



**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	Hoa Binh 1 - Phase 2 Wind Power Project
GS Reference Number	GS 10975
Scale of the project activity	☒ Large-scale ☐ Small-scale
Version number of the validation report	2.1
Completion date of the validation report	06/04/2022
Version number of the PDD to which this report applies	Version 3.2 of 05/04/2022
Project participants	Swiss Carbon Value Ltd.
Host Party	Viet Nam
Applied methodologies and standardized baselines	ACM0002 - Grid-connected electricity generation from renewable sources (version 20.0)
Mandatory sectoral scopes	1
Conditional sectoral scopes, if applicable	NA
SDGs targeted from the project activity	SDG 7, SDG 8 and SDG 13
Estimated amount of annual average GHG emission reductions or GHG removals by sinks	141,213 tCO ₂ e
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 project activity involves the construction of an off-shore wind power plant in Vinh Hau and Vinh Hau A communes, Hoa Binh district, Bac Lieu province, Viet Nam with a total capacity of 50 MW consisting of 13 WTG (4 MW * 3 & 10* 3.8 MW). The electricity generated by the project activity will be supplied to the national grid of Viet Nam. The expected electricity generation from the project is 157.56 GWh which is expected to reduce an average of 141,213 tCO₂e per year emissions which otherwise would have been emitted from equivalent electricity generation from conventional fossil fuel-based power plants. In addition to its positive impact on SDG 13, the project is expected to contribute positively to SDG 7 and SDG 8.

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 off-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. Off-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, off-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 eleven (11) findings which include:

- 08 (Eight) Corrective Action Requests (CARs);
- 03 (Three) Clarification Requests (CLs);

All findings are closed as discussed in Appendix 4 of this report.

Conclusion:

Carbon Check (India) Private Ltd. concludes the validation with a positive opinion that the Project Activity "Hoa Binh 1 - Phase 2 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	EI	Buragohain	Champok	CC IPL	√	×	√	√
2.	Local Expert	EI	Trang	Ngoc	CC IPL	√	×	√	√

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	Anand	Amit	CC IPL
2.	Approver	IR	Singh	Vikash Kumar	CC IPL

SECTION C. Means of validation**C.1. Desk/document review**

>> The PDD version 2.0 of 30/06/2021, version 3.0 of 02/09/2021, version 3.1 of 24/12/2021 and version 3.2 of 05/04/2022 /01/, in particular the applicability of the methodology /04/, the baseline determination, emission reductions calculation worksheet '03.ER spreadsheet_Version 2.0' /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

On-site visit is not done for the validation activity due to national and international restrictions on travel due to COVID-19 impact. VVB could not further postpone the site visit due to timeline agreed as per validation contract between VVB and project representative (PP). Therefore, VVB followed GS rule update 'COVID-19: Interim measures' dated 17/05/2021 paragraph 4.1.1 (b) /07/ and remote audit is done in place of on-site audit:

The validation team has carried out remote interviews and video call in order to assess the information included in the project design document, stakeholder consultation report and monitoring measurement procedures adopted for monitoring the project activity. During the desk review, the relevant records related to project design, implementation and operation were checked. Project framework agreements, technology details, implementation plan, interview with stakeholders engaged and telephonic interview and video call with implementing agency and picture of project systems were taken. Details obtained are cross checked with documents available to cross check consistency of information.

Telephonic interview was performed by validation team as given in below table:

C.3. Interviews

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Dao hai	Linh	General Director – Cong ty TNHH Dien gio Hoa Binh 1 Giai doan 2	31/08/2021	Project Design, ownership details, carbon credit sharing arrangements, monitoring and reporting arrangements, QA/QC procedures, baseline assessment, project technology.	Champak Buragohain & Trang Ngoc
2.	Hoang Van	Cuong	Project Manager – Cong ty TNHH Dien gio Hoa Binh 1 Giai doan 2	31/08/2021		
3.	Nguyen Tien	Hai	Technical Manager - VNEEC	31/08/2021	PDD development, GS requirements, Emission reduction calculations, methodology applicability, start date justification etc.	
4.	Le Cam	Tu	Local stakeholder	31/08/2021	Stakeholder consultation process, impact from the project, positive and negative opinions etc.	
5.	Ly Kim	Tham	Local stakeholder	31/08/2021		

C.4. Sampling approach

>> Not applicable. The project activity does not involve any sampling approach related to its baseline scenario and monitoring plan.

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	1	2	
Application and selection of methodologies and standardized baselines			
- Application of methodologies and standardized baselines		1	
- Deviation from methodology and/or methodological tool			
- Clarification on applicability of methodology, tool and/or standardized baseline			
- Project boundary, sources and GHGs			
- Baseline scenario		1	
- Demonstration of additionality		1	
- Estimation of emission reductions or net anthropogenic removals		1	
- Monitoring plan		1	
Start date, crediting period type and duration			
Environmental impacts			
Local stakeholder consultation	1		
Sustainable development co-benefits		1	
Approval			
Authorization			
Modalities of communication			
Global stakeholder consultation			
Others (GS Preliminary review)			6
Total	1	8	6

SECTION D. Validation findings

D.1. Description of project activity

Means of validation	The purpose of the project activity is to generate electricity from an off-shore wind power plant and export to national grid which replaces equivalent amount of electricity from fossil fuel dominated grid /09/. The project is an initiative by Cong ty TNHH Dien Gio Hoa Binh 1 Giai Doan 2 (project owner) and involves 13 Wind Energy Generators (4 MW * 3 & 10* 3.8 MW) in Vinh Hau and Vinh Hau A communes, Hoa Binh district, Bac Lieu province, Viet Nam. The ownership of project, project capacity, location and export to grid has been confirmed from power purchase agreement copy of the project between project owner and Vietnam Electricity /10/. Energy and Environment Consultancy Joint Stock Company is engaged as consultant for developing the project under GS VER and Swiss Carbon Value Ltd. is the buyer of carbon credited generated from the project activity /11/. Scenario existing prior to the implementation of the project activity In the absence of the project activity the equivalent amount of power would have been generated in the fossil fuel dominated grid. This is evident from the electricity generation scenario of the host country that the grid is dominated by fossil fuel based power plants /09/. There is no regulation in Viet Nam which mandates electricity generation from wind power or prohibit from fossil fuel sources. Hence, it is confirmed that electricity equivalent to the project activity would have been generated in grid from other power plants added to the grid. Technology(ies) employed: The project technology involves 13 WTGs each of capacity between 3.8 to 4 MW V150-4.2 MW model with hub height of 105 meter manufactured by Vestas. The technical life of each WTG is 20 years. CCIPL confirms the technology implemented reflects the current good practice in the host country. The technology
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	given in the PDD is consistent with the actual planning and implementation of the project activity. The validation team confirmed the project technology and its implementation from supply agreement with technology supplier /12/. The annual gross energy generation of the project is estimated to be 157.57 GWh/year as per feasibility study report /13/. Project Location: The project is located in Vinh Hau and Vinh Hau A communes, Hoa Binh district, Bac Lieu province, Viet Nam. The geo-coordinates of the project WTGs as provided in the PDD are confirmed to be correct as per supply agreement with technology supplier /12/. Start Date of the project activity: GS4GG clause 4.1.39 (principle and requirement) states 'The Project start date is the earliest date on which the Project Developer has committed to expenditures related to the implementation of the Project. In this case, project developer has executed equipment supply agreement on 29/07/2020 which is the earliest real action date for execution of the project activity /12/. Therefore, the start date is correctly considered for the project activity. 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 4.1.42 (b) under principle and requirement) /08/. Project proponent submitted initial documents for GS preliminary review on 14/01/2021 and the start date of the project activity is on 29/07/2020. Therefore, project proponent has submitted the project documents for preliminary review within one year of the project start date. Crediting period and estimated Emission Reductions A renewable crediting period has been chosen for the project, starting from 01/10/2021 (expected commissioning date) or maximum two years from the date of registration of project at GS whichever. Total length of crediting period is 15 years (renewable at every 5 years). Avoidance of double counting of project devices with other project activities: The project developer has considered the project only for claiming carbon credit under GS mechanism. PD has provided declaration confirming the project being taken only under GS mechanism /14/. Validation team also checked other publicly available registry such as UNFCCC, VCS and confirm that the project is neither considered nor rejected in other carbon credit mechanism.
Findings	CAR 1 was raised as break up to two different capacity WTG was not provided in the PDD which has been updated in the PDD and found to be consistent with equipment supply contract and hence accepted. CAR is closed.
Conclusion	CC IPL 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", "Grid-connected electricity generation from renewable sources", version 20 /04/. The proposed project activity meets the criteria defined in the baseline methodology as described below: - The proposed activity is a, Greenfield project, which involves the installation of a new grid- connected renewable power generation facility (i.e. 50 MW wind farm). CC IPL confirmed the same from the supply agreement executed with technology supplier /12/ and PPA executed with Viet Nam Electricity /10/. Hence the methodology is applicable to the proposed project activity. - The proposed project activity is the installation of a new 50 MW wind farm with brand new 13 Nos. of Vestas V150-4.2 MW model WTGs. There is no
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	capacity addition, retrofitting or replacements in the proposed project activity. CCIPL confirmed the same from the supply agreement with technology supplier for the supply of 13 numbers of Vestas V150-4.2 MW model WTGs /12/. - The proposed project activity is not hydro power project. CCIPL confirmed the same from the supply agreement executed with technology supplier /12/ and PPA executed with Viet Nam Electricity /10/. - The proposed project activity is not fuel switch project from fossil fuels to renewable energy sources, biomass fired power plants and the hydro power plant that result in new reservoir. CCIPL confirmed the same from the supply agreement executed with technology supplier /12/ and PPA executed with Viet Nam Electricity /10/. - The proposed project activity does not involve any retrofitting, replacements or capacity addition. CCIPL confirmed the same from the supply agreement executed with technology supplier /12/ and PPA executed with Viet Nam Electricity /10/. The project activity applies the following methodological tools: • Methodological “tool to calculate the emission factor for an electricity system” version 07 /15/. • Methodological “tool for the demonstration and assessment of additionality” version 07.0.0 /16/.
Findings	CL 1 was raised to clarify the application of some mandatory tools referred by the applied methodology which PD included in the updated PDD and hence CL is closed.
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	According to the approved baseline and monitoring methodology “ACM0002”, “grid-connected electricity generation from renewable sources”, version 20.0 “the spatial extent of the project boundary includes the project power plant and all power plants connected physically to the electricity system that the CDM project power plant is connected to”. Therefore, all project WTGs and connected National grid is covered under the project boundary. 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
	Leakage	N/A
	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.	
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 /04/, 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, according to paragraph 94 of the CDM-VVS, version 02.0 /17/. 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. CCIPL was able to verify all the documented evidence such as CO₂ Baseline emission factor which is calculated following steps as per tool ‘Tool to calculate the emission factor for an electricity system’ version 7.0 /15/, the applied methodology ACM0002 version 20.0 /04/, latest PDD, version 3.2 dated 05/04/2022 /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 3.2 of 05/04/2022 /01/, including their references and sources. VVB accessed the emission factor from publicly available source /20/ and hence confirm it meets the tool requirements /15/. 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 project activity.
Findings	N/A
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	ELIGIBILITY PRINCIPLES Principle 1: Contribution to Climate Security & Sustainable Development: a) The project meets GS4GG renewable energy activity requirements (version 1.3). The project is a wind power project generating electricity and supplying the generated energy to the national grid. The project is located in Viet Nam which is a low-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. Hence, the project meets GS principle and requirement. b) 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. c) 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 indicator under SDG 7 and SDG 8 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. d) Project eligibility: In line with clause 4.1.3 of GS principle and requirement, the project meets GS4GG renewable energy activity requirements (version 1.3). Therefore, the project is automatically eligible for GS certification: 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. Project Start Date: GS4GG clause 4.1.39 (principle and requirement) states 'The Project start date is the earliest date on which the Project Developer has committed to expenditures related to the implementation of the Project. In this case, project developer has executed equipment supply agreement on 29/07/2020 which is the earliest real action date for execution of the project activity /12/. Therefore, the start date is correctly considered for the project activity. 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 4.1.42 (b) under principle and requirement) /08/. Project proponent submitted initial documents for GS preliminary review on 14/01/2021 and the start date of the project activity is on 29/07/2020. Therefore, project proponent has submitted the project documents for preliminary review within one year of the project start date. 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.
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	Principle 5: Financial Additionality & Ongoing Financial Need: Additionality of the project is discussed under section D.2.7 of the report. GENERAL ELIGIBILITY CRITERIA: Scale of the project activity: The project activity is a correctly classified as large-scale project activity. Host country or State: The project's host Party is Viet Nam and eligible as per Gold Standard. Eligibility project type: Greenhouse Gases: CO₂ is considered in the project activity and the same is eligible under Gold Standard. Legal Ownership: The legal ownership of the project activity lies with 'Cong ty TNHH Dien Gio Hoa Binh 1 Giai Doan 2' which was checked from the PPA executed for the project /10/. Other Rights: Not applicable. 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. Therefore, the proposed project activity is deemed to be eligible under gold standard GS4GG.
Findings	N/A
Conclusion	CC IPL confirms that the project is eligible for GS4GG as per requirements of GS4GG.

D.2.7. Demonstration of additionality

Means of validation	In reference to GS4GG principle and requirements (version 1.2) paragraph 4.1.48 'Gold Standard Projects shall use either a UNFCCC-approved or a Gold Standard-approved additionality tool to demonstrate project additionality, with the exception of specific Activity or Product Requirements as stated in the relevant documentation'. The project falls under 'renewable energy activity requirements' and as per paragraph 4.5.2 of the activity requirement document 'Project and VPAs, where applicable may refer to valid CDM Tool 32: Methodological tool: Positive list of technologies to demonstrate additionality'. The applied UNFCCC approved methodology ACM0002, version 20 refers "TOOL32: Positive lists of technologies" in section 5.3 to demonstrate additionality. The tool: Positive lists of technologies /26/ in paragraph 13 states 'off-shore wind technology' for grid connected electricity generation is a positive technology. Accordingly, paragraph 14 of the tool states 'A specific technology listed in paragraph 13 above is defined as automatically additional if at the time of PDD submission any of the following conditions is met: (a) The percentage share of total installed capacity of the specific technology in the total installed grid connected power generation capacity in the host country is equal to or less than two per cent; or (b) The total installed capacity of the technology in the host country is less than or equal to 50 MW. In case of the proposed project activity, the total share of installed capacity from wind power in Viet Nam (host country) is 0.75% as per generation data of the year 2020 published by EVN (the latest annual report for the year 2021 has been referred) /22-23/. Moreover, the installed capacity of the project is 50 MW which has been confirmed from supply agreement /12/, PPA executed for the project /10/, the project layout document /24/ and approved feasibility report from Ministry of industry and trade, electricity and renewable energy authority /25/.
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	Hence, the project is automatically additional. Prior Consideration: As per GS requirement, retroactive project must submit the required documents to Gold Standard (time of first submission) within one year of its start date. The project start date is 29/07/2020 (refer section D.1 above) and submitted for GS preliminary review on 14/01/2021. Therefore, prior consideration for the project activity is justified as per GS requirement. Ongoing Financial Need (OFN): As per clause 3.5.2.2 of GS4GG principles and requirements, OFN to be demonstrated at Design Certification renewal.
Findings	N/A
Conclusion	CC IPL 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	As 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: <u>Principle 1- Human Rights:</u> 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 off-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. <u>Principle 2 – Gender Equality and Women’s Rights:</u> 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. <u>Principle 3 – Community Health, Safety and Working Conditions:</u> 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 off-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. Vestas is fully covered by an umbrella certificate for the management system standards OHSAS 18001:2008, ISO 14001:2015 and ISO 9001:2015. Therefore, the project complies necessary health, safety and working conditions. <u>Principle 4 – Cultural Heritage, Indigenous Peoples, Displacement and Resettlement:</u>
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	The project is an off-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. Hence, this parameter is safeguarded by the project activity. <u>Principle 5 – Corruption:</u> 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. <u>Principle 6 – Economic Impacts:</u> 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. <u>Principle 7 – Climate and Energy:</u> 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. <u>Principle 8 – Water:</u> 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. <u>Principle 9 – Environment, ecology and land use:</u> 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 Bac Lieu Provincial Peoples committee /28/. 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 //.
Findings	CL 02 was raised to clarify the Community Health, Safety and Working Conditions impacted by the project activity which PD has elaborated further in the updated PDD and VVB could confirm due measures are in place to ensure Community Health, Safety and Working Conditions. Hence, CL is closed.
Conclusion	CC IPL 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 157,560 MWh as per feasibility study report /13/.
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	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 grid 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 2018 dated 12/03/2020 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 0.8795 tCO₂/MWh and build margin emission factor ($EF_{grid,BM,y}$) for the year 2018 is calculated to be 0.9465 tCO₂/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 0.89625 tCO₂e/MWh, which is fixed ex-ante for the entire crediting period. Accordingly, baseline emission is estimated to be 141,213 tCO₂e 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 141,213 tCO₂e per year.
Findings	N/A
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 141,213 tCO₂e 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 3.1 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' /32/ and $EF_{grid,CM,y}$ is as per "TOOL07: Tool to calculate the emission factor for an electricity system" /15/. Data parameter to be monitored for emission reductions calculations (SDG 13):
----------------------------	---

	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	CAR 02 was raised as details of monitoring parameter as per applied tool was missing which PD has included correctly in the updated PDD and hence CAR is closed.	
Conclusion	CC IPL 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. CC IPL 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) states 'The Project start date is the earliest date on which the Project Developer has committed to expenditures related to the implementation of the Project. In this case, project developer has executed equipment supply agreement on 29/07/2020 which is the earliest real action date for execution of the project activity /12/. Therefore, the start date is correctly considered for the project activity. Crediting period and duration: A renewable crediting period (5 years renewable) has been chosen for the project, starting from 01/10/2021 or from the date prior to two years from the date of registration with GS registry whichever is later. Total length of crediting period is 15 years. 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	CAR 03 was raised as crediting period start date was not specified as per GS rule for retroactive project which PD has specified correctly in the updated PDD and hence CAR is closed.
Conclusion	CC IPL 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 Center for environmental and natural resources monitoring under department of natural resources and environment of Bac Lieu Province /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 20/07/2020 /29/.
Findings	N/A
Conclusion	CC IPL 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 off-site assessment and other documents. The stakeholder meeting was held on 28/12/2020 at Hoa Binh 1 phas 2 wind project site's meeting room, hamlet 12, Vinh Hau a Commune, Hoa Binh district. The stakeholders, gold standard supported NGOs were invited via personal invitations, e-mail invitations at least 30 days in advance (i.e. 28/11/2020). 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 off-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 located at Vinh Hau A and Vinh Hau People Committee and Hoa Binh 1 - Phase 2 Wind Power Plant offices 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 27/01/2021 (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.
Findings	FAR from GS preliminary review are discussed in Appendix 4 of this report and closed successfully. CAR 04 was raised as stakeholder consultation report was missing some details which PD updated in the stakeholder report and hence CAR is closed.
Conclusion	CC IPL 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	Parameter	Description/Assessment
	1 Average hourly earnings of female and male employees, by occupation, age and persons with disabilities (SDG 8.5.1)	Mitigation Measures: 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.
	2 Erosion and/or water body stability (SDG 8.2)	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.

	3	Hazardous and Non-hazardous waste (SDG 9.5)	Mitigation Measure: 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.
Findings	N/A		
Conclusion	CC IPL 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 draft 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 "Hoa Binh 1 - Phase 2 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 off-shore wind power plant in Vinh Hau and Vinh Hau A communes, Hoa Binh district, Bac Lieu province, Viet Nam with a total capacity of 50 MW consisting of 13 WTG (4 MW * 3 & 10* 3.8 MW). The electricity generated by the project activity will be supplied to the national grid of Viet Nam which results in reduction of CO₂ 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 "Hoa Binh 1 - Phase 2 Wind Power Project" are estimated to be on average 141,213 tCO₂e 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 "Hoa Binh 1 - Phase 2 Wind Power Project" in Viet Nam, as described in the PDD, version 3.2 of 05/04/2022 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
CC IPL	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 ₂ e	Carbon dioxide equivalent
DNA	Designated National Authority
DOE	Designated Operational Entity
EB	Executive Board
EIA	Environmental Impact Assessment
ER	Emission Reductions
ER	External Resources
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
LDC	Least Developed Country
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
RETS	Renewable Energy Test Station
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
VNV	Value Network Ventures Advisory Services Pte. Ltd.
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.

Champok Buragohain

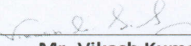
has been qualified as per CCIPL's internal qualification procedures, in accordance with requirements of Accreditation Standard (version 07.0):

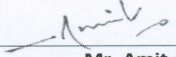
For following functions:

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

In the following Technical Areas:

TA 1.1	☒	TA 3.1	☒	TA 5.2	☐	TA 9.2	☐	TA 13.2	☒
TA 1.2	☒	TA 4.1	☐	TA 8.1	☐	TA 10.1	☐	TA 14.1	☐
TA 2.1	☐	TA 5.1	☐	TA 9.1	☐	TA 13.1	☒		


Mr. Vikash Kumar Singh
 Compliance Officer


Mr. Amit Anand
 CEO

Date of Approval
 24/12/2020

Valid Till
 24/12/2021

Revision History of the Document

26/12/2014	Initial Adoption
24/12/2015	Annual Revision
20/01/2016	Interim Revision for office address change
23/12/2017	Annual Revision
24/12/2017	Annual Revision
24/12/2018	Annual Revision
24/12/2019	Annual Revision
01/03/2020	Interim Revision for office address change
01/09/2020	Interim Revision for CCIPL logo change
24/12/2020	Annual Revision

¹ Please state the name of countries for which the candidate is qualified as local assessor.
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Carbon Check (India) Private Ltd.

Amit Anand

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 3.1	☒	TA 5.2	☐	TA 9.2	☐	TA 13.2	☐
TA 1.2	☒	TA 4.1	☐	TA 8.1	☒	TA 10.1	☐	TA 14.1	☒
TA 2.1	☐	TA 5.1	☐	TA 9.1	☐	TA 13.1	☒		

Mr. Vikash Kumar Singh
Compliance Officer

Date of Approval
24/12/2020

Valid Till
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24/12/2020	Annual Revision

¹ India and South Africa

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Appendix 3. Documents reviewed or referenced

No.	Author	Title	References to the document	Provider
01	Swiss Carbon Value Ltd.	GS4GG key project information and project design document (PDD) for the project activity 'Hoa Binh 1 - Phase 2 Wind Power Project'	Version 2.0 of 30/06/2021, version 3.0 of 02/09/2021, version 3.1 of 24/12/2021, version 3.2 of 05/04/2022	PP
02	Swiss Carbon Value Ltd.	GS4GG stakeholder consultation report for 'Hoa Binh 1 - Phase 2 Wind Power Project'	Version 2.0 of 30/06/2021, version 3.0 of 02/09/2021	PP
03	Swiss Carbon Value Ltd.	Preliminary review under GS4GG for the project activity 'Hoa Binh 1 - Phase 2 Wind Power Project' GS 10975	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 "Hoa Binh 1 - Phase 2 Wind Power Project"	05 July 2021	VVB
06	Swiss Carbon Value Ltd.	Emission reduction worksheet (03.ER spreadsheet Version 2.0)	Version 02	PP
07	Gold Standard	COVID-19: Interim Measures	Dated 17/05/2021, valid upto 31/12/2021	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 2018	No: 263/BDKH-TTBVTOD, 12/03/2020	PP
10	Cong ty TNHH Dien Gio Hoa Binh 1 Giai Doan 2 and Vietnam Electricity	Power Purchase Agreement	Contract No. 12/2020/HD-NM DG-HOA BINH 1 GD2.BL dated 09/12/2020	PP
11	Swiss Carbon Value Ltd. & Cong ty TNHH Dien Gio Hoa Binh 1 Giai Doan 2	Emission reduction purchase agreement	Dated 05/08/2020	PP
12	Cong ty TNHH Dien Gio Hoa Binh 1 Giai Doan 2 & Vestas Asia Pacific	Supply agreement for 50 MW wind farm consisting 13 WTGs of V150-4.2 MW	Dated 29 July 2020	PP
13	Consultancy Company Institute of Energy	Feasibility study report of Hoa Binh 1-Phase 2 wind power plant-50 MW	2020	PP
14	Cong ty TNHH Dien Gio Hoa Binh 1 Giai Doan 2	Declaration confirming the project Hoa Binh 1 - Phase 2 Wind Power Project-50 MW only considered for GS carbon credit.	Dated 10 November 2020	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 2.0	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 2018	http://www.dcc.gov.vn/tin-tuc/3620/He-so-phat-thai-cua-luoi-dien-Viet-Nam-nam-2018.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	Cong ty TNHH Dien Gio Hoa Binh 1 Giai Doan 2	Project layout document		PP
25	Ministry of industry and trade, electricity and renewable energy authority	Approval of feasibility study report- Hoa Binh 1-phase 2 wind power plant in Bac Lieu Province	Decision No. 1575/DL-NLTT, dated 06/10/2020	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&mtmsg_no=IV-2&chapter=4&clang=en	Publicly available
28	Bac Lieu Provincial Peoples committee	Approval on the environmental impact assessment report-Hoa Binh 1-phase 2 wind power project	No. 496/QD-UBND dated 24/03/2020	PP
29	Bac Lieu Provincial Peoples committee, department of planning and investment	Project investment license; project no: 7302650035	Dated 20/07/2020	PP
30	International Labour Organization	Labour codes, general labour and employment acts, Vietnam	https://www.ilo.org/dyn/natlex/natlex4.detail?p_lang=en&p_isn=91650	Publicly available
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	Version 3.0	Publicly available

		consumption and monitoring of electricity generation		
33	Center for environmental and natural resources monitoring	Report on environmental impact assessment-Hoa Binh 1-phase 2 wind power plant-50MW		
34	Mr. Dang Luong Minh, Deputy director – Bac Lieu Center for Environmental and Natural Resources Monitoring	Independent expert opinion for Hoa Binh 1 - Phase 2 Wind Power Project, in Bac Lieu Province – GS 10975	Dated 30/08/2021	PP

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

FARs from GS preliminary review:

FAR ID	01	Section no.	From GS Preliminary review	Date:	11/08/2021
Description of FAR					
Please provide opinions of an expert stakeholder for the following: • Principle 4.1 Sites of Cultural and Historical Heritage • Principle 4.2 Forced Eviction and Displacement • Principle 4.3 Land Tenure and Other Rights • Principle 4.4 Indigenous Peoples • 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:
					02/09/2021

The PPs have received the assessment opinions about safeguarding principles for Hoa Binh 1 – Phase 2 wind power plant which is prepared by the independent expert – Mr. Dang Minh – Deputy Director of Bac Lieu Center for Environmental and Natural Resources Monitoring. He has more than 20 years of experience in the field of natural resources and environment including environmental, social and economic impacts assessment for power plants. The assessment for above principles is summarized as follows:

- Principle 4.1 - Sites of Cultural and Historical Heritage: Project activity is an offshore wind power plant. The project uses a small area of land nearly the seashore for the construction of operators, substations and transmission lines (mainly vacant land). There are no cultural and historical heritages in the project area.
- Principle 4.2 – Forced Eviction and Displacement: The project occupies about 8 hectares of land for the construction items on land. The majority of the land occupied is coastal vacant land and a part of agricultural and forestry land. No buildings, houses, architecture are affected by the project activity, so the project activity does not require resettlement. The entire area of land occupied by the project activity is adequately compensated in accordance with the law, closely supervised by the People's Committee of Hoa Binh district. There is no forced eviction and displacement in this project activity.
- Principle 4.3 – Land Tenure and Other Rights: The project owner has received all the necessary approvals from the competent authority for the implementation of project such as project investment license, approval of environmental impact assessment, approval of technical design report... According to the provisions of the Land Law, the compensation and clearance plan of the project has been approved and fully implemented under the close supervision of the People's Committee of Hoa Binh district. After completing the compensation and ground clearance, the project owner received the Land Use Right Certificate issued by the People's Committee of Bac Lieu Province. Therefore, there is no dispute or uncertainty for the project owner for the construction and operation project.
- Principle 4.4 – Indigenous people: The project is not involved in any activity that may affect any particular community.
- Principle 8.1 – Impact on Natural Water Patterns/Flows: The project activity is an offshore wind power plant. The project does not use surface water sources as well as ground water, so it does not impact on natural water patterns/ flows.
- Principle 8.2 – Erosion and/or Water Body Instability: Construction items on land including operators, substations and transmission lines are built on flat terrain, the construction activity is not large so the impact on landslides by the project is negligible. However, in the construction process, reinforcement measures by slope, rainwater collection channels, planting trees will be thoroughly applied to eliminate the risk of erosion. The project activity does not use surface water sources, ground water so as not to cause an impact on the water body instability.
- Principle 9.10 – High Conservation Value Areas and Critical Habitats: The project is not located in or near areas of high conservation value areas or critical habitats.

Principle 9.11 – Endangered Species: The project only affects a small area of coastal protective forest (about 0.6 hectares). There are no precious or endangered species in the project construction area or the vicinity of the project

Documentation provided by project participant

Independent expert opinion about safeguarding principles assessment for Hoa Binh 1 – Phase 2 wind power plant.

VVB assessment

Date: 15/09/2021

VVB noted independent expert Mr. Dang Minh – Deputy Director of Bac Lieu Center for Environmental and Natural Resources Monitoring provided a detailed assessment in writing which clearly states the project does not adversely affect any safeguarding principles of GS4GG. Hence, FAR is closed.

FAR ID	02	Section no.	From GS Preliminary review	Date: 11/08/2021
Description of FAR				
Please provide a demonstration of no potential for double counting/misestimation of impacts for potential overlapping of Project Area with other voluntary or compliance standard program of a similar nature				
Project participant response				Date: 02/09/2021
Hoa Binh 1 – Phase 2 wind power project is seeking registration only in GS4GG program. The proposed project activity is not participated to other emission trading programs, other binding limits, other forms of environmental credits or other GHG programs. This project is not rejected by any other GHG programs. Therefore, no double counting of impacts is potentially in this project activity. This information is confirmed in the no-double counting declaration by the project owner and has been added in Section A.1.1 of the revised GS PDD				
Documentation provided by project participant				
No-double counting declaration by the project owner The revised GS PDD				
VVB assessment				Date: 15/09/2021

The project is seeking emission reductions only under GS voluntary mechanism and not applied or being claimed for any other similar forms of credits. This has been declared by the Project developer with a written statement. VVB checked other publicly available programme registry such as VERRA, UNFCCC, GCC and noted the project is not listed to claim carbon credit. Hence, double counting is avoided. FAR is closed.

FAR ID	03	Section no.	From GS Preliminary review	Date: 11/08/2021
Description of FAR				
According to rule 3.1.1 D, please include in section A.1.1 a demonstration of compliance with applicable Host Country's legal, environmental, ecological and social regulations. And VVB shall validate the same				
Project participant response				Date: 02/09/2021
<i>The demonstration of compliance with applicable host country's legal, environmental, ecological and social regulations has been added in Section A.1.1 of the revised GS PDD. All the supporting documents have been submitted to the VVB.</i>				
Documentation provided by project participant				
Revised GS PDD				
VVB assessment				Date: 15/09/2021
The PDD in various sections including section A.1.1 demonstrates the compliance with applicable host country's legal, environmental, ecological and social regulations. VVB has cross check the business license for power generation, the PPA executed for supply of the generated electricity with national grid, the approval of feasibility study report, the approval of environmental impact assessment of the project and independent expert opinion and hence confirm the project meets all required necessary host country approvals. Hence, FAR is closed.				

FAR ID	04	Section no.	From GS Preliminary review	Date: 11/08/2021
Description of FAR				
According to rule 3.1.1 F, please provide a copy of the required and obtained permits granted by the government to demonstrate Legal Ownership of the VER				
Project participant response				Date: 02/09/2021
<i>The project owner has full legal right to control, operate and own the project activity. They have got all the required permits which granted by the government like as Business Certificate, Investment Licence of the Project, Power Purchase Agreement. These documents have been submitted to the VVB.</i>				
Documentation provided by project participant				
VVB assessment				Date: 15/09/2021
The project ownership lies with Cong ty TNHH Dien Gio Hoa Binh 1 Giai Doan 2. The ownership of project, project capacity, location and export to grid has been confirmed from power purchase agreement copy of the project between project owner and Vietnam Electricity. Hence, FAR is closed.				

FAR ID	05	Section no.	From GS Preliminary review	Date: 11/08/2021
Description of FAR				
In section B.6.1 please establish a Target and Indicator for SDG 8				
Project participant response				Date: 02/09/2021
<i>The target and indicator for SDG8 have been added in Section B.6.1 of the revised GS PDD</i>				
Documentation provided by project participant				
Revised GS PDD				
VVB assessment				Date: 15/09/2021
The indicator under SDG 8 is 8.5.1 – Average hourly earnings of female and male employees, by occupation, age and persons with disabilities. The same shall be monitored through quality of employment, Quantitative employment, income generation; and Equal pay for work of equal value for both men and women. This has been defined in the PDD and hence FAR is closed.				

FAR ID	06	Section no.	From GS Preliminary review	Date: 11/08/2021
Description of FAR				
It's requested to provide a description of the documents and methods used to seek comments for grievance mechanism. VVB shall validate the same				
Project participant response				Date: 02/09/2021
<i>The description of the documents and methods used to seek comments for continuous input/ grievance mechanism has been added in Section E.2 of the revised GS PDD.</i>				
Documentation provided by project participant				
Updated PDD				
VVB assessment				Date: 15/09/2021

VVB noted project developer has put in place an effective continuous grievance input mechanism for the project activity. As part of the mechanism a grievance book is kept at the project site office of project owner and at the office of Energy and Environment Consultancy JSC/Swiss Carbon Value Ltd. In addition, telephone details, e-mail ids were provided in the PDD and also discussed with stakeholders which is evident in the stakeholder consultation report. Therefore, the FAR is closed.

Table 1. CL from this verification

CL ID	01	Section no.	D.1	Date:	11/08/2021
Description of CL					
Project proponent is requested to clarify why methodology referred tools ' Positive lists of technologies ' and ' Baseline, project and/or leakage emissions from electricity consumption and monitoring of electricity generation ' are not referred. Please clarify if the project does not fall under the scope of the said tools?					
Project participant response					Date: 02/09/2021
<i>These tools are applied to the project activity and have been added in Section B.1 of the revised GS PDD.</i>					
Documentation provided by project participant					
<i>The revised GS PDD</i>					
VVB assessment					Date: 15/09/2021
The updated PDD provides tools ' Positive lists of technologies ' and ' Baseline, project and/or leakage emissions from electricity consumption and monitoring of electricity generation ' which are referred and applied in the project activity. Hence, CL is closed.					

CL ID	02	Section no.	D.2.8	Date:	11/08/2021
Description of CL					
1. PP is requested to clarify how it is concluded that the project leads to safe working conditions as explained under principle 3 in Appendix 1 of the PDD. Being an off-shore wind project, kindly explain the health and safety measures taken during construction and operation of the project. Clarify why it is concluded that the principle is not relevant to consider any mitigation measure? 2. The safeguarding principle assessment mention the project located in land which is contradicting to off-shore location. Kindly clarify. 3. PP is requested to provide commissioning records of any WTGs if commissioned as on today.					
Project participant response					Date: 02/09/2021
1. <i>The information has been corrected in the revised GS PDD as follows: The project activity applies renewable energy technology and does not have exposure to increased health risks and shall not adversely affect the health of the workers and the community. The project provides workers with a safe and healthy work environment and is not complicit in exposing workers to unsafe or unhealthy work environments. The project owner and contractors ensure safe access and planned prevention to avoid any kind of accident. Workers will be trained before any work is carried out. All the safety and hygiene measures are being ensured in order maintain a safe and healthy environment for the workers at site. In case of any emergency, the site in charge will ensure to take adequate action and preventive measures to avoid any miss happening. Necessary health and safety measures will be taken during construction and operation phase, relevant staff will be trained to be able to work with safety. 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.</i> 2. <i>The information has been clarified in the revised GS PDD. 13 WTGs and a part of 22kV electricity transmission line are located on the sea, other project items including a management house, 22/110kV transformer station, 110kV electricity transmission line and remaining part of 22kV electricity transmission line are located on the mainland.</i>					
Documentation provided by project participant					
<i>Updated PDD</i>					

VVB assessment		Date: 15/09/2021
1.	VVB noted the project being a wind power project does not require continuous maintenance or manual operation. Moreover, the operation and maintenance of the project is with technology supplier (Vestas) who operate with high standards for the environment and occupational health and safety. Vestas is fully covered by an umbrella certificate for the management system standards OHSAS 18001:2008, ISO 14001:2015 and ISO 9001:2015. Therefore, safe working condition is in place.	
2.	It is clarified in the PDD and verified from documents, the project wind turbines are located off-shore whereas the site office, grid interconnection sub-station are located at land (on-shore).	
In summary, CL is closed.		

Table 2. CAR from this verification

CAR ID	01	Section no.	D.1	Date: 11/08/2021
Description of CAR				
The project activity involves 13 WTGs of Vestas model V150-4.2 MW. Although feasibility study report states the capacity of WTG is 3.8/4.0 MW, it is not transparent in the PDD the exact capacity of each WTG.				
Project participant response				Date: 02/09/2021
<i>The capacity of WTGs depends on the site specific. According to the equipment supply contract signed between the PO and Vestas Asia Pacific A/S, the capacity of 3 WTGs at the site specifics including WTG No.18, 19 and 20 is 4.0 MW/ unit; and the capacity of 10 WTGs including No.14, 15, 16, 17, 21, 22, 23, 24, 25, 26 is 3.8 MW/ unit. The information has been clarified in Table 2 of the revised GS PDD.</i>				
Documentation provided by project participant				
Updated PDD				
VVB assessment				Date: 15/09/2021
As per equipment supply contract out of 13 WTGs, 3 WTGs are of 4.0 MW and 10 WTGs are of 3.8 MW capacity. Hence, CAR is closed. A FAR is raised to cross check the actual arrangement during first verification.				

CAR ID	02	Section no.	D.2.10	Date: 11/08/2021
Description of CAR				
The monitoring of EG _{facility,y} is required to follow as per 'TOOL05: Baseline, project and/or leakage emissions from electricity consumption and monitoring of electricity generation'. The same is not discussed and followed in the PDD section B.7. The accuracy of meters and calibration frequency as required by the tool is not discussed in the same section.				
Project participant response				Date: 02/09/2021
<i>The accuracy of meters, calibration frequency and QA/QC procedures as required by the applied tool have been added in Section B.7.1 and B.7.3 of the revised GS PDD</i>				
Documentation provided by project participant				
Updated PDD				
VVB assessment				Date: 15/09/2021
The accuracy of the energy meters shall be 0.2S for main meter and 0.5S for back up meter which is as per national standard. Also, calibration frequency of energy meters are fixed once in three years which is as per national standard. Hence, CAR is closed.				

CAR ID	03	Section no.	D.3	Date: 11/08/2021
Description of CAR				
The project being a retroactive project, should specify the start date of crediting period as per rule for retroactive projects in section C.2.1 of the PDD.				
Project participant response				Date: 02/09/2021
<i>The start date of crediting period has been specified in Section C.2.1 of the revised PDD</i>				
Documentation provided by project participant				
Updated PDD				
VVB assessment				Date: 15/09/2021
As per GS rule a retroactive project can claim emission reductions maximum two years prior to the date of registration of the project activity. Since, the project is yet to be commissioned and emission reductions can be claimed either from the date of commissioning of the project or maximum two years prior to date of registration of the project at GS whichever is later. This has been stated in the PDD and hence CAR is closed.				

CAR ID	04	Section no.	D.5	Date: 11/08/2021
Description of CAR				
1. The Stakeholder consultation report (SCR) in section A.3 states in couple of places land being used in the project activity. Please clarify the appropriateness of the same. 2. Section B.1 of the SCR does not provide name of the invitee and its gender (male/female) to ensure invitations were sent without any gender bias. 3. Section E.2 of the PDD should be more transparent in providing details of mechanism in place for continuous grievance input in consistent with section D of the stakeholder consultation report.				
Project participant response				Date: 02/09/2021
1. The information has been clarified in Section A.3 of the revised SCR. 13 WTGs and a part of 22kV electricity transmission line are located on the sea, other project items including a management house, 22/110kV transformer station, 110kV electricity transmission line and remaining part of 22kV electricity transmission line are located on the mainland. 2. The physical stakeholder consultation meeting was open for all stakeholders regardless of gender. Everyone who are interested in/ or concerns about the project activity are welcome to participate in this meeting. Local authorities, local NGOs were invited by invitation letters delivered in organizations by post; local residents were invited by invitation letters were announced/ listed at the offices of commune people's committees more than one month prior to the date of organizing stakeholder meeting. Other stakeholders were invited by invitation letters sent by email and also published on the website. These invitations didn't mention the name of invitee nor its gender, it was sent without any gender bias. 3. The details of continuous input/ grievance mechanism have been added in Section E.2 of the revised GS PDD.				
Documentation provided by project participant				
Updated PDD				
VVB assessment				Date: 15/09/2021
The corrections required in the stakeholder consultation report has been done appropriately and hence, CAR is closed.				

CAR ID	05	Section no.	From GS Preliminary review	Date: 11/08/2021
Description of CAR				
Please include a brief description of the technology in section A.1.1				
Project participant response				Date: 02/09/2021
The brief description of technology has been added in Section A.1.1 of the revised GS PDD. Further information is presented in Section A.3 Technologies and/or measures.				
Documentation provided by project participant				
Updated PDD				
VVB assessment				Date: 15/09/2021
The technology details of the project has been added in the PDD in appropriate sections as per actual arrangement in place. The details found consistent with supply agreement. Hence, CAR is closed.				

CAR ID	06	Section no.	From GS Preliminary review	Date: 11/08/2021
Description of CAR				
Please Include a statement that the project is not registered with any other voluntary or compliance schemes in section A.1.1 if it is not the case				
Project participant response				Date: 02/09/2021
The statement on no-double counting has been added in Section A.1.1 of the revised GS PDD.				
Documentation provided by project participant				
No-double counting declaration by the project owner				
VVB assessment				Date: 15/09/2021
The project developer has considered the project only for claiming carbon credit under GS mechanism. PD has provided declaration confirming the project being taken only under GS mechanism. Validation team also checked other publicly available registry such as UNFCCC, VCS and confirm that the project is neither considered nor rejected in other carbon credit mechanism. Hence, CAR is closed.				

CAR ID	07	Section no.	From GS Preliminary review	Date: 11/08/2021
Description of CAR				
In section A.1.1 please include a confirmation that the host country, region or state does not either:				
• Have an emission reduction cap enforced OR • Have the possibility to trade emissions that include the scope of the proposed project?				

Project participant response	Date: 02/09/2021
Vietnam host country and Bac Lieu province do not either: • Have an emission reduction cap enforced; or • Have the possibility to trade emissions that include the scope of the proposed project. Moreover, the proposed project is constructed, operated and owned by a private company, without any state budget or ODA fund. Therefore, the project owner has full legal right to own any GS-CERs generated from the project activity. The above information has been added in Section A.1.1 of the revised GS PDD.	
Documentation provided by project participant	
Updated PDD	
VVB assessment	Date: 15/09/2021
PD clarified Vietnam does not have any legally binding emission reduction cap and the project does not fall under any such host country scope. The project is constructed, operated and owned by a private company, without any state budget or ODA fund. Therefore, the project owner has full legal right to own any GS-CERs generated from the project activity. Hence, CAR is closed.	

CAR ID	08	Section no.	From GS Preliminary review	Date: 11/08/2021
Description of CAR				
In section A.1 of the SCR please include the duration of the project. In KPI of the SCR please include the GS ID for the project which is GS 10975				
Project participant response				Date: 02/09/2021
The duration of the project and GS ID have been added in Section A.1 and KPI of the revised SCR.				
Documentation provided by project participant				
Updated SCR				
VVB assessment				Date: 15/09/2021
The SCR is updated and GS id has been included with duration of the project. Hence, CAR is closed.				

Table 3. FARs from this validation

FAR ID	01	Section no.		Date: 15/09/2021
Description of FAR				
The commissioning records of the project and capacity of WTGs shall be cross check during first verification of the project by the verification entity.				
Project participant response				Date: DD/MM/YYYY
Documentation provided by project participant				
DOE assessment				Date: DD/MM/YYYY

Document information

<i>Version</i>	<i>Date</i>	<i>Description</i>
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.
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