them in the monitoring plan and these principles are identified as below.
Safeguarding Principle 9.5 - Hazardous and non-hazardous waste
Safeguarding Principle 3 - Community Health, Safety and Working Conditions

Verifier reviewed monitoring arrangements against these parameters and verification conclusions are documented in tabular manner as below**.**

Operational Parameter	Data Parameter as per monitoring plan	Frequency of Monitoring	Monitoring Arrangement	Accuracy Class and Calibration Frequency and status
Safeguarding Principle 9.5	Hazardous and Non Hazardous Waste	Continuous / Once per monitoring period	- PP has established and implemented suitable waste collection and disposal system in order to comply with local legal requirements and during Onsite verification PP demonstrated the same effectively. - Waste collection and disposal system includes segregation and disposal through authorized waste handlers. The process found in accordance with - Law on Environmental Protection 72/2020/QH14; - Decree No. 08/2022/ND-CP - Circular No. 02/2022/TT-BTNMT - Also, it is observed that PP has engaged a 3rd party to prepare Environmental Performance report to submit to the local authority on periodic manner. - Verified Waste collection and disposal records maintained by PP at project site.	Not Applicable
Safeguarding Principle 3.0	Community Health, Safety and Working Conditions	Ongoing / Once per monitoring period	- PP has established and implemented compliant HSE Management System to ensure that Project complies with the local legal requirement from HSE performance point of view. - The system also includes provision of regular HSE Trainings to staff and contractors, providing PPE and ensure that safe work conditions are maintained all the time. - Occupational health and safety plan is found established and followed on continual basis. - Verified relevant HSE Training records during monitoring period. - Provision of Safety performance report by O&M Contractor as one of the key requirement from contractual point of view.	Not Applicable

Findings	No finding raised.
Conclusion	and hence Corresponding to the paragraph 360 – 364 CDM validation and verification standard for project activities, Version 03.0 (CDM-EB111-A02), Bureau Veritas Certification can confirm that: – The monitoring has been carried out in accordance with the monitoring plan containedin the approved revised PDD. – All parameters required by the monitoring plan have been sufficiently monitored and correctly listed. The monitored data for required parameters have been verified by checking the whole information flow.

E.6.3. Implementation of sampling plan

Means of verification	Not applicable.
Findings	Not applicable.
Conclusion	Not applicable.

E.7. Compliance with the calibration frequency requirements for measuring instruments

<table>
<tr><td>Means of verification</td><td>As confirmed above in the E.6.2 it is demonstrated that the monitoring meters installed by PP are calibrated and calibration details are found in accordance with the relevant regulation in the host country as well in accordance with Connection agreement and Power Purchase agreement signed by PP with EVN. The calibration details of main monitoring meters are provided as below,
<table>
<tr><th>Details of Monitoring meters</th><th>Verification Conclusion</th></tr>
<tr><td>- Main Meter 231C
Accuracy class – 0.2s
Sr. No.- 20015970
Cal Frequency – Once Year
Last Calibration –10/08/2023 (Valid till 31/08/2026)
Cal Certificate # 23/CPC ETC-PXĐL

- Back Up Meter 232DP1
Accuracy class – 0.5s
Sr. No.- 21000515
Cal Frequency – Once every 3 Years
Last Calibration – 12/07/2021 (Valid till 31/07/2024)
Cal Certificate # 21/0449/ĐL2.28

- Back Up Meter 332DP2
Accuracy class – 0.5s
Sr. No.- 21000549
Cal Frequency – Once every 3 Years
Last Calibration – 12/07/2021 (Valid till 31/07/2024)
Cal Certificate # 21/0449/ĐL2.33</td><td>- PP has maintained relevant documented information to support the calibration requirements and hence found complied.</td></tr>
</table></td></tr>
<tr><td>Findings</td><td>No finding raised.</td></tr>
<tr><td>Conclusion</td><td>Corresponding to the paragraph 365 – 371 CDM validation and verification standard for project activities, Version 03.0 (CDM-EB111-A02), Bureau Veritas Certification can confirm that:
The calibration is conducted at the frequency as specified by the methodology and the monitoring plan contained in the approved revised PDD.</td></tr>
</table>

E.8. Assessment of data and calculation of emission reductions or net removals

E.8.1. Calculation of baseline GHG emissions or baseline net GHG removals by sinks

Means of verification	Since the project activity involves electricity generation using wind technology i.e. installation of wind turbines. the project activity comes under the category of Renewable Energy generation Projects. As per ACM 0002, Version 21.0 the Baseline emissions are calculated by using Electricity delivered to the grid by the project would have otherwise been generated by

the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM). Hence the baseline emissions are the baseline emission factor times the net electricity supplied to the grid. Therefore,

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

Where:

BE_y = Baseline emissions in year *y* (tCO_2/yr)

$EG_{PJ,y}$ = Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year *y* (MWh/yr)

$EF_{grid,CM,y}$ = Combined margin CO_2 emission factor for grid connected power generation in year *y* calculated using the latest version of the "Tool to calculate the emission factor for an electricity system" (tCO_2/MWh)

Emission Reduction Spreadsheet **/Ref-07/** provides transparent calculation of $EG_{PJ,y.}$ PP has calculated Net Electricity Generation and dispatch to grid by all turbines during this monitoring period. This is the monitored parameter, PP has provided suitable metering arrangement and described in the Section C.3 of Monitoring report.

Month	Imported (MWhrs)	Exported (MWhrs)	NET MWhrs (Export-Import)
Dec-21	5.691	28,931	28,925
Jan-22	8.214	27,817	27,809
Feb-22	1.567	25,762	25,760
Mar-22	29.853	18,153	18,123
Apr-22	28.293	17,105	17,076
May-22	40.066	7,355	7,315
Jun-22	42.524	3,439	3,397
Jul-22	37.754	4,715	4,677
Aug-22	33.751	5,491	5,457
Sept-22	75.097	3,879	3,804
Oct-22	29.851	11,262	11,232
Nov-22	6.449	21,115	21,108
Dec-22	0.000	33,219	33,219
Total	**339.11**	**208,243**	**207,902**
2021	5.691	28,931	28,925
2022	333.419	179,311	178,977

Further BV verifier cross checked these values using Total invoice for Electricity export and import issued by the EVN for both vintages i.e. 2021 and 2022 and the quantity of electricity accounted during this Monitoring period and since the COD date i.e. 14/10/2021.
i.e. Electricity supplied to the grid during this monitoring period = 207,902 MWh

Hence Baseline emissions calculated by PP using above equation is:
BEy =207,902 x 0.8230
= 171,098 tCO2e

Findings	CAR-2: PDD and ER Spreadsheet showing wrong energy generation and Energy export values, As per the table presented in the monitoring report Section D.2 it was observed that Net Energy Export to Grid is mentioned as 214,567 Mwh during entire monitoring period instead of 207,902 MWh. Subsequently PP closed the CAR by rectifying the Monitoring

	report as well as ER Spreadsheet.
Conclusion	Corresponding to the paragraph 372 – 374 CDM validation and verification standard for project activities, Version 03.0 (CDM-EB111-A02), Bureau Veritas Certification can confirm that: - Data used for the determination of the emission reductions are available and monitoredin accordance with the monitoring plan contained in the approved/submitted revised PDD. - Information and data provided in the monitoring report have been cross-checked with other sources such as plant logbooks, inventories, purchase records, laboratory analysis. - Appropriate methods and formulae for calculating baseline emissions, project emissions and leakage have been followed. - Assumptions, emission factors and default values that were applied in the calculations have been justified.

E.8.2. Calculation of project GHG emissions or actual net anthropogenic GHG removals by sinks

Means of verification	The Project is a greenfield hydropower project, thus according to ACM0002Version 21.0, the project emissions is zero (7).
Findings	Not applicable.
Conclusion	Not applicable.

E.8.3. Calculation of leakage GHG emissions

Means of verification	No leakage emission needs to be considered according to ACM 0002 Version 21.0.
Findings	Not applicable.
Conclusion	Not applicable.

E.8.4. Summary calculation of GHG emission reductions or net anthropogenic GHG removals by sinks

Means of verification	By checking calculation excel spreadsheet and referring the applied methodology: Emission reductions The emission reductions during the monitoring period from 30/11/2021 to 31/12/2022 are calculated as: ERy = BEy – PEy – Ly Where, ERy : Emission reductions BEy : Baseline emissions PEy : Project emissions Ly : Emissions due to leakage = 171,098 – 0 – 0 = 171,098 tCO2e. The verification team has checked in the emission reduction calculation spreadsheet and found that the calculation and the result are correct .
Findings	No finding raised.
Conclusion	Corresponding to the paragraph 372, 373 and 374 of VVS for PA version 3.0, Bureau Veritas can confirm that: Data used for the determination of the emission reductions are available and monitored in accordance with the monitoring plan contained in the registered PDD. Information and data provided in the monitoring report have been cross – checked with other sources such as invoices, calibration records, written check-sheets and operation logs. Appropriate methods and formulae for calculating baseline emissions have been followed.

	Assumptions, emission factors and default values that were applied in the calculations have been justified.

E.8.5. Comparison of actual GHG emission reductions or net anthropogenic GHG removals by sinks with estimates in registered PDD

Means of verification

The Verification activity was performed along with the validation of the project which is acceptable by the Gold Standard. During validation VVB validated ex ante calculation of Baseline emissions and Emission reduction based on the feasibility report and methodological calculations and confirmed that on an average Project can generate maximum of 135,655 tCO_2e emission reductions during year i.e. 365 days of operations.

Based on this emission reduction achieved and presented during this 1st monitoring periodin the MR PP has accounted 171,098 tCO_2e emission reduction during 396 days. i.e. 31 days during year 2021 (30/11/2021 – 31/12/2021) and 365 days during 2022 (01/01/2022 – 31/12/2022).

While performing vintage wise comparison between estimated ER v/s Actual ER following formulae was applied
% Difference = {(Estimated ER in PDD x Total Days during This monitoring period / Total Days in a year) – Actual emission reduction calculated during this monitoring period} / Estimated ER in PDD

= {171,098 tCO_2e – 146,959 tCO2e } / 135,655 tCO_2e
= 0.1779
= 17.79%
That means Project achieved 17.79% higher emissions during vintage period 30/11/2021 – 31/12/2022 than the estimated emission reductions presented in the revised PDD.

This increase in the Emission reduction is attributed to the season as explained in the verification report. It is noted that from November – April month is the windy season and during this monitoring period out of 13 months 7 months is the windy season, which results in the high energy generation and it is demonstrated through EVN export invoices and hence it is found satisfactory and acceptable.

The Gold standard also requires presenting the calculation of net benefits or direct calculation for each SDG Impacts. According to this PP has provided the information in section E.4 of Monitoring report and this impact quantification was verified as follows

SDG Goal	SDG Impacts	Baseline Estimate	Project Estimate	Net Benefits	Verification Conclusion.
4	Quality Education – Substantially increase the number of youth and adults who have relevant skills for employment (Number of people)	0	14	14	As per the requirement of this SDG indicator it is expected that project shall improve / increase the number of personnel having relevant skills required for the operation and maintenance of the Wind Turbines, SCADA System and other high risk maintenance activities associated with the project. PP continuously arrange training programs for direct Employee and contractors so that their skills are upgraded in the field of Project monitoring, Operations, Controls, HSE etc. during this monitoring period it is observed that 14 such employees and contracts employees are trained for improving their skills. Adequate training arrangements were demonstrated by PP, and it is confirmed that relevant records of training are maintained i.e., Training Plan and Training records / List of Trainings provided during monitoring period. Based on the verification of training arrangements and records maintained

					by the PP it is concluded that the project contributes positively to this SDG indicator and hence acceptable.
	7	Affordable and Clean Energy – Net amount of electricity generated and supplied to grid (MWh)	0	178,571	207,902	As per the requirement of this SDG indicator it is expected that project shall deliver affordable clean energy and it is observed that project has generated 207,902 MWh of renewable energy during 1st monitoring period and hence it is confirmed that Project is contributing positively towards this SDG indicator. This confirms that project is contributing positively to this SDG indicator andhence acceptable.
	8	Decent workand Economic Growth – Number of jobs created	0	27	27	PP has established and implemented fair employment practices, which included nodiscrimination policy, equal opportunity to male and female, and provision of decentworkplace including Safety at work and work life balance etc. Further it is also demonstrated that Staff has been provided with an opportunity to develop their skills by arranging relevant skill-based trainings. Quantification towards this SDG indicatoris in terms of total employment opportunities created by PP during operation phase are 27. Based on the above assessment it is confirmed that Project is contributing positively towards this SDG indicator and hence acceptable
	13	Climate Action – Emission Reductions (tCO2e)	146,959	0	171,098	During this monitoring period it observed that PP achieved higher emission reductions that that of the estimated quantity presented in the revised PDD. Based on the prorate calculation Project achieved 17.79% higher emission reductions than the estimated emission reductions. This confirms that project is contributing positively to this SDG indicator and hence acceptable.
Findings	No finding raised.					
Conclusion	Corresponding to the paragraph 372, 373 and 374 of VVS for PA version 3.0, Bureau Veritas can confirm that: Assumptions, emission factors and default values that were applied in the calculations have been justified.					

E.8.6. Remarks on difference from estimated value in registered PDD

Means of verification	Actual GHG emissions are observed to be slightly higher as compared to PDD estimates during current verification period and hence it is found satisfactory. The 17.79% higher emission reductions are directly attributed to the Renewable energy generation during monitoring period 30/11/2021 – 31/12/2022 (Both days included) and it is observed that approximately 17.79% increase in the electricity generation is observed and hence the increase in Emission reductions are justified.
Findings	No finding raised.
Conclusion	Corresponding to the paragraph 372, 373 and 374 of VVS for PA version 3.0, Bureau Veritas confirms that the variation is due to higher PLF achieved during current monitoring period which could be due to annual operational hours. Verification team confirms that there are no changes to the project activity equipment since the commissioning of the project activity.

E.8.7. Actual GHG emission reductions or net anthropogenic GHG removals by sinks during the first commitment period and the period from 1 January 2013 onwards

Means of verification	Not Applicable
Findings	Not Applicable
Conclusion	Not Applicable

E.9. Assessment of reported sustainable development co-benefits

As explained in the Monitoring report section E.4 PP has identified three SDG indicators i.e. 7.2.1, 8.5 and 13.2.2 and the contribution to these identified indicators is assessed as below along with quantified impacts.

PP has utilized current version of the SDG Impact tool to demonstrate how the quantification of impacts against identified SDG indicators and it is found satisfactory.

SDG Goals	SDG Impact	Baseline estimate	Project estimate	Net benefit	Verification Conclusion
4	Quality Education – Substantially increase the number of youth and adults who have relevant skills for employment (Number of people)	0	14	14	As per the requirement of this SDG indicator it is expected that project shall improve / increase the number of personnel having relevant skills required for the operation and maintenance of the Wind Turbines, SCADA System and other high risk maintenance activities associated with the project. PP continuously arrange training programs for direct Employee and contractors so that their skills are upgraded in the field of Project monitoring, Operations, Controls, HSE etc. during this monitoring period it is observed that 14 such employees and contracts employees are trained for improving their skills. Adequate training arrangements were demonstrated by PP, and it is confirmed that relevant records of training are maintained i.e., Training Plan and Training records / List of Trainings provided during monitoring period. Based on the verification of training arrangements and records maintained by the PP it is concluded that the project contributes positively to this SDG indicator and hence acceptable.
7	Affordable and Clean Energy – Net amount of electricity generated and supplied to grid (MWh)	0	178,571	207,902	As per the requirement of this SDG indicator it is expected that project shall deliver affordable clean energy and it is observed that project has generated207,902 MWh of renewable energy during 1st monitoring period and hence it is confirmed that Project is contributing positively towards this SDG indicator. During this monitoring period it is observed that PP achieved higher electricity generation than that of the estimated quantity presented in the revised PDD. Based on the prorated calculation Project achieved 17.79 % higher electricity generation than the estimated energy generation. This confirms that project is contributing positively to this SDG indicator and hence acceptable.

Means of verification	**8**	Decent work and Economic Growth – Number of jobs created	0	27	27	PP has established and implemented fair employment practices, which included no discrimination policy, equal opportunity to male and female, and provision of decent workplace including Safety at work and work life balance etc. Further it is also demonstrated that Staff has been provided with an opportunity to develop their skills by arranging relevantskill-based trainings. Quantification towards this SDG indicatoris in terms of total employment opportunities created by PP during operation phase are 27. Based on the above assessment it is confirmed that Project is contributing positively towards this SDG indicator and hence acceptable.
	13	Climate Action – Emission Reductions (tCO2e)	146,959	0	171,098	During this monitoring period it observedthat PP achieved higher emissionreductions that that of the estimated quantity presented in the revised PDD. Based on the prorate calculation Project achieved 17.79% higher emission reductions than the estimated emission reductions. This confirms that project is contributing positively to this SDG indicator and hence acceptable.
Findings	NIL					

Conclusion	Based on the Local Stakeholder Consultation process conducted by the PP and the solicitation of stakeholder comments obtained during the Local stakeholder consultation process as presented in PDD section E.1, E.2 as well as Local Stakeholder consultation reports submitted by the PP, it is confirmed that the procedure adopted for the Local Stakeholder consultation is in accordance with following specific requirements. ✓ Gold Standard for the Global Goals Stakeholder Consultation & Engagement Procedure, Requirements & Guidelines, Version 1.2 ✓ Gold Standard For The Global Goals Programme Of Activities Requirements Version 1.2 – Published October 2019 ✓ Para 3.4.3 of Gold Standard For The Global Goals Principles & Requirements, Version 1.2 – Published October 2019 ✓ Approved CDM Large Scale Methodology ACM 0002, Version 21.0

E.10. Local stakeholder consultation

Means of verification

As per Principle 3 "Stakeholder Inclusivity" as stated in the Para 3.4.3 of Gold Standard for The Global Goals Principles & Requirements, Version 1.2 – Published October 2019, it is must that Projects shall identify and engage relevant stakeholders and seek expert stakeholder input where necessary in the design, planning and implementation of the Project. The Stakeholder consultation shall be conducted as per Gold Standard for the Global Goals Stakeholder Consultation & Engagement Procedure, Requirements & Guidelines, Version 2.1

Due to COVID 19 pandemic, Vietnam government has imposed lockdown during 2020 and 2021 and hence PP could not conduct physical stakeholder consultation.

When government lifted the lockdown PP ensured that 1st round of Local Stakeholder consultation process was conducted on site during March 2022 (i.e. 19th March 2022- Post Covid 19), PP has invited relevant Stakeholders through Email and other relevant means i.e. Individual invitation letter, Newspaper, Commune Notice Boards, Personal invitations. The evidences of these means adopted are provided transparently in the Stakeholder Consultation Report **/Ref-P4/**.

Feedback/ comments received during onsite stakeholder consultation are addressed and responses are found satisfactory, and this information is included in the PDD as well as in the update stakeholder consultation report (SCR). Entire process of stakeholder consultation found satisfactory and in line with the Stakeholder consultation and engagement procedure requirements and guidelines.

The stakeholder consultation was conducted in three separate meetings as described below

Date Of Stakeholder Consultation	Type of Stakeholder Engaged during the meeting
19/03/2022	Local community people, Government authorities, NGOs & GS

PP has prepared a simple Power point presentation in local language to brief stakeholder on the project as well as sustainability parameters affected due to the implementation of project. PP has also engaged experts in the consultation and these experts are from agencies i.e. Government and NGO's.

PP has shared the assessment of Safeguard principles during stakeholder consultation and preformed exercise on blind sustainability assessment with stakeholders. The outcome of the Blind assessment is provided in the separate report i.e. "Blind Sustainability Assessment Report", where the assessment results performed by each stakeholder are provided and it was observed that there is no negative assessment is done by the stakeholder, most of the parameters are assessed as "Does not Impact".

PP has received few generic comments from the Stakeholders and those comments are found responded satisfactorily, there is no pending comment for the response. It is also observed from the comments received from Stakeholder that no technical, technology related comments received as the Project technology is simple and proven green technology and does not have significant environmental and societal impacts. It is also

	observed that the Wind power project is not a new project in host country and the project design and implementation is in line with the Standard Engineering practices. PP has briefed all stakeholder during onsite (Physical) consultation that PP has established a mechanism for continuous input / grievance. Grievances / feed backs at any given point is welcomed through an Email and site-based register. Verified the grievance mechanism and found that PP has communicated to all Stakeholders through email and verbally and encouraged them to report any grievance they have on the implementation of the project. However, it is observed that so far there is no grievance found reported by any stakeholders. It is observed that PP has kept a Grievance register at the site office and this mechanism was found briefed to all stakeholders who attended the Stakeholder consultation. This book location is fixed, and it is shown to validator during onsite validation visit. Stakeholders who are intended to record their grievances in person shall use the Grievance Book kept at project site office and if any stakeholder willing to share their grievances through E-mail, then it is possible. Based on this it is concluded that PP has established adequate mechanism to record grievances in case any reported by the stakeholder. Stakeholder Feedback round was also conducted by, PD And project relevant documents were made available to stakeholders through means of email to provide relevant feedbacks during Stakeholder Feedback Round (SFR), the SFR was on 16/02/2022 till 15/04/2022 and during this period there was no feedback received. Also During Validation, personal interviews with sampled stakeholders arranged where same stake holders were invited who attended combined Stakeholder consultation and Feedback round. Validation team interacted with the Stakeholders to understand their feedback on stakeholder consultation, project implementation and relevant issues. Stakeholder provided positive opinion about the Project implementation as well as the 1st Stakeholder consultation thatPP conducted. Overall, the Feedback round was satisfactory, and no adverse feedback was noted. All Stakeholders are aware of the project implementation and benefits of the Project to the Environment. It was also understood that few local personnel have got employment during project construction as well as operational phase. PP is helping community by providing financial help to local people to build new house. While reviewing Preliminary Review Comments it was observed that FAR#04 was reported by GS related to the Stakeholder consultation process. Validation team took due account of this FAR and reviewed the SCR and found that project owner has conducted physical stakeholder consultation on 19/03/2022 after Vietnam government lifted the lockdown. Validator interviewed two expert stakeholders during validation i.e. Official of DONRE and Local Commune who are believed to be involved in approval of the Project. Based on the feedback obtained during interview it is observed that the project is in line with host country policy, and it contributes positively in achieving sustainability benefits. During Verification the verifier performed due diligence on the continuous grievance mechanism established and implemented by PP and observed that PP has received only one responses during the post-construction phase and has appropriately addressed and compensated local stakeholders. During interviews with stakeholders, it was confirmed and observed that all grievances are effectively addressed, and that there are no pending grievances that have been escalated to the level of major noncompliance and legal concern. Stakeholders are pleased and content with the compensation provided by the project owner as well as any reconstruction or corrections made by the owner. There were no inputs and grievances from the local stakeholders during the Project operational phase
Findings	Nil
Conclusion	Based on the Local Stakeholder Consultation process conducted by the PP and the solicitation of stakeholder comments obtained during the Local stakeholder consultation process as presented in PDD section E.1, E.2 as well as Local Stakeholder consultation reports submitted by the PP, it is confirmed that the procedure adopted for the Local Stakeholder consultation is in accordance with following specific requirements. ✓ Gold Standard for the Global Goals Stakeholder Consultation & Engagement Procedure, Requirements & Guidelines, Version 1.2 ✓ Gold Standard For The Global Goals Programme Of Activities Requirements

	Version 1.2 – Published October 2019 ✓ Para 3.4.3 of Gold Standard For The Global Goals Principles & Requirements, Version 1.2 – Published October 2019 ✓ Approved CDM Large Scale Methodology ACM 0002, Version 21.0

SECTION F. Internal quality control

The verification report underwent an Internal Technical Review (ITR) before requesting issuance of VERs for the project activity.

The ITR is an independent process performed to examine thoroughly that the process of verification has been carried out in conformance with the requirements of the verification scheme as well as internal Bureau Veritas procedures.

The Team Leader provides a copy of the verification report to the reviewer, including any necessary verification documentation. The reviewer reviews the submitted documentation for conformance with the verification scheme. This will be a comprehensive review of all documentation generated during the verification process.
When performing an Internal Technical Review, the reviewer ensures that:

- The verification activity has been performed by the team by exercising utmost diligence and complete adherence to the Gold Standard and applicable CDM rules and requirements.

- The review encompasses all aspects related to the project which includes project design, baseline, additionality, monitoring plans and emission reduction calculations, internal quality assurance systems of the project participant as well as the project activity, review of the stakeholder comments and responses, closure of CARs, CLs and FARs during the verification exercise, review of sample documents.

The reviewer may raise Clarification Requests to the verification team and discusses these matters with Team Leader.

After the agreement of the responses on the Clarification Requests from the verification team as well as the PP (s), the finalized verification report is accepted for further processing such as submitting to the Gold Standard for review and issuance.

SECTION G. Verification opinion

Bureau Veritas Certification has performed the 1st verification of Nhon Hoa 2 Wind Power Project, Gold Standard Project reference Number GS11414, which is located Chu Don and Ia Phang communes, Chu Puh district, Gia Lai province, Viet Nam, and applying the methodology ACM0002 Version 21.0. The verification was performed based on the requirements set by the Gold Standard Principles & requirements aswell as its guidance, rules and Activity requirement, CDM and relevant guidance provided by CMP and the CDM Executive Board.

The verification consisted of the following three phases: i) desk review of the project design, the baseline and monitoring plan; ii) follow-up interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final verification report and opinion.

The management of Monsoon Carbon and Nhon Hoa 2 Wind Electricity Joint Stock Company is responsible for the preparation of the GHG emissions data and the reported GHG emission reductions of the project on the basis set out within the monitoring plan contained in the PDD. The development andmaintenance of records and reporting procedures in accordance with that plan, including the calculation and determination of GHG emission reductions from the project, is the responsibility of the management of the project.

Bureau Veritas Certification has verified the project Monitoring Report version 2.0 dated 12/12/2023 for the reporting period as indicated below. Bureau Veritas Certification confirms that the project is implemented as described in the validated and registered project design documents. Installed equipment being essential for generating emission reductions run reliably and are calibrated appropriately. The monitoring system is in place and the Project is generating GHG emission reductions as a Gold Standard project.

Bureau Veritas Certification can confirm that the GHG emission reductions are calculated without material misstatements. Our opinion relates to the projects' GHG emissions and resulting GHG emission reductions reported and related to the validated and registered project baseline, approved monitoring plan and its associated documents.

Based on the evidence and information that are considered necessary to guarantee that GHG emission reductions are appropriately calculated, Bureau Veritas Certification confirms the following statement:

SECTION H. Certification statement

Based on the evidence and information that are considered necessary to guarantee that GHG emission reductions are appropriately calculated, Bureau Veritas Certification confirms the following statement:

Reporting period:	30/11/2021 to 31/12/2022	
Baseline emissions:	171,098	tCO_2 equivalents
Project emissions:	0	tCO_2 equivalents
Leakage emissions:	0	tCO_2 equivalents
Emission Reductions:	171,098	tCO_2 equivalents

Year (Monitoring period)	Baseline emissions (tCO_2e)	Project emissions (tCO_2e)	Leakage emissions (tCO_2e)	Emission Reductions (tCO_2e)
2021 (30/11/2021 – 31/12/2021)	23,804.00	0	0	23,804.00
2022 (01/01/2022 – 31/12/2022)	147,294.00	0	0	147,294.00

Abbreviations

Abbreviations	Full texts
BM	Build Margin
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reductions
CL	Clarification Request
CM	Combined Margin
CO2	Carbon Dioxide
DNA	Designated National Authority
EB	Executive Board
EF	Emission Factor
EVN	Electricity Vietnam
EQUIPMENT SUPPLY	Engineering Procurement and Construction
EIA	Environmental Impact Assessment
GHG	Green House Gases
GS	Gold Standard
GS4GG	Gold Standard For Global Goals
GW	Gigawatt
GWh	Gigawatt-hour
IPCC	Inter-Governmental Panel on Climate Change
IRR	Internal Rate of Return
kW	Kilowatt
kWh	Kilowatt-hour
VAT	Value Added Tax
MONRE	Ministry Of Natural Resource and Environment
MP	Monitoring Plan
MW	Megawatt
MWh	Megawatt-hour
NGO	Non-Governmental Organization
ODA	Official Development Assistance
O & M	Operation and Maintenance
OM	Operating Margin
PCP	Project Cycle Procedure
PDD	Project Design Document
PLF	Plant Load Factor
PP	Project Participant
PS	Project Standard
SDG	Sustainable Development Goals
tCO2	Tonnes of Carbon Dioxide
UNFCCC	United Nations Framework Convention on Climate Change
USD	United Stated Dollar
VVS	Validation and Verification Standard
VND	Vietnamese Dong
VVB	Validation and Verification Body
CIT	Corporate Income Tax
WTG	Wind Turbine Generator

Appendix 1. Competence of team members and technical reviewers

Mr. Ram Desai	Bureau Veritas Certification, Brunei	***Team Leader, Climate Change Lead Verifier,*** *Environmental Engineer with over all 13 years of experience in various industries related to Water & Waste water engineering design, installation & Commissioning, Integrated Facility Management for Environmental Services operations in various industries i.e Automotive, Pharmaceutical , IT & Electronics (With Clean Room).* *Management System Implementation and Maintenance, Green Building concept implementation, Lean Management Implementation, Water & Waste Water engineering Design & project Management, Project Environmental Compliance etc. for a construction company.* *He is the lead auditor for Environment management system, Quality management system and Occupational health and safety management system and his auditing experience spans for 3 year with BVCI & BVCS. He has undergone intensive training on Clean Development Mechanism and was trained as Lead Verifier for CDM in the year 2005 and working as a lead Verifier for* *validation and verification of CDM/VCS projects*
Mr. Hong Linh Nguyen	Bureau Veritas Vietnam	***Technical Reviewer, Climate change Lead Verifier****:* *He has graduated in Environmental Studies and had a Master Degree of Quality Management. He has undergone intensive training on Clean Development Mechanism. His working experience includes more than 7 years of auditing works in the field of Quality Management System and Environmental Management System. He has been involved in the validation / verification / technical review work of more than 30 GHG projects*

Appendix 2. Documents reviewed or referenced

No.	Author	Title	References to the document	Provider
Documents related directly to the GHG components of the project activity				
P1	PP	PDD Version 1.2 – 01/07/2022		Nhon Hoa 2 Wind Power Project
P2	PP	PDD Version 1.3 – 06/01/2023		Nhon Hoa 2 Wind Power Project
P3	PP	Stake Holder Consultation Report Version 2.0, Dated 06/08/2022		Nhon Hoa 2 Wind Power Project
P4	PP	Attendance Register for the Stake holder Consultation		Nhon Hoa 2 Wind Power Project
P5	PP	Monitoring Report Version1.0 Dtd. 06/01/2023 Monitoring Report Version 1.1 Dtd. 16/06/2023		Nhon Hoa 2 Wind Power Project
P6	PP	Emission Reduction calculation Spread sheet (NH2_ERV02 230601)		Nhon Hoa 2 Wind Power Project
P7	PP	SDG Impact Tool (NH2_V1.0_IQ_SDG-Impact Tool_230601)		Nhon Hoa 2 Wind Power Project
P8	GS	GS11414 11415_GS4GG Preliminary Review_R2_response_20220306		Nhon Hoa 2 Wind Power Project
P9	PP	Finalized FSR for Nhon Hoa 2 Wind project Dtd. 16/10/2020		Nhon Hoa 2 Wind Power Project
P10	Project Owner	O&M Contract signed between Project owner and GE Vietnam Limited Dtd. 19/10/2020		Nhon Hoa 2 Wind Power Project
P11	Chu Puh Communal Peoples Committee	Construction Permit Issued by Chu Puh Communal Peoples Committee Dtd. 2nd December 2020 Sr. No 1506/UBND-KT		Nhon Hoa 2 Wind Power Project
P12	EVNNPT	Connection Agreement - Connection Agreement - Verified through Grid connection agreement Dtd. 14th September 2020 No 3491/EVNNPT- TTDN		Nhon Hoa 2 Wind Power Project
P13	EVN	HD mua ban dien EVN (PPA) & its Appendices - Power Purchase Agreement with EVN (PPA # 12/2020/HD-NMDG-NHON HOA 2.GL Dtd. 15th December 2022)		Nhon Hoa 2 Wind Power Project
P14	EVNEPTC	1st COD – for six turbines WTG 02,03, 04, 05, 06, 09 – Dtd. 14th October 2021, Sr. 6151/EPTC-KDMD 2nd COD – for remaining 6 turbines WTG 01, 07, 08, 10, 11and 12 – Dtd. 22nd October 2021 Sr. No 6467/EPTC-KDMD.		Nhon Hoa 2 Wind Power Project
P15	EVN	Approved Single line diagram for the electricity Metering System		Nhon Hoa 2 Wind Power Project
P16	EVNEPTC	Calibration Records for the Meters - Calibration Report for the Electricity		Nhon Hoa 2 Wind

		Meters installed at Nhon Hoa 2 Wind Power Project– The Calibration is done by Electricity Trading Company (EVNEPTC).		Power Project
P17	MONRE	Grid EF_MONRE_29.03.2019 - Detailed Report on Emission Factor published by Ministry of Natural Resource and Environment for the Year 2018, Date of Publishing 12/03/2020		Nhon Hoa 2 Wind Power Project
P18	Department Environment	Approved Environment protection management plan for Nhon Hoa 2 Wind Power Project – January 2021		Nhon Hoa 2 Wind Power Project
P19	National Assembly Vietnam	EIA Regulation - Regulations on environmental protection planning, strategic Environmental assessment, environmental impact assessment and environmental protection plan		Nhon Hoa 2 Wind Power Project
P20	PO	Monthly Invoices for Electricity Exported to Grid by the Project owner		Nhon Hoa 2 Wind Power Project
P21	PO	Joint Meter Reading records between project owner and EVN to reconcile the final electricity export quantity to Grid		Nhon Hoa 2 Wind Power Project
P22	PO	Monthly import and export electricity production minutes with EVN		Nhon Hoa 2 Wind Power Project
P23	ILO	Ratifications of ILO- Ratifications of ILO conventions: Ratifications for Viet Nam obtained from website https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:11200:0::NO::P11200_COUNTRY_ID:103004		Website
P24	UN	SDG8Goal 8 .:. Sustainable Development Knowledge Platform obtained from https://sustainabledevelopment.un.org/sdg8 Documents provides detailed information on SDG 8.		Website
P25	UN	Declaration of Human Rights		Website
P26	ILO	Labour Code		Website
P27	International cooperation department	Labour Code of Vietnam		Website
P28	National Assembly Vietnam	Labor code		Website
P29	UN Treaty Body - OHCHR	Human Rights		Website
P30	National Assembly Office Vietnam	Law on Cultural Heritage		Website
P31	UN Convention Against Corruption	Ratifications against corruption		Website
P32	National Assembly Vietnam	Law on environmental protection		Website
P33	USEIA	US Energy Information Administration Report on Vietnams Latest power development Plan Dtd. 1st June 2021 https://www.eia.gov/todayinenergy/detail.php?id=48176#		iea
P34	Nhon Hoa 2 Wind Power Project	Nhon Hoa 2 Wind Power Project Employment record during project and operational phase.		Nhon Hoa 2 Wind Power Project
P35	MONRE	- Law on Environmental Protection 72/2020/QH14;		Website
P36	MONRE	- Decree No. 08/2022/ND-CP		Website
P37	MONRE	- Circular No. 02/2022/TT-BTNM		Website
P38	PO	- Waste collection contracts and manifests		Nhon Hoa 2 Wind Power Project
P39	PO	- Environmental performance reports from the 3-rd party		Nhon Hoa 2 Wind Power Project
P40	PO	- Occupational Heath and Safety Plan		Nhon Hoa 2 Wind Power Project
P41	PO	- HSE Training Records		Nhon Hoa 2 Wind Power Project
P42	VVB	Validation Report		
P43	PP	PDD Version 3.0 – 05/12/2023		Nhon Hoa 2 Wind Power Project
P44	PP	Monitoring Report Version 2.1 Dtd. 21/01/2024		Nhon Hoa 2 Wind Power Project
Background documents related to the design and/or methodologies employed in the design or other reference documents				

B1	GS	Gold Standard for the Global Goals - Key Project Information & Project Design Document (PDD) – Version 1.2 - 14 October 2020		GS Website
B2	GS	Gold Standard for the Global Goals - Stakeholder Consultation Report - Version 1.2 – 23 October 2019		GS Website
B3	GS	Gold Standard Principles & Requirements – Version 1.2, Dtd. 23/10/2019		GS Website
B4	GS	Gold Standard Safeguarding Principles and Requirements - Version 1.2, Dtd. 23/10/2019		GS Website
B6	GS	Gold Standard Renewable Energy Activity Requirements – Version 1.2, Dtd. 23/10/2019		GS Website
B7	GS	Gold Standard Validation & Verification Body Requirements – Version 1.0, Dtd. 1/03/2018		GS Website
B8	UNFCCC EB 100 Annex 6	ACM 0002, Version 21.0 "Grid-connected electricity generation from renewable sources"		UNFCCC CDM website
B9	EB69 annex 6	Guideline on Application of Materiality in Verification, EB69 annex 6		UNFCCC CDM website
B10	UNFCCC EB 111 Annex 2	CDM Validation and Verification Standard for Project Activities version 3.0		UNFCCC CDM website
B11	UNFCCC EB 101 Annex 1	CDM Project Standard for Project Activities version 3.0		UNFCCC CDM website
B12	UNFCCC EB 101 Annex 16	CDM Project Cycle Procedures for Project Activities version 3.0		UNFCCC CDM website
B13	UNFCCC EB 96 Annex 5	Tool for baseline, project and/or leakage emissions from electricity consumption and monitoring of electricity generation version 3.0		UNFCCC CDM website
B14	UNFCCC EB 48 Annex 11	Guidelines for the reporting and validation of PLF's version 1		UNFCCC CDM website
B15	EB 50 Annex 15	Tool to determine the remaining lifetime of equipment Version 1		UNFCCC CDM website
B16	IAF	International Accreditation Forum (IAF): Guidance on the Application of ISO/IEC Guide 62:1996: 'General Requirements for Bodies Operating Assessment and Certification/registration of Quality Systems		IAF Website

Appendix 3. Clarification requests, corrective action requests and forward action requests

Table 1. Remaining FAR from validation and/or previous verifications

FAR ID	N.A	**Section no.**	E.2	**Date:** DD/MM/YYYY
Description of FAR				
NA				
Project participant response				**Date:** DD/MM/YYYY
N.A				
Documentation provided by project participant				
N.A				
VVB assessment				**Date:** DD/MM/YYYY
N.A				

Table 2. CL from this verification

CL ID	N.A	**Section no.**		**Date:** DD/MM/YYYY
Description of CL				
N.A				

Project participant response	Date: DD/MM/YYYY
N.A	
Documentation provided by project participant	
N.A	
VVB assessment	**Date:** DD/MM/YYYY
N.A	

Table 3. CAR from this verification

CAR ID	01	Section no.	C.4	Date: 12/01/2023
Description of CAR				

While reviewing Monthly meter reading Excel sheet for December 2022, it is observed that Backup meter (L2) are not tallying with the total export quantity of energy shown by Main meter and Backup meter (L1) as explained below

Month	Meter Description	Electricity Export Quantity Monitored (KWh)
December 2022	Main Meter (231C)	30,732,744
	Backup Meter (L1) (231DP1)	30,754,429
	Backup Meter (L2) (274)	116,754,451

It is not clear how Level 2 Backup meters mentioned in the PDD and monitoring report are supporting the monitoring arrangement.

Project participant response	Date: 03/06/2023

Meter 274 is eliminated from the monitoring arrangement of the proposed Project.

The meter reading system of the proposed Project includes one main meter (231C) and two back-up meters (231DP1 and 331DP2). These three meters are being used and will suffice for the purpose of cross-check and billing between the Project Owner and the grid operator EVN. The emission reductions are calculated based on metering records of the main meter 231C, and can be cross-checked with electricity sales receipt issued by EVN.

In December 2022 (and also other months), the metering data recorded from the three meters shows a consistent recording with the permissible error limits regulated by grid operator EVN (e.g., 0.2s for main and 0.5s for back-up meters). See further details in the updated Monitoring report v1.1.

Month	Meter Description	Electricity Export Quantity Monitored (kWh)
December 2022	Main Meter (231C)	30,732,744
	Backup Meter (L1) (231DP1)	30,754,429
	Backup Meter (L2) (331DP2)	31,050,265

Whereas, the meter 274 is not used for electricity billing purpose so this meter will not be monitored and shall not be used for calculating the net export electricity quantity for the proposed Project.

The above information is now updated in the Monitoring report v1.1.

Documentation provided by project participant
Updated Monitoring report v1.1

VVB assessment	Date: 06/06/2023
Updated Monitoring report and metering arrangement found satisfactory and reflecting correct approach while monitoring of electricity generated and exported to the grid and hence the CAR is closed.	

CAR ID	02	Section no.	D.2	Date: 06/04/2022
Description of CAR				

PDD and ER Spreadsheet showing wrong energy generation and Energy export values, As per the table presented in the monitoring report Section D.2 it was observed that Net Energy Export to Grid is mentioned as 214,567 MWh during entire monitoring period instead of 207,902 MWh.

Project participant response	Date: 03/06/2022

The PDD and ER spreadsheet are now revised and updated with the actual electricity generation data of the proposed Project. The new Grid Emission Factor was published by the Vietnam Department of Climate Change (DCC) – Ministry of Natural Resources and Environment on 31 December 2022. Hence, this new value is also updated for the ER calculation. The Table in Section D.2 of Monitoring report now shows the updated Net Energy Export to the Grid as total 207,902 MWh during the monitoring duration.
Documentation provided by project participant
- Gird Emission Factor 2021, Document No. 1278/BĐKH-TTBVTOD issued by Vietnam Department of Climate Change – Ministry of Natural Resources and Environment, dated 31 December 2022, page 18 (e.g., 0,8230 for renewable energy), available at http://dcc.gov.vn/van-ban-phap-luat/1102/Nghien-cuu,-xay-dung-he-so-phat-thai-(EF)-cua-luoi-dien-Viet-Nam-nam-2021-(k%C3%A8m-CV-1278/BDKH-TTBVTOD - Updated Monitoring report v1.1 - Updated ER v2.1 spreadsheet
VVB assessment **Date:** 06/06/2023
Corrected ER Spreadsheet, monitoring report is now found aligned to the correct updated emission factor as well as correct monitoring arrangement of Electricity exported to the grid. Based on the verification

Table 4. FAR from this verification

FAR ID	N.A	**Section No.**		**Date:** DD/MM/YYYY
Description of FAR				
N.A				
Project participant response				**Date:** DD/MM/YYYY
N.A				
Documentation provided by project participant				
N.A				
VVB assessment				**Date:** DD/MM/YYYY
N.A				

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Document information

Version	*Date*	*Description*
04.0	6 April 2021	Revision to: • Reflect the “Clarification: Regulatory requirements under temporary measures for post-2020 cases” (CDM-EB109-A01-CLAR).
03.0	31 May 2019	Revision to: • Ensure consistency with version 02.0 of the “CDM validation and verification standard for project activities” (CDM-EB93-A05-STAN); • Make structural and editorial improvements.
02.1	11 January 2018	Editorial revision to correct the numbering of appendices in the instructions.
02.0	31 October 2017	Revision to align with the requirements of the “CDM validation and verification standard for project activities” (version 01.0).
01.0	23 March 2015	Initial publication.

Decision Class: Regulatory
Document Type: Form
Business Function: Issuance
Keywords: project activities, verifying and certifying