Carbon CHECK

Validation report form for GS project activities

(Version 04.0)

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

BASIC INFORMATION	
Title of the project activity	Thai Hoa Wind Power Project
GS Reference Number	GS 11251
Scale of the project activity	☒ Large-scale ☐ Small-scale
Version number of the validation report	2.2
Completion date of the validation report	31/07/2023
Version number of the PDD to which this report applies	Version 2.6 of 26/07/2023
Project participants	Swiss Carbon Value Ltd.
Host Party	Viet Nam
Applied methodologies and standardized baselines	ACM0002: Grid-connected electricity generation from renewable sources, version 20
Mandatory sectoral scopes	1
Conditional sectoral scopes, if applicable	NA
SDGs targeted from the project activity	SDG 8, SDG 7 and SDG 13
Estimated amount of annual average GHG emission reductions or GHG removals by sinks	214,728 tCO_2e
Name of VVB	Carbon Check (India) Private Limited
Name, position and signature of the approver of the validation report	Vikash Kumar Singh, Compliance Officer

SECTION A. Executive summary

>> Purpose and general description of the project

The purpose of the project activity is to generate power using renewable energy source and export to the national grid by utilizing wind energy. It involves the construction of an on-shore wind power plant in Hoa Thang commune, Bac Binh district, Binh Thuan province, Viet Nam with a total capacity of 90 MW. The project involves the installation of 18 wind turbines – generators at 5 MW, 22kV underground cable line, 2x50 MVA transformer station and 220 kV transmission line. The electricity generated with an estimated annual volume of 248.5 GWh will be supplied to the national grid via a newly constructed transmission line from the plant to the 2x50 MVA transformer station. The project will reduce the emission of greenhouse gases by replacing electricity generated from fossil fuel-fired power plants with zero emissions electricity from a wind power plant. It is expected that the power plant when in full operation, will result in a reduction of 214,728 tCO_2 on average per year.

Scope of the validation

The validation scope is defined as an independent and objective review of the project design document (PDD) and the GS LSC report /02/. The PDD /01/ is reviewed against the relevant criteria and decisions by the Gold standard and CDM Executive Board, including the approved baseline and monitoring methodology /04/. The validation team has, based on the recommendations in the CDM Validation and Verification Standard employed a rule-based approach, focusing on the identification of significant risks for project implementation and the generation of VERs.

The validation is not meant to provide any consulting towards the project participants. However, stated requests for clarifications and/or corrective actions may have provided input for improvement of the project design. While carrying out the validation, CCIPL determines if the project activity complies with the requirements of the applicability conditions of the selected methodology /04/, guidance issued by the Gold Standard and also assess the claims and assumptions made in the PDD /01/ without limitation on the information provided by the project participants.

The Validation team confirms the contractual relationship signed /05/ between the GS VVB (Carbon Check (India) Private Ltd.) and the Project Participant (Swiss Carbon Value Ltd.). The team assigned to the validation meets the Carbon Check (India) Private Ltd.'s internal procedures including the UNFCCC/Gold Standard requirements for the team composition and competence. The projects team has conducted a thorough contract review as per UNFCCC and Carbon Check procedures and requirements.

Validation methodology

The validation has been performed as described in the VVS and constitutes the following steps:

- Document review of data and information (PDD /01/ and the relevant documents including the reference to information relating to projects or technologies similar to the proposed project

activity and review based on the approved methodology /04/ being applied and of the appropriateness of formulae and accuracy of calculations).

- Cross checks between information provided in the PDD /01/ and information from other sources.
- Follow up actions for cross checking data and on-site assessment.
- Reference to available information
- Issuance of Validation Report.

Validation Process

The validation consists of the following four phases:

I. A desk review of the project design documents
   - A review of data and information;
   - Cross checks between information provided in the PDD /01/ and the information from sources with all the necessary means without limitations to the information provided by the project proponent;

II. On-site visit and follow-up interviews with the project stakeholders
   - Interviews with the relevant stakeholders in the host country with personnel having knowledge with the project development via telephone, email or direct on-site visits;
   - Cross checking between information provided by interviewed personnel with all necessary means without limitations to the information provided by the project proponent;

III. Reference to available information's relating to projects or technologies similar projects under validation and review based on the approved methodology /04/ being applied of the appropriateness of formulae and accuracy of calculations.

IV. The resolution of outstanding issues and the issuance of the final validation report and opinion.

The report is based on the assessment of the PDD /01/ undertaken through stakeholder consultations, application of standard auditing techniques including but not limited to document reviews, on-site assessment, and stakeholder interviews, review of the applicable/applied methodology /04/ and its underlying formulae and calculations.

This report contains the findings and resolutions from the validation and a validation opinion on the proposed.

Project thus confirming the project design as document is sound and reasonable and meets the stated requirements and identified criteria.

The validation protocol describes a total of five (05) findings which include:

- 05 (Five) Corrective Action Requests (CARs);
- 01 (One) Clarification Requests (CLs);

All findings are closed during the validation process.

Conclusion:

Carbon Check (India) Private Ltd. concludes the validation with a positive opinion that the Project Activity "Thai Hoa Wind Power Project" in Viet Nam, as described in the PDD /01/, meets all applicable requirements of Gold standard, relevant methodologies, tools and guidelines.

The selected baseline and monitoring methodology /04/ are applicable to the project and correctly applied.

Carbon Check (India) Private Ltd. therefore recommends the project to the Gold Standard for registration.

SECTION B. Validation team, technical reviewer and approver

B.1. Validation team member

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)	Involvement in			
						Desk/document review	On-site inspection	Interviews	Validation findings
1.	Team Leader, validator and Technical Expert	ER	Buragohain	Champok	CCIPL, India	√	√	√	√
2.	Local Expert	ER	Trang	Ngoc	CCIPL, Viet Nam	×	√	√	×

B.2. Technical reviewer and approver of the validation report

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)
1.	Technical reviewer	IR	C.	Indumathi	CCIPL
2.	Approver	IR	Singh	Vikash Kumar	CCIPL

SECTION C. Means of validation

C.1. Desk/document review

>> The PDD version 2.1 of 06/10/2021, version 2.2 of 28/09/2022, version 2.3 of 31/10/2022, version 2.4 of 06/01/2023, version 2.5 of 08/03/2023, version 2.6 of 16/07/2023 /**01**/, in particular the applicability of the methodology **/04/**, the baseline determination, emission reductions calculation worksheet '34_ER and Project IRR_Spreadsheet.xlsx' and '03_ER and Project IRR_Spreadsheet_Ver 2.1.XLS' /**06**/, the additionality of the project activity, the starting date, the project eligibility, the monitoring plan, the sustainability indicators, the stakeholder consultation, the environment impact assessment, the emission reductions calculations were assessed as part of the validation. All documents reviewed or referenced during the validation are listed in Appendix 3.

C.2. On-site inspection

Duration of on-site inspection: 20/07/2022				
No.	**Activity performed on-site**	**Site location**	**Date**	**Team member**
1.	During the on-site assessment of the project, the audit team assessed the implementation and operation of the proposed project activity, reviewed the information flows for generating, aggregating and reporting the monitoring parameters, interviewed key personnel to confirm the operational and data collection procedures, cross-checked information provided in the PDD, reviewed calculations and assumptions made in determining the GHG data and emission reductions, checked the quality control and quality assurance procedures in place to prevent or identify and correct any errors or omissions in the reported monitoring parameters, checked the correct and effective implementation of the mitigation measures foreseen in the sustainability monitoring plan, to prevent violation or the risk of violating a safeguarding principle of the "Do No Harm" Assessment or to "neutralize" a Sustainable Development Indicator. There were no hindrances or barriers that were faced by the validation team while carrying out the site visits.	Hoa Thang commune, Bac Binh district, Binh Thuan province	20/07/2022	Champok Buragohain, Ngoc Trang

C.3. Interviews

No.	**Interviewee**			**Date**	**Subject**	**Team member**
	Last name	**First name**	**Affiliation**			
1.	Nguyen Tien	Hai	Technical Manager - VNEEC	20/07/2022	PDD development, GS requirements, Emission reduction calculations, methodology applicability, start date justification etc.	Champok Buragohain, Ngoc Trang
2.	Huynh	Thau	Pacific - Binh Thuan Energy Joint Stock Company		Project Design, ownership details, carbon credit sharing arrangements, monitoring and reporting arrangements, QA/QC procedures, baseline assessment, project technology, Commissioning	

					details	
3.	Nguyen	Mai Lam	Pacific - Binh Thuan Energy Joint Stock Company		Stakeholder consultation process, impact from the project, positive and negative opinions etc.	
4.	Nguyen	Thi Mua	Local People (Male)			
5.	Mai	Van Hai	Local People (Female)			

C.4. Sampling approach

>> Not Applicable.

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

Areas of validation findings	No. of CL	No. of CAR	No. of FAR
Demonstration of prior consideration of the CDM	-	-	-
Identification of project type	-	-	--
Description of project activity	-	-	
Application and selection of methodologies and standardized baselines	-	-	-
- Application of methodologies and standardized baselines	-	-	-
- Deviation from methodology and/or methodological tool	-	-	-
- Clarification on applicability of methodology, tool and/or standardized baseline	-	-	-
- Project boundary, sources and GHGs	-	-	-
- Baseline scenario	-	2	-
- Demonstration of additionality	1	1	-
- Estimation of emission reductions or net anthropogenic removals	-	-	-
- Monitoring plan	-	-	-
Start date, crediting period type and duration	-	-	-
Environmental impacts	-	-	-
Local stakeholder consultation	-	1	1
Sustainable development co-benefits	-	-	-
Approval	-	-	-
Authorization	-	-	-
Modalities of communication	-	-	-
Global stakeholder consultation	-	-	-
Others (please specify)- SDG tool/Safeguarding principles	-	1	-
Total	1	5	1

SECTION D. Validation findings

D.1. Description of project activity

Means of validation	The purpose of the project activity is to generate power using renewable energy source (i.e. wind energy) and export to the national grid. It involves the construction of an on-shore wind power plant in Hoa Thang commune, Bac Binh district, Binh Thuan province, Viet Nam with a total capacity of 90 MW. The project involves the installation of 18 wind turbines – generators at 5 MW, 22kV underground cable line, 2x50 MVA transformer station and 220 kV transmission line. The ownership of the project lies with Pacific - Binh Thuan Energy Joint Stock Company which has been verified from business license issue to project owner /**35**/ and power purchase agreement copy executed for the project /**10**/. The project capacity and number of turbines are verified from approved feasibility study report of the project by Ministry of Industry & Trade /**13**/, /**25**/, PPA /**10**/ and commissioning certificate /**36**/. The

	electricity generated with an estimated annual volume of 248.5 GWh will be supplied to the national grid via a newly constructed transmission line from the plant to the 2x50 MVA transformer station. The project owner has agreement with Swiss Carbon Value Ltd. for trading and sale of carbon credit generated from the project activity /**11**/. The project will reduce the emission of greenhouse gases by replacing electricity generated from fossil fuel-fired power plants with zero emissions electricity from a wind power plant. It is expected that the power plant when in full operation, will result in a reduction of 214,728 tCO_2 on average per year. Thus, the project helps in mitigating harmful GHGs in the atmosphere. **Scenario existing prior to the implementation of the project activity** The project activity is the green field activity, which involves installation of new wind power plant and export to national grid. In the absence of the project activity, the equivalent power would have been generated in fossil fuel dominated grid. **Technology of the project activity**: The project involves 18 Wind turbine generators (WTG) from Siemens Gamesa Consortium of 5MW each which is confirmed from the agreement of supply, installation and commission between Siemens Gamesa & project developer /**12**/. The same is also found consistent during on-site audit. **Project Location**: The wind power plant is located in Hoa Thang commune, Bac Binh district, Binh Thuan province, Viet Nam. The specific geo-coordinates presented in the PDD are found consistent during on-site audit. **Start Date of the project activity**: GS4GG clause 4.1.39 (principle and requirement, version 1.2 of October 2019) sates 'the Project start date shall be the earliest date on which the Project Developer has committed to expenditures related to the implementation of the Project'. Examples of start date may be the date on which contracts have been signed for equipment or construction/operation services required for the Project'. In case of this project, PD executed equipment supply contract on 14/07/2020 which is the earliest date of real action for implementation of the project activity and clearly represents the start date. It has been noted that the project is a retroactive project which means the start date has occurred prior to the first submission of preliminary review information to GS (clause 4.1.49 (b) under principle and requirement). As per GS rule for retroactive projects, the first-time submission of documents for preliminary review should happen within one year of the start date, The GS preliminary review completed, and project got listed which clearly states the start date to be 14/07/2020 and hence meets all GS requirements for start date. **Crediting period and estimated Emission Reductions** A renewable crediting period has been chosen for the project, starting from 31/10/2021 or from the date prior to two years from the date of registration with GS registry whichever is later. This is in line with GS requirements. **Avoidance of double counting of project devices with other project activities**: The project has only applied to claim GS VERs. PD has provided a declaration in this regard /**14**/. In addition, similar registered projects under GS, CDM were checked to ascertain, no double counting is in place. As per available information, documents and interview with PP and end users it was concluded that avoidance of double counting measures are in place.
Findings	CAR 01 was raised for start date of crediting period and chronology of events for the project which has been closed as discussed in Appendix 4 of this report.
Conclusion	CCIPL confirms that the description of the proposed project activity, as contained in the PDD sufficiently covers all relevant elements, is accurate and complete and that it provides the reader with a clear understanding of the nature of the proposed GS project activity.

D.2. Application and selection of methodologies and standardized baselines

D.2.1. Application of methodologies and standardized baselines

Means of validation

The project correctly applies the approved baseline and monitoring methodology "ACM0002", "Consolidated baseline methodology for grid-connected electricity generation from renewable sources", version 20.0 /09/.
The proposed project activity meets the criteria defined in the baseline methodology as described below:

Criteria	PD's justification	VVB's assessment
This methodology is applicable to grid-connected renewable energy power generation project activities that: a) Install a Greenfield power plant; b) Involve a capacity addition to (an) existing plant(s); c) Involve a retrofit of (an) existing operating plant(s)/unit(s); d) Involve a rehabilitation of (an) existing plant(s)/unit(s); or e) Involve a replacement of (an) existing plant(s)/unit(s).	The project activity consists of the installation of a new grid connected renewable power plants at a site where no renewable power plant was operated prior to the implementation of the project activity (green field plant).	The proposed activity is a, Greenfield project, which involves the installation of a new grid-connected renewable power generation facility (i.e. 90 MW wind farm). Carbon Check confirmed the same from the equipment supply agreement /**12**/ and the commissioning certificates **/36/** and PPA executed for the project activity /**10**/. Hence the methodology is applicable to the proposed project activity.
The methodology is applicable under the following conditions: a) The project activity may include renewable energy power plant/unit of one of the following types: hydro power plant/unit with or without reservoir, wind plant/unit, geothermal plant/unit, solar plant/unit, wave plant/unit or tidal plant/unit; b) In the case of capacity additions, retrofits, rehabilitations or replacements (except for wind, solar, wave or tidal power capacity addition projects) the existing plant/unit started commercial operation prior to the start of a minimum historical reference period of five years, used for the calculation of baseline emissions and defined in the baseline emission section, and no capacity expansion, retrofit, or	The project activity is the installation of new wind power plant.	The proposed activity is a, Greenfield project, which involves the installation of a new grid-connected renewable power generation facility (i.e. 90 MW wind farm). Carbon Check confirmed the same from the equipment supply agreement /**12**/ and the commissioning certificates **/36/** and PPA executed for the project activity /**10**/. Hence the methodology is applicable to the proposed project activity.

	rehabilitation of the plant/unit has been undertaken between the start of this minimum historical reference period and the implementation of the project activity.		
	In case of hydro power plants, one of the following conditions shall apply: (a) The project activity is implemented in existing single or multiple reservoirs, with no change in the volume of any of the reservoirs; or (b) The project activity is implemented in existing single or multiple reservoirs, where the volume of the reservoir(s) is increased and the power density, calculated using equation (7), is greater than 4 W/m2; or (c) The project activity results in new single or multiple reservoirs and the power density, calculated using equation (7), is greater than 4 W/m2; or (d) The project activity is an integrated hydro power project involving multiple reservoirs, where the power density for any of the reservoirs, calculated using equation (7), is lower than or equal to 4 W/m2, all of the following conditions shall apply: (i) The power density calculated using the total installed capacity of the integrated project, as per equation (8), is greater than 4 W/m2; (ii) Water flow between reservoirs is not used by any other hydropower unit which is not a part of the project activity; (iii) Installed capacity of the power plant(s) with power density lower than or equal to 4 W/m2 shall be: Lower than or equal to	The project activity is the installation of new wind power plant.	The project activity is a wind power project and not a hydro project. Hence, these conditions are not applicable.

	15 MW; and Less than 10 per cent of the total installed capacity of integrated hydro power project.		
	In the case of integrated hydro power projects, project proponent shall: (a) Demonstrate that water flow from upstream power plants/units spill directly to the downstream reservoir and that collectively constitute to the generation capacity of the integrated hydro power project; or (b) Provide an analysis of the water balance covering the water fed to power units, with all possible combinations of reservoirs and without the construction of reservoirs. The purpose of water balance is to demonstrate the requirement of specific combination of reservoirs constructed under CDM project activity for the optimization of power output. This demonstration has to be carried out in the specific scenario of water availability in different seasons to optimize the water flow at the inlet of power units. Therefore, this water balance will take into account seasonal flows from river, tributaries (if any), and rainfall for minimum of five years prior to the implementation of the CDM project activity.	This project activity is not an integrated hydropower plant	The project activity is a wind power project and not a hydro project. Hence, these conditions are not applicable.
	The methodology is not applicable to: (a) Project activities that involve switching from fossil fuels to renewable energy sources at the site of the project activity, since in this case the baseline may be the continued use of fossil fuels at the site; (b) Biomass fired power plants/units.	It is a renewable energy project with no fuel-switch involved.	The project activity is a new grid connected wind power plant and does not involve any switching from fossil fuel to renewable energy at the site of the project activity.
	In the case of retrofits,	The project activity is the	The project does not

	rehabilitations, replacements, or capacity additions, this methodology is only applicable if the most plausible baseline scenario, as a result of the identification of baseline scenario, is "the continuation of the situation, that is to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance".	installation of new wind power plant.	involve any retrofit. It is a new installation as verified from equipment supply agreement /**12**/ and the commissioning certificates **/36/** and PPA executed for the project activity /**10**/.

The project activity applies the following methodological tools:

- Methodological "tool to calculate the emission factor for an electricity system" version 07
- Methodological "tool for the demonstration and assessment of additionality" version 07.0.

Findings	N/A
Conclusion	CCIPL hereby confirms that the selected baseline and monitoring methodology has been previously approved by the CDM Executive Board, and is applicable to the Project, which complies with all the applicability conditions therein and the selected version is valid at the time of submission of the proposed project activity. It is also confirmed that the methodology is correctly applied by comparing it with the actual text of the applicable version of the methodology.

D.2.2. Deviation from methodology and/or methodological tool

Means of validation	No deviation from the applied methodology or methodological tool is applied in the project activity.
Findings	N/A
Conclusion	N/A

D.2.3. Clarification on applicability of methodology, tool and/or standardized baseline

Means of validation	No clarification on the applied methodology or methodological tool is applied in the project activity
Findings	N/A
Conclusion	N/A

D.2.4. Project boundary, sources and GHGs

Means of validation

As per applied methodology, the project boundary is the spatial extent of the project boundary includes the project power plant/unit and all power plants/units connected physically to the electricity system that the CDM project power plant is connected to. The generated electricity will be delivered to the National grid.
Emissions sources included in the project boundary are shown in the table below:

	GHGs involved	Description
Baseline emissions	CO_2	Net electricity delivered to the grid by the project activity that would otherwise have been generated by the operation of grid-connected power plants and by the addition of new generation sources into the grid
Project emissions	N/A	The project activity does not have

	<table><tr><td></td><td></td><td>any project emission</td></tr><tr><td>Leakage</td><td>N/A</td><td>The project activity does not have any leakage emission since there is no transfer of equipment to or from the project activity.</td></tr></table> Emission sources which are not addressed by the applied methodology and which are expected to contribute more than 1% of the overall expected average annual emissions reduction have not been identified. Therefore, the project boundary covers all project biogas system usage point and its location. The project boundary is clearly defined in the PDD as per the methodology.
Findings	N/A
Conclusion	The project boundary is correctly identified in accordance with the methodology ACM0002 (Version 20). All greenhouse gas emissions occurring within the proposed project activity boundary as a result of the implementation of the proposed project activity have been appropriately addressed in the PDD.

D.2.5. Baseline scenario

Means of validation	According to the approved baseline and monitoring methodology “ACM0002”, “grid-connected electricity generation from renewable sources”, version 20.0 /09/, the following is the baseline scenario for a new grid-connected renewable power plant/unitis: “Electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources as reflected in the combined margin (CM) calculations described in the “tool to calculate the emission factor for an electricity system” Since the approved methodology that is applied prescribes the baseline scenario, no further analysis is required. The relevant National Acts and regulations pertaining to generation of energy in Viet Nam are: Electricity Law No. 28/2004/QH11 dated on 03/12/2004 and Law No. 50/2010/QH12 on “Economical and Efficient use of energy” dated on 17/06/2010 are the main laws that govern the electricity sector in Viet Nam /18/, /19/. Their implementation is regulated under Government Decree No. 14/2014/ND-CP on “Stipulating in detail the implementation of electricity law regarding electricity safety” dated on 26/02/2014. The national policy does not mandate wind power for electricity generation nor prohibit use of fossil fuel to generate electricity. Therefore, the baseline scenario is meets host country regulations. The above mentioned National Acts and regulations pertaining to generation of energy in Viet Nam does not influence the choice of fuel used for power generation. There is no legal requirement on the choice of a particular technology for power generation. Carbon Check was able to verify all the documented evidence such as Viet Nam grid emission factor /**09**/, applied methodology ACM0002 version 20 /04/, latest PDD, version 2.6 of 26/07/2023 /01/, and emission reduction calculation spreadsheet /06/ during the validation process and can confirm that: All the assumptions and data used by the project participants are listed in the latest PDD, version 2.6 of 26/07/2023 /01/, including their references and sources; The approved baseline methodology “ACM0002”, version 20.0 /04/ has been correctly applied to identify the most reasonable baseline scenario and the identified baseline scenario reasonably represents what would occur in the absence of the proposed CDM project activity.
Findings	CAR 02 was raised as relevant national and sectoral policies related to identification of baseline scenario was not discussed which found correctly incorporated in the updated PDD and hence CAR is closed as discussed in Appendix 4 of this report.
Conclusion	CCIPL confirms that the baseline scenario is identified as per the applied methodology. All data parameters are used correctly while estimating the baseline emissions. The baseline scenario represents the most possible scenario in absence of the project activity.

D.2.6. Proof of project eligibility

Means of validation	GENERAL ELIGIBILITY CRITERIA: a) **Type of project**: The proposed GS project activity falls under GS4GG '**renewable energy activity requirements'** as it involves electricity generation from wind energy and supply to grid. Also, the project is located in Viet Nam - a Lower Middle-Income country as per World Bank country classification /21/ and the penetration level of wind power generation is 0.72% /**22-23**/. Therefore, it meets paragraph 2.1.2 and 2.1.3 (b) of GS4GG '**renewable energy activity requirements'** version 1.4 b) **Location of the project**: The project's host Party is Viet Nam and eligible as per Gold Standard. c) **Project area, project boundary and scale**: The project area is clearly defined and no double counting exist. The project only applies for GS VER and declaration for the same was verified. d) **Host country requirements**: The project has received all applicable host country approval to start the project. Investment license, PPA, commissioning certificate and other approvals were checked and verified. e) **Contact Details**: The name and contact details of project developer and other project particiapants are transparently detailed in the PDD. The approval documents and contractual documents were checked and verified in this regard by the audit team. f) **Legal Ownership:** Legal ownership of the GS carbon credit generated from the project activity lies with Pacific - Binh Thuan Energy Joint Stock Company. The project owner has agreement with Swiss Carbon Value Ltd. for trading and sale of carbon credit generated from the project activity. g) **Other Rights:** Not applicable. The project is implementation as per individual users choice and hence no other rights are required. h) **Official Development Assistance (ODA) Declaration:** The project does not involve any ODA. This has been also supported with declaration of ODA as per GS requirement. ELIGIBILITY PRINCIPLES Principle 1: Contribution to Climate Security & Sustainable Development: The project meets GS4GG '**renewable energy activity requirements'** as it leads to climate change mitigation from supply of electricity generated from wind energy to fossil fuel dominated grid. Projects shall define their Baseline Scenario and Project Scenario. Baseline scenario is clearly defined as described in section D.2.5 above. Project scenario is clearly defined as described in section D.1 above. Hence, meets the GS requirements. Projects shall contribute positively to Climate Security & Sustainable Development. As per GS4GG requirement all Projects shall demonstrate a clear, direct contribution to sustainable development, defined as making demonstrable, positive impacts on at least three SDGs, one of which must be SDG 13 (defined herein as Emissions Reductions or Removals and/or Adaptation to climate change). The project has demonstrated positive indicators under SDG 8 and positive indicators under SDG 7 apart from SDG 13 outcome. The parameters, its effects and monitoring measuring mechanism are clearly defined in the PDD which has been approved during GS preliminary review. Hence, meets GS requirement. Project eligibility: In line with clause 4.1.3 of GS principle and requirement, the project meets GS4GG **renewable energy activity requirements'**. Principle 2: Safeguarding Principles The project transparently describes safeguarding principles and its outcomes in the PDD. These are further discussed under D.2.8. Principle 3: Stakeholder Inclusivity The project developer has organized local stakeholder consultation meeting in line with GS requirements. This has been further discussed in section D.5 of this report.

	Principle 4: Demonstration of real outcomes: To demonstrate real outcome of identified SDGs under the project activity, PP has transparently developed a PDD incorporating monitoring and reporting plan. **Development of monitoring and reporting plan**: PP has transparently developed a PDD incorporating monitoring and reporting plan. This is further discussed under section D.2.10. Principle 5: Financial Additionality & Ongoing Financial Need: Additionality of the project is discussed under section D.2.7 of the report. Therefore, the proposed project activity is deemed to be eligible under gold standard GS4GG.
Findings	N/A
Conclusion	CCIPL confirms that the project is eligible for GS4GG as per requirements of GS4GG.

D.2.7. Demonstration of additionality

Means of validation	According to the approved baseline and monitoring methodology "ACM0002", "Consolidated baseline methodology for grid-connected electricity generation from renewable sources", 20.0 **/09/**, the additionality of the project has been established applying the tool "Tool for the demonstration and assessment of additionality", version 07.0.0 **/29/.** Step 2 of the tool: **Investment analysis:** **Choice of approach**: The PP has chosen to apply investment analysis to demonstrate the additionality of the project activity using the benchmark analysis method. PP has identified project IRR as the most suitable financial indicator. Benchmark selection: As per paragraph 15 of the 'investment analysis tool' /**32**/, Local commercial lending rates or WACC are appropriate benchmarks for a project IRR. The project participant applies the local commercial lending rates as a benchmark for this project IRR. This benchmark is derived from the average long-term lending rates available from the beginning of calculated year up to the date of decision making. All data is sourced from weekly reports published by the State Bank of Vietnam on its official website (https://www.sbv.gov.vn/) /**38**/. Therefore, the benchmark of 11% is appropriately considered for the project IRR analysis. Input Parameters: The validation team of Carbon Check validated the input values and assumptions in the investment analysis by checking the original and other supportive documents as detailed below. It is noted that the values of the input values stated in the PDD are consistent with that of the financial calculation sheet **/06/**. The lifetime of the WTGs are considered as 25 years following UNFCCC methodological tool 'tool to determine the remaining lifetime of equipment' version 01 /**39**/ and the investment analysis is done for the period of 25 years and hence is justified as per the investment analysis tool **/37/**. Carbon Check has validated the input parameters used in the investment analysis and the following steps have been followed to assess the investment analysis. • Assessment of the sources used for input parameters. All input parameters used in the financial analysis are taken from Feasibility study report (FSR) of the project **/13/, /25/** and applicable government tariff rate **/10/** available at the time of decision making as described in the below table, and can thus considered information provided by independent source. • Confirmation of the values in the PDD and investment analysis is fully consistent with the values in FSR **/13/, /25/**, tariff rate **/10/,** Carbon Check

compared the input parameters for the financial analysis included in the latest PDD **/01/** and in the investment analysis spreadsheet **/06/** with the parameters stated in the documents used and was able to confirm that the values applied are consistent.

Cross-check of the input parameters used in the financial analysis. The input parameters used in the financial analysis were cross-checked and all data sources used to cross-check were checked during the validation process. The following is carried out:

Parameter	Unit	Value	Validation Assessment and cross checking
Project capacity	MW	90	Verified against FSR **/13/, /25/** and cross check against the PPA /**25**/, commissioning report of the project activity /**36/**.
Plant Load Factor	%	31.5%	Verified against FSR **/13/** which was approved by Ministry of industry and trade, electricity and renewable energy authority /25/.
Project Hard cost (Cost of WTG, Concrete towers, transformers, civil works, transportation, erection and Commissioning)	Billion VND	4,303	Verified against FSR **/13/, /25/** and cross check against the supply agreement with technology supplier /**12/**.
Tariff (fixed for 20 years)	8.50 Cent/kWh or 1967.33 VND/kWh		Tariff rate is as per Article 1, Item 7 of Prime Minister's Decision No.39/2018/QD-TTg dated 10 September 2018 and subsequent amendment No.37/2011/QD-TTg on 29 June 2011 on promotion mechanism on wind power projects in Vietnam. The tariff rate is cross checked from the PPA executed for the project which states the rate as 8.50 Cent/kWh (Considering exchange rate from VND to USD on 31/10/2019 /**41**/) fixed for 20 years. VVB checked even if there is 10% increase in electricity tariff from 21st year, the IRR will not cross the benchmark. The average inflation rate of Viet Nam is 6.1% between 1996 to 2021 and hence it is not expected to increase tariff rate more than 100% to reach the benchmark.
Total annual O&M cost	Billion VND	64.5	Verified against FSR **/13/, /25/** and cross check against the supply agreement with technology supplier /**12/.**
Residual/ fair value	Billion VND	0	The investment analysis is done for the full technical life of 25 years and according to Circular No.45/2013/TT-BTC issued by Ministry of Finance, Viet Nam dated 25/04/2013 regarding “Guiding regulation on management, use and depreciation of fixed assets” the

			maximum depreciation period for wind power plants is 20 years. As per Tool27 - "Investment Analysis", Version 12.0, the fair value to be added if investment analysis is done for a period shorter than the technical life of the project. In this case, the investment analysis is done for the full technical life and full value of assets has been completely depreciated thus no residual value remains at the end of the assessment period.

Carbon check confirms that the input values used in the financial analysis are reasonable and adequately represent the economic situation of the project activity at the time of the investment decision.

Calculation and conclusion:
The validation team further assessed the correctness of computations and documentation carried out by the project participants. The assessment involves checking the data input taken from project feasibility study report **/13/** which was duly approved by Ministry of industry and trade, electricity and renewable energy authority /**25**/, electricity tariff as per government tariff order and PPA executed /**10**/, adoption of correct accounting principle and arithmetical accuracy. The accounting principles adopted with respect to computation of depreciation and tax computation are found to be in order. The arithmetical accuracy is also found to be correct. The pre-tax project IRR calculations were provided in a spread sheet **/06/**.

The calculation was verified in detail and found to be correct by Carbon Check as well as the assumptions used in the calculation were deemed to be correct. The pre-tax project IRR for the project activity without carbon credit revenues is 7.88% as per input values available at the time of investment decision which confirms that the proposed project activity in absence of carbon credit benefits and compared to the benchmark IRR of 11% is not economically and financially attractive.

Sensitivity analysis:

Parameter	**Pre-tax project IRR**		
Variation in %	***-10%***	***Base Case***	***+10%***
Tariff	6.61%	7.88%	9.09%
PLF/Electricity generation	6.61%	7.88%	9.08%
Project cost	6.89%	7.88%	9.04%
O & M cost	8.04%	7.88%	7.72%

PD provided the sensitivity analysis using mathematical tool 'Data Tables' and 'Solver tool' to find the threshold value to reach the benchmark. Validation team assessed the sensibility analysis with variation of key parameters within ±10%. For example, in cell N14, if tariff rate increases by 27% from the first year itself it will reach the benchmark. Either this 27% rate can be checked applying tools referred by PD or by hit and trial method. However, in all the key parameters it does not cross the benchmark within ±10% variations. Below includes the assessment of key parameters.

Parameter	**VVB's assessment on possibility**
Tariff	The tariff rate is cross checked from the PPA executed for the project which states the rate as 8.50 Cent/kWh fixed for 20 years. VVB checked even if there is 10% increase in electricity tariff from 21st year, the IRR will not cross the benchmark. The average inflation rate of Viet Nam is 6.1%

	between 1996 to 2021 and hence it is not expected to increase tariff rate more than 100% to reach the benchmark.
PLF/ Electricity generation	To reach the benchmark the PLF has to reach above 40% which is not a realistic scenario for wind power technology.
Project cost	The supply agreement is already executed and there is no scope to reduce the cost by 23.75% to reach the benchmark.
O & M cost	The project has to run with operation and maintenance which bears some cost. Even without any O& M cost i.e. 100% reduction is O & M cost the project will not reach the benchmark.

Common practice analysis:
The PP has conducted the common practice analysis as per the requirements of 'Common practice tool' version 03.1 **/51/**. In line with the guidance given in this tool, the PP has selected Viet Nam (host country) as the default applicable geographical area for the assessment of common practice. Further, the PP has selected the step-wise approach given in Para 5 of the tool to carry out the common practice analysis.

As per the Step 1, the applicable output range as ± 50% of the design output range (90 MW) is 45 MW to 135 MW.

In the step 2, PP has identified the plants with same measure (i.e. renewable power generation) that deliver the output in the range of 45 MW to 135 MW in the host country Viet Nam. In accordance with the tool, all renewable power plants based on hydro, solar, biomass and wind power plants that have started commercial operation before the start date, i.e. 14/07/2020, were identified. The list of grid-connected power plants in Viet Nam as of July 2023 summarized from EVN's database 2020 /09/ has been considered. The database is published by Ministry of Natural Resources and Environment, Viet Nam and hence credible. As per the list, a total 74 plants are identified.

Under step 3, the plants those are not registered or applied for carbon credit in different mechanism are identified. A total 30 projects have been found listed for claiming carbon credit under different mechanism. The list is verified from UNFCCC CDM, GS, VCS and GCC database and found to be correct. Hence, remaining projects categorized as N_{all} is '44'.

In step 4, projects of different technologies from the plants identified in step 3. Accordingly, solar, biomass and hydro plants were identified as different technology and noted total plants identified as 'N_{diff} is also '44'.

In step 5, the PP has calculated F factor (F=1-Ndiff/Nall) as '0' and $N_{all} - N_{diff} = 0$. The project is not a common practice in Viet Nam as F factor is less than 0.2. Thus, in view of the common practice tool, the team based on the assessment has been able to confirm that the project activity can be regarded as not a common practice in the host country Viet Nam.

Ongoing Financial Need (OFN):
As per clause 4.1.52 of GS4GG principles and requirements (version 1.2 of October 2019), OFN to be demonstrated at Design Certification renewal.

Findings	CL 1 was raised to clarify the tariff rate for 25 years and investment break-ups in first three years which were adequately clarified and found to be correct. Hence, CL is closed as discussed in Appendix 4 of this report.
Conclusion	CCIPL confirms that conservative approach has been applied in line with the applied methodology to demonstrate additionality which is also as per GS4GG requirements and hence the project is additional.

D.2.8. Sustainability assessment (SAFEGUARDING PRINCIPLES & REQUIREMENTS)

Means of validation	A s per GS4GG Safeguarding principles and requirements version 1.2 of October

	2019, all projects shall conform to the Gold Standard for the Global Goals Safeguarding Principles & Requirements. The assessment is done as follows: Principle 1- Human Rights: The proposed project activity follows the human rights in accordance with the national and international legal framework /**27**/. The project activity will not be put the human rights at risk. Hence, the project respects internationally proclaimed human rights including dignity, cultural property and uniqueness of indigenous people. The project is not complicit in Human Rights abuses. The project is an on-shore wind power project and all legal and local requirements such as approval on EIA /**28**/, project investment license /**29**/ are obtained. Hence, the project does not involve and is not complicit in involuntary resettlement. The project activity does not involve alteration damage or removal of any critical cultural heritage as confirmed from feasibility study report and EIA. Principle 2 – Gender Equality and Women's Rights: The host country (Vietnam) has adopted labor code (10/2012/QH13) on 18/06/2012 which has specific provisions for female employees /**30**/. Therefore, the project follows all legal requirements on gender equality and women rights. Project developer has considered to monitor the number of employees and equal pay to both men and women to cross check the same. Principle 3 – Community Health, Safety and Working Conditions: The host country (Viet Nam) has adopted labour code (10/2012/QH13) on 18/06/2012 which has specific provisions for occupational safety and health /**30**/. The project is an on-shore wind power project which is prone to have less risky operational conditions compared to its baseline scenario (coal fired power plant). The employees of the project will be trained on technical aspects relating to the operation, safety of the plant and provided with labour contracts, medical insurance and regular health-check as well as social insurance and unemployment insurance. This shall be monitored. The project is in compliance with all relevant local and national laws such as Vietnam Labor Code, Law on Occupational Safety and Hygiene of Vietnam 2015. The project's operation and maintenance is with Vestas (technology supplier) who runs with standards for the environment and occupational health and safety. Siemens is fully covered by an umbrella certificate for the management system standards ISO 45001. Therefore, the project complies necessary health, safety and working conditions. Principle 4 – Cultural Heritage, Indigenous Peoples, Displacement and Resettlement*:* The project is an on-shore wind power project which is not a habited land and does not have any cultural heritage and does not involve any displacement or resettlement. However, 5.26 ha agricultural land is occupied by the project activity. All areas occupied by the project activity has been adequately compensated in accordance with the Government regulations /42/,/43/. Hence, this parameter is safeguarded by the project activity. Principle 5 – Corruption*:* The host country (Viet Nam) has ratified convention against corruption /**31**/. The project poses all applicable legal permits for its operation. Therefore, the project does not have any scope for corruption or corrupt practice. The principle is safeguarded by the project activity. Principle 6 – Economic Impacts: Labour rights & negative economic consequences: The host country (Viet Nam) has adopted labour code (10/2012/QH13) on 18/06/2012 which has specific provisions for child labour, labour discipline, dialogue at workplace, collective bargaining and collective labour agreements /**30**/.

	Therefore, the project adheres to all labour rights. The project does not have any negative economic consequence. Due to the project, the electricity generation of country is increased leading to better economic prospects towards the local and nation as a whole. Principle 7 – Climate and Energy: The project being a wind power project replaces equivalent electricity from fossil fuel dominated power generation which leads to overall emission reductions. The energy supply is not hampered compared to baseline. Principle 8 – Water: The project does not use water for electricity generation. No use of water or any impact on natural water body or resource. Therefore, the project does not have any negative impact on water. Principle 9 – Environment, ecology and land use: The project is under implementation phase. No negative impact on environment, ecology and land use. This is confirmed from environmental impact assessment and approval on the environmental impact assessment report by Binh Thuan Provincial Peoples committee /28/. The compensation process has been completed and confirmed in the land lease decisions issued by Binh Thuan PPC. The project owner has also signed the Land Lease Contract with Binh Thuan PPC /42/,/43/. Hence, the principle is safeguarded by the project activity. VVB also noted the independent expert's written opinion who confirms the project does not adversely impact the GS4GG safeguarding principles /**34**/.
Findings	N/A
Conclusion	CCIPL confirms that conservative approach has been applied by PP to demonstrate sustainable development of the project activity which is in line with GS4GG requirements.

D.2.9. Estimation of emission reductions or net anthropogenic removals

Means of validation	**Baseline Emissions**: In line with applied methodology ACM0002, version 20, baseline emissions are calculated as below: $BE_y = EG_{PJ,y} \times EF_{grid,CM,y}$ $EG_{PJ,y} = EG_{facility,y}$ is the quantity of net electricity generation supplied by the project plant/unit to the grid in year y (MWh/yr). This is to be monitored. For ex-ante estimation this is considered to be 248,500 MWh/year as per feasibility study report /**13**/. Grid emission factor ($EF_{grid,CM,y}$) is calculated as per 'Tool to calculate the emission factor for an electricity system' version 07 /**15**/. The gird emission factor for national grid of Viet Nam has been calculated on the basis of sum of 75% of OM (operating margin) and 25% of BM (build margin). $EF_{grid,CM,y} = 0.75 * EF_{grid,OM,y} + 0.25* EF_{grid,BM,y}$ The ministry of natural resources and environment department of climate change published Vietnam national electricity grid emission factor for 2020 dated 31/12/2021 which is the latest data source on grid emission factor /**09**/. The operating margin emission factor, build margin emission factor and combined margin emission factor are calculated following UNFCCC 'Tool to calculate the emission factor for an electricity system' version 07 /**15**/. Accordingly simple operating margin ($EF_{grid,OM,y}$) is calculated to be 0.9242 tCO_2/MWh and build margin emission factor ($EF_{grid,BM,y}$) for the year 2020 is calculated to be 0.6840 tCO_2/MWh.

	The combined margin emission factor (CM) is calculated as the average of the operating margin emission factor and the build margin emission factor where the weights W_{OM} and W_{BM}, by default, are 75% W_{OM} and 25% W_{BM}. The combined margin emission factor for national grid has been calculated to be 0.8641 tCO_2e/MWh, which is fixed ex-ante for the entire crediting period. Accordingly, baseline emission is estimated to be 214,728 tCO_2e per year. **Project Emissions**: In line with the applied methodology project emission for wind power project is zero. **Leakage emissions**: As per ACM0002 /**04/**, no leakage emissions are considered. The main emissions potentially giving rise to leakage in the context of electric sector projects are emissions arising due to activities such as power plant construction and upstream emissions from fossil fuel use (e.g., extraction, processing, transport). These emissions sources are neglected. Therefore, $LE_y = 0$. Accordingly, the emission reductions estimated ex-ante to be 214,728 tCO_2e per year
Findings	CAR 3 was raised as most recent grid emission factor was not used which is found corrected in the updated PDD and ER sheet and hence CAR is closed as discussed in Appendix 4 of this report.
Conclusion	Based on the calculations and results presented in the sections above the implementation of the project activity will result in an average ex-ante estimation of emission reduction conservatively calculated to be 214,728 tCO_2e per year. The calculation of the emission reductions has been ensured by the validation team based on the VER calculation sheet. The emission reductions estimation can be replicated using the data and parameter values provided in the PDD and supporting file submitted for registration. The data sources mentioned have been verified by CCIPL. CCIPL confirms that the estimates provided in the revised PDD version 02.5 are reasonable and the project participant has correctly applied the methodology; the calculations are complete and transparent and the data accuracy has been verified.

D.2.10. Monitoring plan

Means of validation

The approved baseline and monitoring methodology "ACM0002", "grid-connected electricity generation from renewable sources", version 20 /04/ has been applied. The parameter to be monitored to account emission reductions are $EG_{facility,y}$ and $EF_{grid,CM,y}$.

Monitoring procedure of $EG_{facility,y}$ is followed as per 'TOOL05: Baseline, project and/or leakage emissions from electricity consumption and monitoring of electricity generation' and $EF_{grid,CM,y}$ is as per "TOOL07: Tool to calculate the emission factor for an electricity system" /**15**/.

Data and parameters fixed ex-ante:

	Data/parameter	Unit	Value applied	Assessment
1	EF_y (Combined Margin of the Grid)	tCO_2/ MWh	0.8641	The ministry of natural resources and environment department of climate change published Vietnam national electricity grid emission factor for 2020 dated 31/12/2021 which is the latest data source on grid emission factor /**09**/. The operating margin emission factor, build margin emission factor and combined margin emission factor are calculated following UNFCCC 'Tool to calculate the emission

					factor for an electricity system' version 07 /**15**/. Accordingly simple operating margin ($EF_{grid,OM,y}$) is calculated to be 0.9242 tCO_2/MWh and build margin emission factor ($EF_{grid,BM,y}$) for the year 2020 is calculated to be 0.6840 tCO_2/MWh. The combined margin emission factor (CM) is calculated as the average of the operating margin emission factor and the build margin emission factor where the weights W_{OM} and W_{BM}, by default, are 75% W_{OM} and 25% W_{BM}. The combined margin emission factor for national grid has been calculated to be 0.8641 tCO_2e/MWh, which is fixed ex-ante for the entire crediting period
	2	EF_{BM} (Build Margin of the Grid)	tCO_2/ MWh	0.6840	The ministry of natural resources and environment department of climate change published Vietnam national electricity grid emission factor for 2020 dated 31/12/2021 which is the latest data source on grid emission factor /**09**/. The operating margin emission factor, build margin emission factor and combined margin emission factor are calculated following UNFCCC 'Tool to calculate the emission factor for an electricity system' version 07 /**15**/. Accordingly build margin emission factor ($EF_{grid,BM,y}$) for the year 2020 is calculated to be 0.6840 tCO_2/MWh.
	3	EF_{OM} (Generation Weighted Operational Margin of the Grid)	tCO_2/ MWh	0.9242	The ministry of natural resources and environment department of climate change published Vietnam national electricity grid emission factor for 2020 dated 31/12/2021 which is the latest data source on grid emission factor /**09**/. The operating margin emission factor, build margin emission factor and combined margin emission factor are calculated following UNFCCC 'Tool to calculate the emission factor for an electricity system' version 07 /**15**/. Accordingly simple operating margin ($EF_{grid,OM,y}$) is calculated to be 0.9242 tCO_2/MWh.

Data and parameters to be monitored:
The monitoring arrangement is included with a diagram (Figure 6) in the PDD. VVB confirms the same as part of site visit assessment and applicable host country regulations.

		Parameter	Description/Assessment
	1	Quantity of net electricity generation supplied by the project plant/unit to the grid in year *y* **$EG_{facility,y}$** (MWh/year)	$EG_{facility,y}$ is to be calculated from monitored gross electricity generation ($EG_{y,export}$) and gross import ($EG_{y,import}$) i.e. $EG_{facility,y} = EG_{y,export} - EG_{y,import.}$ $EG_{y,gross}$ and $EG_{y,import}$ are monitored continuously in two way energy meter and monthly readings are recorded jointly by EVN and project developer. The accuracy of energy meters to be met as per national standard (0.2S for main meter and 0.5S for back up meter) and to be calibrated at least once in three years as per national standard. Invoices raised for the net export of electricity shall be used to cross check the value used in emission reduction calculation.
Findings	N/A		
Conclusion	CCIPL confirms that the monitoring plan mentioned in the PDD is in accordance with the requirements mentioned in the monitoring methodology and the local regulatory requirements, as well the monitoring arrangements described in the monitoring plan are feasible within the project design. CCIPL is of the opinion that the monitoring plan will give opportunity for real measurement of achieved emissions reductions for 2 years after the crediting period.		

D.3. Start date, crediting period type and duration

Means of validation	**Start Date of the project activity**: GS4GG clause 4.1.39 (principle and requirement, version 1.2 of October 2019) sates 'the Project start date shall be the earliest date on which the Project Developer has committed to expenditures related to the implementation of the Project'. Examples of start date may be the date on which contracts have been signed for equipment or construction/operation services required for the Project'. In case of this project, PD executed equipment supply contract on 14/07/2020 which is the earliest date of real action for implementation of the project activity and clearly represents the start date. It has been noted that the project is a retroactive project which means the start date has occurred prior to the first submission of preliminary review information to GS (clause 4.1.49 (b) under principle and requirement). As per GS rule for retroactive projects, the first-time submission of documents for preliminary review should happen within one year of the start date, The GS preliminary review completed, and project got listed which clearly states the start date to be 14/07/2020 and hence meets all GS requirements for start date. **Crediting period and duration**: A renewable crediting period (5 years renewable) has been chosen for the project, starting from 31/10/2021 (commercial operation date) or from the date prior to two years from the date of registration with GS registry whichever is later. Since, it is the retroactive project, PP has chosen the period 2 years prior to the date of registration. This is in line with GS requirements.
Findings	N/A
Conclusion	CCIPL confirms that that duration and crediting period considered for the project activity meets the requirement of GS4GG.

D.4. Environmental impacts

Means of validation	The project being a wind power project does not have negative environmental impacts. The EIA report prepared by Power Engineering Consulting Joint Stock Company /**33**/ states 'the project location is far away from residential areas and not in areas of historical relics; favourable compensation and site clearance, no resettlement is required by the project activity'. The report states minimal impacts on environment from release of wastewater, solid waste, hazardous waste and on air against which mitigation measures are proposed. The approval on EIA has been received from Bac Lieu Provincial Peoples committee on 09/10/2019 /**28**/.
Findings	N/A
Conclusion	CCIPL confirms that the project does not result any negative environmental and social impact and meets the sustainable development criteria as defined by GS

	requirements.

D.5. Local stakeholder consultation

Means of validation	The local stakeholder consultation is found conducted following guideline as outlined in GS4GG 'stakeholder consultation & Engagement procedure, requirement and guidelines' and a stakeholder consultation report is prepared /**02**/. VVB cross checked the information provided in the stakeholder report during on-site assessment and other documents. The stakeholder meeting was held on 02/11/2021 at the people's committee of Hoa Thang commune, Bac Binh district, Binh Thuan provinc. The stakeholders, gold standard supported NGOs were invited via personal invitations, e-mail invitations at least 30 days in advance. In addition, invitation letter was announced/ listed at offices of commune people's committees and published at PD's company website and the documents were made available to VVB /02/. The same also confirmed from stakeholders during on-site interview. All the steps found performed as per the guideline. No negative comment or grievance found recorded during the stakeholder meeting. It is also noted that a continuous grievance mechanism as detailed during stakeholder meeting is found in practice. A grievance registry is placed at People's Committee of Hoa Thang commune and Thai Hoa Wind Power Plant office and VNEEC office where stakeholders can file and follow up any grievance. Stakeholders are found aware of the continuous grievance mechanism system. The project being a retroactive project, the feedback round was combined with the live stakeholder meeting as per GS requirement and completed by 01/01/2022 (60 days from the date of first invitation for feedback). The stakeholders were informed to provide feedback within 60 days during initial invitation itself and also during live stakeholder meeting. No comment found received as part of feedback round. Since, a continuous grievance mechanism is in place the feedback round meets the GS4GG requirements. **Mechanism to input continuous grievances**: As part of continuous grievance input mechanism, a Grievance Expression Process Book have been located in People's Committee of Hoa Thang commune and Thai Hoa Wind Power Project office. All the sites are appropriate publicly accessible location where local stakeholders can provide their feedback about the project. Project Participant will check the comments in the book on a regular basis, and record responses. They will be respectful to the views of stakeholders and suggest alternative solutions or compromises wherever possible. In addition, contact details are provided to register any grievance. The mechanism was checked during on-site assessment found to be in place.
Findings	CAR 04 was raised as stakeholder consultation section was not complete in the PDD which PP updated in the revised PDD and hence CAR is closed as discussed in Appendix 4 of this report.
Conclusion	CCIPL confirms that the stakeholder consultation process held for the project activity meets the requirement of GS4GG.

D.6. Sustainable development co-benefits

Means of validation

The project directly benefits SDG 8 and SDG 7 apart from SDG 13 which are explained below:

SDGs	Parameter	Description/Assessment
8	Average hourly earnings of female and male employees, by occupation, age and persons with disabilities (Indicator 8.5.1) • Quality of employment; • Quantitative	The project employs people to run the project and therefore, 'average hourly earnings of female and male employees, by occupation, age and persons with disabilities' is a correct SDG indicator (8.5.1) to be monitored to measure target SDG of 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). Hence,

	employment and income generation; and • Equal pay for work of equal value for both men and women.	the SDG identification is correct. PD proposes to monitor 'Quality of employment, Quantitative employment and income generation; and Equal pay for work of equal value for both men and women'. **Way of monitoring**: Quality training to be provided to the employees, medical insurance, regular health-check as well as social insurance to be provided to the employees. The employees of the project are paid higher than the average monthly income per capita of the province. Men and women are paid equally for work of equal value.
7	Renewable energy share in the total final energy consumption (Indicator 7.2.1) - Net electricity supplied to the national grid by the proposed project	The project generated electricity from renewable energy and supplies to grid which is dominated by fossil fuel-based plants. Hence, the project directly contributes to SDG 7 and hence PD correctly identified indicator (7.2.1) for monitoring the identified indicator. **Way of monitoring**: The project owner will conduct plantation in the campus such as powerhouse, transformer station site, coastal area to restore the green cover, create nice scenery and improve the ecosystem as well as the landscape and soil conditions in the area. The project owner will pay money to the Government to plant new equivalent forest area to replace the area occupied by the project activity.

Monitoring of parameters linked to Safeguarding Principles:

	Parameter	Description/Assessment
1	Erosion and/or water body stability (Safeguarding principle 8.2) - Cultivation of plant and afforestation for impacted areas	**Mitigation Measure:** Cultivation of plant and afforestation for impacted areas. **Way of monitoring**: The project owner will conduct plantation in the campus such as powerhouse, transformer station site, coastal area to restore the green cover, create nice scenery and improve the ecosystem as well as the landscape and soil conditions in the area. The project owner will pay money to the Government to plant new equivalent forest area to replace the area occupied by the project activity.
2	Hazardous and Non-hazardous waste (Safeguarding principle 9.5) - Hazardous waste (lubricant, grease, light bulb, accumulator, etc.); and -Non-hazardous	**Mitigation Measure:** Safe disposal of Hazardous waste (lubricant, grease, light bulb, accumulator, etc.); and Non-hazardous waste (domestic waste). **Way of monitoring**: Hazardous wastes are collected and treated by the third authorized party in accordance with local laws and related regulations; and Non-hazardous wastes are collected and treated in accordance with local laws and related regulations.

		waste (domestic waste).	
	3	High conservation value areas and critical habitats (Safeguarding principle 9.5) - Number of dead birds	**Parameter:** Number of birds that are killed by wind turbines **Way of monitoring**: PD via interview with people of the affected area shall monitor the number of birds getting killed from wind turbines and accordingly take appropriate measures.
Findings	CAR 05 was raised as SDG impact tool was not submitted and expert opinion was requested which PP has appropriately addressed with supporting documents and hence CAR is closed as discussed in Appendix 4 of this report.		
Conclusion	CCIPL confirms that sustainability monitoring plan and indicators included in the PDD confirm to the sustainable development requirements of GS4GG.		

SECTION E. Internal quality control

>>The final validation report before being submitted to the client is subjected to an independent technical review to confirm that all validation activities has been completed according to the pertinent CCIPL's procedures. The technical review is performed by a technical reviewer(s) qualified in accordance with the CCIPL's qualification procedure.

SECTION F. Validation opinion

>> Carbon Check (India) Pvt. Ltd. has performed validation of the project activity "Thai Hoa Wind Power Project" in Viet Nam with regard to the relevant requirements for GS VER activities.

The review of the project design document and the subsequent follow-up interviews have provided CCIPL with sufficient evidence to determine the fulfilment of the stated criteria.

The project correctly applies the approved baseline and monitoring methodology "ACM0002", "Grid-connected electricity generation from renewable sources", version 20.

The project involves the construction of an on-shore wind power plant in Hoa Thang commune, Bac Binh district, Binh Thuan province, Viet Nam with a total capacity of 90 MW consisting of 18 WTG (5 MW*18). The electricity generated by the project activity will be supplied to the national grid of Viet Nam which results in reduction of CO_2 emissions which otherwise would have generated in fossil fuel dominated grid, that are real, measurable and give long-term benefits to the mitigation of climate change. It is demonstrated that the project is not a likely baseline scenario. Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity.

The total emission reductions from the "Thai Hoa Wind Power Project" are estimated to be on average 214,728 tCO_2e per year over the selected 5 years renewable crediting period. The emission reduction forecast has been checked and it is deemed likely that the stated amount is achieved given that the underlying assumptions do not change.

The monitoring plan provides for the monitoring of the project's emission reductions and of the sustainable development indicators. The monitoring arrangements described in the monitoring plan are feasible within the project design and it is CCIPL's opinion that the project participants are able to implement the monitoring plan.

In conclusion, it is CCIPL's opinion that the project activity "Thai Hoa Wind Power Project" in Viet Nam, as described in the PDD, version 2.6 of 26/07/2023 meets all relevant UNFCCC requirements for the GS VER and all relevant host Party criteria and correctly applies the baseline and monitoring methodology "ACM0002", "Grid-connected electricity generation from renewable sources", version 20.0.

Appendix 1. Abbreviations

Abbreviations	Full texts
BE	Baseline Emissions
CAR	Corrective Action Request
CCIPL	Carbon Check India Pvt. Ltd.
CDM	Clean Development Mechanism
CDM M&P	Modalities and Procedures CDM
CDM-PCP	Clean Development Mechanism Project Cycle Procedure
CDM-PS	Clean Development Mechanism Project Standard
CDM-VVS	Clean Development Mechanism Validation and Verification Standard
CH_4	Methane
CL	Clarification Request
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
DNA	Designated National Authority
DOE	Designated Operational Entity
EB	Executive Board
EIA	Environmental Impact Assessment
ER	Emission Reductions
ER	External Resourses
ERPA	Emission Reduction Purchase Agreement
FAR	Forward Action Request
GHG(s)	Greenhouse gas(es)
GS4GG	Gold Standard for Global Goals
GWP	Global Warming Potential
IPCC	Intergovernmental Panel on Climate Change
LoA	Letter of Approval
LSC	Local Stakeholder Consultation
MoV	Means of Verification
MP	Monitoring Plan
MR	Monitoring Report
NGO	Non-governmental Organization
ODA	Official Development Assistance
PDD	Project Design Document
PE	Project Emission
PP(s)	Project Participant(s)
Ref.	Document Reference
SD	Sustainability Development
SDG	Sustainable Development Goals
SMP	Sustainability Monitoring Plan
SS(s)	Sectoral Scope(s)
UNFCCC	United Nations Framework Convention on Climate Change
VER	Voluntary Emission Reduction
VNEEC	Energy and Environment Consultancy Joint Stock Company

VVB	Validation and Verification Body
VVS	Validation and verification standard

Appendix 2. Competence of team members and technical reviewers

Carbon CHECK

Carbon Check (India) Private Ltd.

Mr. Champok Buragohain

has been qualified as per CCIPL's internal qualification procedures, in accordance with requirements of Accreditation Standard (version 07.0):

For following functions:

Validator	☒	**Team Leader**	☒	**Technical reviewer**	☒		
Verifier	☒	**Technical Expert**	☒	**Local Assessor**[1]	☒		

In the following Technical Areas:

TA 1.1	☒	**TA 4.1**	☐	**TA 9.1**	☐	**TA 13.1**	☒
TA 1.2	☒	**TA 5.1**	☐	**TA 9.2**	☐	**TA 13.2**	☒
TA 3.1	☒	**TA 5.2**	☐	**TA 10.1**	☐	**TA 14.1**	☐

Mr. Vikash Kumar Singh
Compliance Officer

Mr. Amit Anand
CEO

Date of Approval
24/12/2021

Valid Till
23/12/2022

Revision History of the Document

01/03/2020[2]	Interim Revision for office address change
01/09/2020	Interim Revision for CCIPL logo change
24/12/2020	Annual Revision
24/12/2021	Annual Revision

[1] India

[2] Please refer to previous version of competency certificates for the revision history

CARBON CHECK (INDIA) PRIVATE LIMITED
CIN: U74930DL2012PTC232495
Regd. Off: 2071/38, 2nd Floor, Naiwala, Karol Bagh, New Delhi - 110005
Corporate off: Unit No. 1701, Logix City Centre Office Tower, Plot No. BW-58, Sector-32 Noida, Uttar Pradesh
Tel: +91 120 4373114 | **URL:** www.carboncheck.co.in | **e-mail:** info@carboncheck.co.in

Carbon
CHECK

Carbon Check (India) Private Ltd.

Mr. Nguyen Hong Ngoc Trang

has been qualified as per CCIPL's internal qualification procedures, in accordance with requirements of Accreditation Standard (version 07.0):

For following functions:

Validator	☒	**Team Leader**	☒	**Technical reviewer**	☐
Verifier	☒	**Technical Expert**	☒	**Local Assessor**[1]	☒

In the following Technical Areas:

TA 1.1	☒	**TA 4.1**	☐	**TA 9.1**	☐	**TA 13.1**	☒
TA 1.2	☒	**TA 5.1**	☐	**TA 9.2**	☐	**TA 13.2**	☐
TA 3.1	☐	**TA 5.2**	☐	**TA 10.1**	☐	**TA 14.1**	☐

Mr. Vikash Kumar Singh

Mr. Amit Anand
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[1] Vietnam

2 Please refer to previous version of competency certificates for the revision history.

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Carbon CHECK

Carbon Check (India) Private Ltd.

Ms. Indumathi. C

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TA 1.2	☒	**TA 5.1**	☐	**TA 9.2**	☐	**TA 13.2**	☒
TA 3.1	☒	**TA 5.2**	☐	**TA 10.1**	☐	**TA 14.1**	☐

Mr. Vikash Kumar Singh
Compliance Officer

Mr. Amit Anand
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Tel: +91 120 4373114 | **URL:** www.carboncheck.co.in | **e-mail:** info@carboncheck.co.in

Appendix 3. Documents reviewed or referenced

No.	Author	Title	References to the document	Provider
01	VNEEC	GS4GG key project information and project design document (PDD) for the project activity 'Thai Hoa Wind Power Project'	version 2.1 of 06/10/2021, version 2.2 of 28/09/2022, version 2.3 of 31/10/2022, version 2.4 of 06/01/2023, version 2.5 of 08/05/2023 version 2.6 of 26/07/2023	PP
02	VNEEC	GS4GG stakeholder consultation report for 'Thai Hoa Wind Power Project'	Version 2.2 of 28/09/2022	PP
03	VNEEC	Preliminary review under GS4GG for the project activity 'Thai Hoa Wind Power Project' GS 11251	Review form	PP
04	UNFCCC	ACM0002: Grid-connected electricity generation from renewable sources	version 20	Publicly available
05	Carbon Check & Swiss Carbon Value Ltd.	GS validation contract for the project ''Thai Hoa Wind Power Project"	05 November 2021	VVB
06	VNEEC	Emission reduction worksheet (03_ER and Project IRR_Spreadsheet_Ver 2.1.XLS')	version 2.2 of 28/09/2022	PP
07	Gold Standard	Site visit and remote audit requirements and procedures	Version 1.0 of 17/11/2021	Publicly available
08	Gold Standard	PRINCIPLES & REQUIREMENTS	Version 1.2 of October 2019	Publicly available
09	Ministry of Natural Resources and Environment	Vietnam national electricity grid emission factor for 2020	http://dcc.gov.vn/van-ban-phap-luat/1081/Nghien-cuu,-xay-dung-he-so-phat-thai-(EF)-cua-luoi-dien-Viet-Nam-nam-2020-(k%C3%A8m-CV-1316/BDKH-TTBVTOD).html	PP
10	Pacific-Binh Thuan Energy Joint Stock Company & Viet Nam Electricity (EVN)	Power Purchase Agreement	Contract No. 12/2019/HD-NMDG-THAIHOA	PP
11	Swiss Carbon Value Ltd. & Pacific-Binh Thuan Energy Joint Stock Company	Emission reduction purchase agreement	Dated 02/07/2021	PP
12	Pacific-Binh Thuan Energy Joint Stock Company & Siemens Gamesa Consortium	Supply, installation and commissioning agreement for 90 MW wind firm consisting of 18 WTGs of SG 5.0–145 model.	Dated 14 July 2020	PP
13	Power Engineering Consulting Joint Stock Company	Feasibility study report of Thai Hoa Wind Power Project	June 2019	PP

14	Pacific-Binh Thuan Energy Joint Stock Company	Declaration confirming the project Thai Hoa Wind Power Project -90 MW only considered for GS carbon credit.	Dated 18 September 2021	PP
15	UNFCCC	Methodological "tool to calculate the emission factor for an electricity system"	Version 7	Publicly available
16	UNFCCC	Methodological "tool for the demonstration and assessment of additionality"	Version 7	Publicly available
17	UNFCCC	CDM validation and verification standard for project activities	Version 3.0	Publicly available
18	Socialist Republic of Viet Nam	Electricity Law	No. 28/2004/QH11	Publicly available
19	Socialist Republic of Viet Nam	Law on Economical and Efficient use of energy	Law No. 50/2010/QH12	Publicly available
20	Department of Climate Change – Ministry of Natural Resources and Environment	Emission factor of Vietnam's electricity grid in 2020	http://dcc.gov.vn/van-ban-phap-luat/1081/Nghien-cuu,-xay-dung-he-so-phat-thai-(EF)-cua-luoi-dien-Viet-Nam-nam-2020-(k%C3%A8m-CV-1316/BDKH-TTBVTOD).html	Publicly available
21	The World Bank	World Bank Country and Lending Groups- country classification	https://datahelpdesk.worldbank.org/knowledgebase/articles/906519	Publicly available
22	Ministry of Industry and Trade, Socialist Republic of Viet Nam	Report on supplemental planning of wind power projects – No. 1931/BCT-DL	Dated 19/03/2020	Publicly available
23	EVN	Annual report 2021	https://en.evn.com.vn/userfile/User/huongBTT/files/2021/10/EVNAnnualReport2021%20final%2022_10_2021.pdf	Publicly available
24	Pacific-Binh Thuan Energy Joint Stock Company	Project layout document		PP
25	Ministry of industry and trade, electricity and renewable energy authority	Approval of feasibility study report- Thai Hoa Wind Power Plant Project, in Binh Thuan province	No. 1784/DL-NLTT, dated 24/10/2019	PP
26	UNFCCC	Methodological tool: Positive lists of technologies	Version 3.0	Publicly available
27	United Nations treaty collection	Status of treaties	https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=IV-2&chapter=4&clang=_en	Publicly available
28	People's Committee of Binh Thuan Province	Approval on the environmental impact assessment report- Thai Hoa Wind Power Plant Project	No. 2604/QD-UBND dated 09/10/2019	PP
29	People's Committee of Binh Thuan Province	Project investment license	No. 1376/QD-UBND, Dated 03/06/2019	PP
30	International Labour	Labour codes, general labour and employment acts, Vietnam	https://www.ilo.org/dyn/natlex/natlex4.detail?p_lang=en&	Publicly available

	Organization		p_isn=91650	
31	Wikipedia	Corruption in Vietnam	https://en.wikipedia.org/wiki/Corruption_in_Vietnam	Publicly available
32	UNFCCC	Baseline, project and/or leakage emissions from electricity consumption and monitoring of electricity generation	Version 3.0	Publicly available
33	Power Engineering Consulting Joint Stock Company	Report on environmental impact assessment- *Thai Hoa Wind Power Project* -90MW	September 2019	PP
34	**Nguyen Phu Hai**, Deputy director – Power Engineering Consulting Joint Stock Company	Independent expert opinion for *Thai Hoa Wind Power Project* – GS 11251	Dated 30/08/2022	PP
35	Ministry of Industry and trade electricity regulatory authority of Vietnam	Electricity generation license	No. 249/GP-DTDL Date of issue: 06 Oct 2021	PP
36	Viet Nam Electricity Power Trading Company	Commercial operation date of Thai Hoa Wind Power Plant	No. 6788/EPTC-KDMD	PP
37	UNFCCC	Methodological Tool 'Investment Analysis'	Version 11	Publicly available
38	State Bank of Vietnam	Long-term lending rates: https://www.sbv.gov.vn/webcenter/ShowProperty?nodeId=/UCMServer/SBV402031//idcPrimaryFile&revision=latestreleased		Publicly available
39	UNFCCC	Tool to determine the remaining lifetime of equipment	Version 1.0, EB 50, Annex 15	Publicly available
40	UNFCCC	Common practice tool	version 03.1	Publicly available
41	State Bank of Vietnam	The State Bank of Vietnam quoted the central rate of VND versus USD on 10/31/2019	https://www.sbv.gov.vn/TyGia/faces/Aiber.jspx?_afrLoop=12341168082419873&_afrWindowMode=0&_adf.ctrl-state=c0dya6o36_17	Publicly available
42	People's Committee of Binh Thuan Province	Decision On leasing land to Pacific - Binh Thuan Energy Joint Stock Company land to invest in Thai Hoa wind power plant project in Hoa Thang commune, Bac Binh district.	No: 1517/QD-UBND 2nd July 2020	PP
43	People's Committee of Binh Thuan Province	Land lease agreement	No: 16/HDTD 26th March 2021	PP

Appendix 4. Clarification requests, corrective action requests and forward action requests

Table 1. CLs from this validation

CL ID	01	**Section no.**	D.2.7	**Date:** 06/09/2022
Description of CL				
1. Clarify why the tariff rate is fixed for 25 years in the investment analysis? *2. Basis for three years construction period and break up of the investment made in those first three years.*				
Project participant response				**Date:** 28/09/2022
1. The feed in tariff (FIT) and application period were based on the most available information at the time of making the investment decision. According to the Prime Minister's Decision No.39/2018/QD-TTg dated 10 September 2018 on amendment and adding some articles of Prime Minister's Decision No.37/2011/QD-TTg on 29 June 2011 on promotion mechanism on wind power projects in Vietnam, the FIT of 8.5 cent/kWh (FIT 1) is fixed for on-shore wind power plants in 20 years from the commercial operation date (COD), the FIT 1 is only applied to plants with COD on or before 31/10/2021. Thai Hoa WPP was put into COD on 31/10/2021 so the fixed FIT 1 of 8.5 cent/kWh is applied to this plant for 20 years. After 20 years from the COD, the power purchase agreement (PPA) with EVN will be renegotiated based on the most updated regulations at that time. However, the project owner still expects that this FIT 1 will be maintained throughout the 25 years lifetime of the project activity and therefore the fixed FIT 1 for 25 years has been applied in the investment analysis. *2. In addition, new FIT (FIT 2) for wind power projects has not been issued by the government yet, so wind power projects completed after 31/10/2021 cannot be put into COD until now. Refer to the FIT for another renewal energy source – solar power, FIT 1 for Solar is 9.35 cent/kWh (based on Decision No.11/2017/QD-TTg dated 11/04/2017 on "Mechanism for encouragement of development of solar power in Vietnam") however FIT 2 for Solar is only 7.09 cent/kWh, it is decreased by 24% compared to FIT 1 for solar (based on Decision No. 13/2020/QD-TTg of the Prime Minister on "Mechanisms to Promote the Development of Solar Power Projects in Viet Nam"). Therefore, the scenario of increasing FIT for wind power in the future may not be feasible and the applied fixed FIT 1 for whole lifetime of the project activity in the investment analysis is considered as a conservative approach. The investment schedule and breakdown of the investment cost are sourced from the Feasibility Study Report which was prepared by the third party and has been approved by the national authority. This schedule is also compatible with the actual implementation of the project activity in 3 years from 2019 to 2021.*				
Documentation provided by project participant				
N/A				
VVB's assessment				**Date:** 10/10/2022
1. It is noted from host country regulation applicable at the time investment decision and subsequent execution of PPA, the project proponent considered the correct tariff rate for 20 years. For rest 5 years upto the technical life of the project, PP considered the same tariff rate as there is no appropriate reference to take any other rate. VVB noted even after a 100% increase in tariff rate from 21st year and applying the same upto 25th year the IRR doe not cross the benchmark. Hence, accepted by VVB. 2. It is noted the construction period and break-up of the investment is as per approved feasibility report and correctly considered for investment analysis at the time of investment decision. PP's response is accepted and CL is closed.				

Table 2. CARs from this validation

CAR ID	01	**Section no.**	D.1	**Date:** 06/09/2022
Description of CAR				
1. PP is requested to provide a table with major chronology of events so as to justify the investment decision considering carbon credit, start date justification, GS preliminary review and commercial operation date. *2. The start date of crediting period is not consistent with the commissioning date of the project. PD should also specify the start date of crediting period will be maximum two years prior to date of registration of the project under GS as per GS retroactive project rule.*				
Project participant response				**Date:** 28/09/2022
1. The list of key events of the project activity has been added in Section A.1 of the revised PDD. *2. The start date of 1st crediting period has been revised to the COD of the project activity. The statement regarding maximum retroactive period has been added in the revised PDD. The start date of crediting period may be updated during the GS design review phase.*				
Documentation provided by project participant				
The revised PDD and IRR – ER calculation sheet.				
VVB's assessment				**Date:** 10/10/2022
The necessary corrections are found done in the updated PDD as per actual project scenario, Hence, CAR is closed.				

CAR ID	02	**Section no.**	D.2.5	**Date:** 06/09/2022
Description of CAR				
1. PD is requested to outline and discuss the applicable national and sectoral policy/regulations and its impact in baseline scenario. *2. PD has to refer 'Tool to calculate the emission factor for an electricity system' version 7 and provide steps followed to determine the grid emission factor. The PDD should be transparent against para 72 and 73 of the tool.*				
Project participant response				**Date:** 28/09/2022
1. The applicable national and sectoral policy/regulations and its impact in baseline scenarios have been discussed in the revised GS-PDD. *2. The emission factor of Vietnam national electricity gird is calculated and published by the national authority - Department of Climate Change under Ministry of Natural Resources and Environment (DNA of Vietnam) every year. The most up-to-date gird emission factor for year 2020 was calculated by DNA of Vietnam based on "Tool to calculate the emission factor for an electricity system", version 07.0. The PD has applied the GEF 2020 published by DNA of Vietnam on 03/01/2022 for this project activity. The GEF 2020 will be fixed in the first crediting period. This information has been elaborated in the revised PDD.*				
Documentation provided by project participant				
VVB's assessment				**Date:** 10/10/2022
The applicable national and sectoral policies are discussed appropriately in the updated PDD. Also, the latest grid emission factor is considered for the project correctly. Hence, CAR is closed.				

CAR ID	03	**Section no.**	D.2.9	**Date:** 06/09/2022
Description of CAR				
1. It is noted PD has referred Gird emission factor for 2019, although a latest data is available for the country. PD is requested to clarify the same. *2. Please re-check the paragraph 'So in the renewal crediting period, the CM emissions factor is derived as follows'*				
Project participant response				**Date:** 28/09/2022
1. The latest GEF for 2020 was published by DNA of Vietnam on 03/01/2022, it has been applied to calculate baseline emissions in the revised ER sheet and PDD. *2. The information has been corrected in the revised PDD.*				
Documentation provided by project participant				

The revised IRR-ER sheet and PDD
VVB's assessment **Date:** 10/10/2022
Correction in applying correct grid emission factor is found done appropriately in the updated PDD and hence CAR is closed.

CAR ID	04	**Section no.**	D.5	**Date:** 06/09/2022
Description of CAR				
The stakeholder consultation section in section E.1 is not complete. Also clarify whether LSCR is submitted to GS within 2 months from the date of stakeholder consultation and provide evidence for the same.				
Project participant response				**Date:** 28/09/2022
Section E.1 has been updated in the revised PDD. *The LSCR has been prepared according to the GS requirements. However, the validation process was delayed due to COVID 19 so the LSCR will be submitted to the GS registry along with the PDD, IRR-ER sheet and other supporting documents during the design review phase. All supporting documents for the LSCR have been submitted to the VVB for review and approval.*				
Documentation provided by project participant				
The revised PDD				
DOE assessment				**Date:** 10/10/2022
The stakeholder process was found conducted as per GS rules and procedure and a complied LSCR is prepared. Supporting documents were checked and VVB could confirm the stakeholder consultation process was as per GS rule and procedure. However, as GS rule stipulates submission of LSCR within 2 months from the date of stakeholder consultation, PP is requested to investigate the deviation proposed and submit for registration accordingly. CAR is closed. FAR 1 is raised to confirm the acceptance of deviation from GS during registration stage of the project.				

CAR ID	05	**Section no.**	D.6	**Date:** 06/09/2022
Description of CAR				
1. Kindly submit the SDG impact tool for the project and elaborate the continuous grievance input mechanism in place for the project activity. *2. PD shall provide expert opinion for the assessment of the following SG principles:* *Principle 8.1 Impact on Natural Water Patterns/Flows* *Principle 8.2 - Erosion and/or Water Body Instability* *Principle 9.10 - High Conservation Value Areas and Critical Habitats Principle 9.11 - Endangered Species*				
Project participant response				**Date:** 28/09/2022
1. *The SDG impact tool for the project activity is attached herewith. The continuous grievance input mechanism has been elaborated in the revised PDD.* 2. *The PPs have received the assessment opinions about safeguarding principles for Thai Hoa wind power plant which is prepared by the independent expert – Mr. Hai Phu – Power Engineering Consulting JSC 2. He has more than 25 years of experience in the field of natural resources and environment including environmental, social and economic impacts assessment for power plants. Power Engineering Consulting JSC 2 is the consultancy unit who prepared Environmental Impact Assessment Report for Thai Hoa WPP. The assessment opinions are submitted to the VVB for review. These assessments have been updated in the revised PDD.*				
Documentation provided by project participant				
The SDG impact tool and the revised PDD. *The independent expert opinion for Thai Hoa WPP.* *The revised PDD.*				
DOE assessment				**Date:** 10/10/2022
The SDG impact tool is submitted in consistent with the SDGs identified and VVB found the same to be appropriate for the project activity. An independent expert opinion has been provided for the project activity confirming the negative impact of the project on *Natural Water Patterns/Flows (Principle 8.1), Erosion and/or Water Body Instability (Principle 8.2), High Conservation Value Areas and Critical Habitats Principle (Principle 9.10) and Endangered Species (Principle 9.11).* *Hence, response is accepted and CAR is closed.*				

Table 3. FARs from this validation

FAR ID	N/a	**Section no.**		
Description of FAR				
Project participant response				**Date:** DD/MM/YYYY
Documentation provided by project participant				
DOE assessment				**Date:** DD/MM/YYYY

- - - - -

Document information

Version	*Date*	*Description*
04.0	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 editorial improvements.
03.1	11 January 2018	Editorial revision to remove an erroneously included instruction paragraph in section D.2 (Identification of project type).
03.0	31 October 2017	Revision to align with the requirements of the "CDM validation and verification standard for project activities" (version 01.0).
02.0	22 July 2016	EB 90, Annex 3 Revision to include provisions related to automatically additional project activities.
01.0	23 March 2015	Initial publication.

Decision Class: Regulatory
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Business Function: Registration
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