



GENNEIA WIND PROJECTS IN ARGENTINA



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Summary:

The "KBS Certification Services Pvt. Ltd." has been commissioned by Swiss Carbon Value Ltd. to carry out the VCS verification of the project "Genneia Wind Projects in Argentina" for the monitoring period 01-January-2021 to 31-December-2021 (including both days), with regards to the requirements of VCS Standard Version 4.4.

"Genneia Wind Projects in Argentina" consists of 6 wind farms (Chubut Norte I, Chubut Norte II, Pomona I, Pomona II, Villalonga I and Villalonga II) connected to the Argentine electricity system (SADI, due to its name in Spanish) with a total installed capacity of 223.38 MW.

The project applies the CDM consolidated methodology ACM0002 – "Grid-connected electricity generation from renewable sources" (version 19.0).

The VCS Verification was based on monitoring report, emissions reduction calculation spreadsheet, the monitoring plan as set out in the registered PD and supporting documents made available to the KBS Certification Services Pvt. Ltd by the project participant. The process was performed through a combination of desk review, interviews, and communications with relevant PP personnel.

During the VCS Verification, 03 Correction Action Requests (CAR) and 04 Clarification Requests (CL) were raised and successfully closed. No Forward Action Requests (FAR) have been raised.

As a result of this verification, the verifier confirms that:

- all operations of the project are implemented and installed as planned and described in the registered VCS PD.
- the monitoring plan is in accordance with the applied approved CDM methodology, i.e., ACM0002 version 19.0.
- the equipment essential for measuring parameters required for calculating emission reductions are properly maintained.

- the monitoring system is in place and functional. The project has generated GHG emission reductions.

In addition, the verifier confirms that the GHG emission reductions are calculated without material misstatements in a conservative and appropriate manner.

KBS herewith confirms that the project has achieved GHG emission reductions in the above-mentioned monitoring period as follows:

Year (vintage)	Baseline emissions or removals (tCO ₂ e)	Project emissions or removals (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Net GHG emission reductions or removals (tCO ₂ e)
2021	393,884	0	0	393,884
Total	393,884	0	0	393,884

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1 INTRODUCTION

1.1 Objective

The objectives of this verification audit are, by review of objective evidence, to establish that:

- The project activity has been implemented and operated as per the registered VCS PD and that all physical features (technology, project equipment, and monitoring and metering equipment) of the project are in place,
- The monitoring report and other supporting documents are complete.
- The data is recorded and stored as per the monitoring methodology and approved monitoring plan,
- The actual monitoring systems & procedures and monitoring report conforms with the requirements of the approved monitoring plan and the approved monitoring methodology,
- To confirm that the monitoring system is implemented and fully functional to generate Voluntary Emission Reductions (VCUs) without any double counting,
- To establish that the data reported are accurate, complete, consistent, transparent and free of material error or omission by checking the monitoring records and the emissions reduction calculation, and
- The data is recorded and stored as per the monitoring methodology and approved monitoring plan.

1.2 Scope and Criteria

The verification scope is defined as an independent and objective review of monitoring report, VCS project description (VCS PD), including the monitored data, and other relevant documents made available to verifier and information collected through performing interviews during site visit (remote assessment) of the project activity.

The project is assessed against the requirements of VCS standard, version 4.4 and related rules and guidance. Based on the recommendations in Verified Carbon standard, KBS has employed a rule-based approach (as criteria) in the verification, focusing on the identification of significant reporting rules and the reliability of project monitoring.

The aspects covered under the purview of verification have been:

- Ensure that the project activity has been implemented and operated as per the registered VCS PD and that all physical features (technology, project equipment, and monitoring and metering equipment) of the project are in place as per the documents provided by the client and during remote audit,
- Ensure that the monitoring report and other supporting documents provided are complete,
- Ensure that the practiced monitoring system and procedures comply with the monitoring systems and procedures described in the monitoring plan and the approved CDM methodology, and
- Evaluate the data recorded and stored are as per the monitoring methodology.

1.3 Level of Assurance

The verification has been planned and organized to achieve a reasonable level of assurance of conformance against the defined audit criteria and materiality thresholds within the audit scope.

The verification has been based on the registered VCS PD, MR, proof of title, proof of right, additional documents related to baseline and monitoring methodology, the subsequent background investigation, monitoring plan, follow-up interviews and supporting documents made available to the verification team by the PP. The information in these documents has been reviewed against the requirements of VCS Standard, Version 4.4. KBS has employed a rule-based approach in the verification, focusing on the fulfillment of the rules determined by the VCS Standard.

The items covered in the verification are described below:

- Criteria of VCS Version 4 (VCS Program Guide, Version 4.3 & VCS Standard, Version 4.4),
- Criteria of CDM approved methodology, ACM0002 Version 19.0,
- VCS Monitoring Report;
- Monitoring Plan;
- Background investigation and follow up interviews;
- Stakeholder feedback;
- Registered VCS PD and Validation Report;
- Previous verification documents; and
- Project's compliance with other relevant rules, including the project country (Argentina) legislation.

Furthermore, the verification team used additional documentation by third parties like host country legislation and technical reports referring to the project design. A desk review has been carried out to assess the following:

- Compliance with relevant law and regulations,
- Stakeholder comments,
- Proof of title;
- Site location maps;
- Technical specifications of meters and calibration certificates;
- Commissioning Letters;
- Publicly available electricity data records from the Argentine Wholesale Electricity Market Administration Company (CAMMESA).

The Verification team has checked all the above-mentioned details and confirms that all the information provided is accurate.

Through the remote interviews, host country rules and regulations related to project activity, project description, technological measures, Implementation, operation, management of project activity, training of personnel, baseline and monitoring plan, stakeholders consultation, etc., have been checked and found appropriate.

KBS applies the rule-based approach aimed at focusing on the fulfillment of the rules determined by the VCS Standard, in order to assure not omitting any part of the mandatory processes. A few discrepancies were found during the verification and there were submitted to the project proponent, indicated under the titles of Corrective Action Requests (CARs) and Clarification Requests (CL). CARs and CLs were required to be addressed by the PP.

Hence the above steps has been followed to achieve a reasonable level of assurance in verification report. Based on the process and procedures conducted, KBS confirms that the information in the MR:

- is materially correct and is a fair representation of the actual project details, and
- is prepared in accordance with VCS requirements and the applied CDM methodology for information pertaining to GHG qualification, monitoring and reporting.

The verification work has been carried out as per this requirement and the verification opinion is assured, provided the credibility of all above. Details are presented in the Verification statement in section 5 below.

1.4 Summary Description of the Project

Genneia Wind Projects in Argentina consists of six Greenfield wind farms (Chubut Norte I, Chubut Norte II, Pomona I, Pomona II, Villalonga I and Villalonga II) located in different regions in Argentina and connected to the Argentine Interconnected System (SADI, due to its name in Spanish).

The total installed capacity of the project is 223.38 MW.

The electricity generated by the project is exported to the SADI. The project activity applies the approved CDM methodology ACM0002 (Version 19.0). In the baseline scenario, all the electricity supplied to the grid by the project activity would otherwise have been generated by the operation of grid-connected power plants.

A summary of the project and its six wind farms is below provided:

Wind farm	Installed capacity (MW)	Province, city or town	Wind Turbines	Operation start date under testing	Commercial operation start date
Chubut Norte I	28.80	Northwest of the city of Puerto Madryn, Province of Chubut	8 Vestas V126, 3.6 MW each one	12/11/2018	12/12/2018
Chubut Norte II	26.28	Northwest of the city of Puerto Madryn, Province of Chubut	6 Nordex N149-4.5, 4.38 MW each one	12/02/2021	27/03/2021
Pomona I	101.40	Vicinity of the town of Pomona, Province of Río Negro	26 Nordex N131, 3.90 MW each one	01/06/2019	12/07/2019
Pomona II	11.70	Vicinity of the city of Choele Choel, Province of Río Negro	3 Nordex N131, 3.90 MW each one	26/07/2019	14/08/2019
Villalonga I	51.75	Vicinity of the city of Villalonga, Province of Buenos Aires.	15 Vestas V126, 3.45 MW each one	16/11/2018	19/12/2018
Villalonga II	3.45	Vicinity of the city of Villalonga, Province of Buenos Aires.	1 Vestas V126, 3.45 MW each one	01/01/2019	22/02/2019

The milestones of the project activity as VCS project are as follow:

Milestone	Date/Period
Project start date (Chubut Norte I operation start date)	12/11/2018
VCS registration date	10/09/2020
1st Verification Period	12-November-2018 to 31-December-2020 (including both days)
2nd Verification period	01-January-2021 to 31-December-2021 (including both days)

During the remote audit inspection, location (as mentioned in section 1.7 of MR) and all the technical aspects of the project activity mentioned in the VCS PD have been verified. The same was also cross-checked during the desk review of supporting documents.

2 VERIFICATION PROCESS

Based on the desk review and remote site visit the team leader follows the verification protocol to identify and record the findings in the context of the project activity. The findings are communicated to the client in the findings document (Appendix II). The project documentation, including responses to the findings is reviewed by the team leader in consultation with team members, wherever appropriate. The team leader prepares the draft verification report subject to closure or non-closure of the findings.

2.1 Method and Criteria

The verification process has been carried out in line with the requirements of VCS Standard, Version 4.4. In addition, the verification team followed standard auditing techniques and KBS's CDM Procedures were also applied during the verification. A rule-based approach has been followed to carry out verification and access all the factors and concerns that relate to the issuance of GHG emission reductions from a project activity. They include:

- Identification of all the sources contributing to the project GHG emissions and emission reductions.
- Authenticity of the provided data has been checked.

- A rule-based analysis has been carried out to ensure a clear and transparent assessment. The findings identified in this process have been mainly with regards to the operation of the project activity and QA/QC procedures and registries.

KBS has followed a rule-based verification approach, wherein a desk review of the project documentation has been undertaken, which has been followed by a remote discussion/video inspection by the members of the verification team. The verification protocol has been filled by the verification team based on standard auditing practices and VCS requirements. The verification protocol provides transparent means to record the observations by the verification team members and the non-conformities, if any. The verification protocol is an internal document, and available on request.

KBS confirms that sufficient evidence was presented for the reported net anthropogenic GHG emission reductions and that there is a clear audit trail that contains the evidence and records that validate the stated figure in this verification report since:

- Sufficient evidence available: The PP has provided the 100% of data used in the calculations to achieve the final amount of GHG emission reductions reported, or the source of data in case of default values, or conservative approaches in case of estimated values.
- Nature of evidence: The raw data were collected from reliable sources. They are detailed in the project documents and have been provided to the verification team and were checked during the interviews.
- Cross-checked evidence: KBS has cross-checked the collected information through interviews with stakeholders and reproducing calculations.

Hence, KBS confirms that the stated figures in the monitoring report are correct and confirms that is able to certify net anthropogenic GHG emissions reductions based on verifiable and reliable evidence.

The verification schedule has been as follow:

Verification Contract	31-August-2022
PP submission of MR, ER spreadsheet and supporting documents	9-December-2022
NOVS notification	19-December-2022
Desk Review	19-December-2022 – 13-March-2023
Remote audit	26-January-2023
Draft Verification Report	13-March-2023
Technical Review	17-April-2023
Final Verification Report	17-April-2023

2.2 Document Review

A detailed review of all project documentation has been conducted to ensure the accomplishment VCS program requirements, the methodology applied (ACM0002 version 19.0), and the registered VCS PD. The desk review undertaken has involving, but not limited to:

- A review of the data and information presented to verify their completeness,
- A review of the monitoring plan and monitoring methodology, paying particular attention to the frequency of measurements, the quality of metering equipment including calibration requirements, and the quality assurance and quality control procedures,
- An evaluation of data management and the quality assurance and quality control system in the context of their influence on the generation and reporting of emission reductions.

The list of documents reviewed is included in the section 'References'.

2.3 Interviews

Interviews with relevant PP personnel have been undertaken by members of the verification team, involving:

- Interviews to confirm the operational and data collection procedures are implemented in accordance with the approved monitoring plan,
- An assessment of the implementation and operation of the proposed VCS project activity as per the registered VCS PD,
- A cross-check between information provided in the monitoring report and data from other sources such as CAMMESA electricity reports,

- A check of the monitoring equipment, including calibration performance and observations of monitoring practices against the requirements of the VCS PD and the selected methodology,
- An identification of quality control and quality assurance procedures in place, to prevent or identify and correct any errors or omissions in the reported monitoring parameters.

The interviews for this verification assessment were undertaken by Adriana Torchelo (Auditor, Technical Expert for scope 1.2 and Local Expert) and Raul G. Mitre (Team Leader, Technical Expert for scope 1 and Local Expert).

The details of the PP personnel interviewed are below provided:

No.	Name	Role	Organization
1	Edwing King	Commercial Chief	Genneia
2	Ricardo Monzón	Control Center Chief	Genneia
3	Santiago González	Senior Project Coordinator	South Pole
4	Leandro Maidan a	Villalonga (I and II) O&M Supervisor	<u>Genneia</u>
5	Javier Esteves	Responsible of node Madryn (including wind farms Chubut Norte)	<u>Genneia</u>
6	Daniel Ruiz	Pomona (I and II) wind farm Chief	<u>Genneia</u>
7	Sagar Patel	Technical assistance	South Pole

2.4 Site Visits

According to VCS Standard v4.4 a site visit is not required for this verification given that this is the second verification of the project after validation.

Thus, KBS has conducted an independent risk assessment to identify the risk of a material misstatement or nonconformity with the audit criteria in case of no conducting a site visit. The risks identified pertaining to the remote inspection are described as follow:

	Risk identified	Level	Mitigation measures
1	Risks related to organizational and procedural aspects, which include generic risks. These risks could relate to the following: the quality of the internet connection; the quality of ICT tools such as good camerawork to ensure a reasonably good view for the validation or verification team; the amount of documentation to be reviewed remotely; whether relevant data flows can be accessed remotely; what record-keeping system is established; the maintaining of confidentiality and personnel data protection; and the required competence and resources of the validation or verification team.	Low	Internet connections were found as adequate and allowed the possibility to establish rapport and good communication. All questions regarding the project activity could be satisfied and all information, documents and data have been sent by the PP before the audit took place in order to perform an appropriate desk review.

	Risk identified	Level	Mitigation measures
2	Risks related to the project activity and its configuration, which present project-specific risks: The risks could relate to the following: whether the boundary and features of the project activity can be evaluated remotely; whether the remote inspection would enable the VVB to observe any sources of emissions that are not included in the project activity; how control activities are carried out; and how calculations are tracked and cross-checked.	Low	All information could be checked during remote assessment. Interviews were also performed to cross-check the information provided. When possible, all evidence provided were checked directly from the source when is publicly available (e.g.: electricity generation, commissioning dates, installed capacity, etc. from CAMMESA web site). The boundary and features of the project activity could be evaluated remotely. Calculations were tracked and cross-checked with their proper evidence. When discrepancies were identified, a finding has been raised. When data from calculation come directly from internal data, the source of data has been requested and cross-checked against interviews and publicly available reports from CAMMESA.

	Risk identified	Level	Mitigation measures
3	Risks related to monitoring aspects: The risks could relate to the following: the complexity of the monitoring parameters and the monitoring plan; data processing and reporting; whether a fiscal metering method is applied; the sampling or surveys conducted at household level; what status of the monitoring period is being verified; and whether data and information have been thoroughly checked during previous verifications or whether such data and information can be checked subsequently without an on-site inspection.	Low	The monitoring parameter was checked directly from the source where is publicly available (CAMMESA website). All data processing and reporting were requested and assessed with the responsible persons. Monitoring equipment were checked through videos performed by employees of the project activity. Photographs were taken and documents were assessed to cross-check the information about the installed equipment.

Based on the above risk assessment KBS has determined that no site visit was required for this second verification of Genneia Wind Projects in Argentina. It is important to reinforce that the six wind farms that conform the VCS project are connected and dispatch electricity to the national electricity system (SADI). The project' wind farms must comply with the national electricity system rules and standards, including the national "Commercial Measurement System" (SMEC, due to its name in Spanish), which rules the power plants electricity meters operation and calibration or verification. Additionally, the operation of the power plants connected to the SADI is continuously monitored remotely by the Argentine Wholesale Electricity Market Administration Company (CAMMESA) and there are specific rules and procedures in case of failures of operation of the power plants or the electricity meters. Furthermore, there is publicly available data in CAMMESA website (<https://cammesaweb.cammesa.com/>) to cross-check the wind farms operation, installed capacity, electricity generation data, among others.

Furthermore, during planning stage, the following has been taken into consideration:

- Composing a validation team with sufficient members that have the knowledge, skill and solid professional judgement required in an on-site inspection in conjunction with additional competence in applying ICT tools,
- Conducting a desk review to gain a prior understanding of records and documentation control processes of the project participants,
- Establishing a verification plan to clearly define the tasks to be done during the remote inspection, considering the established measures to eliminate or reduce the identified risks,
- Determining ICT tools to be used before the remote inspection and ensuring a backup plan in case there is a connection issue.

For the remote assessment KBS has used other standard auditing techniques for validation or verification as referred to in VCS Rules/requirements, VCS Validation and Verification Manual version 3.2. Specifically, the verification team has used the following alternative means for its assessment and to justify that they are sufficient for the purpose of verification. Along with desk review, audit team has conducted remote audit interview as follows:

- A complete desk review of the MR, as well as all applicable country legal requirement and supportive evidence have been checked by the verification team.
- Verification team has performed Microsoft Team Application interviews with PP and remote inspection of the project on 26-January-2023 to check implementation, project boundary, current situation, monitoring and metering equipment (including remote inspection of the metering equipment installed at each wind farm), monitoring procedures, calibration, etc.
- Cross-check evaluation, for information received from interviews, under the scope of all information and references provided in MR and supporting documents.
- An assessment of the implementation and operation of the VCS project activity as per the registered VCS PD.
- A review of information flows for generating, aggregating, and reporting the monitoring parameters.

- A check of the monitoring equipment including performance and observations of monitoring practices against the requirements of the registered VCS PD and the selected methodology.
- A review of calculations and assumptions made in determining the GHG data and emission reductions.
- An identification of quality control and quality assurance procedures in place to prevent or identify and correct any errors or omissions in the reported monitoring parameters.

Consequently, KBS has performed remote assessment using ICT tools and confirms that they were sufficient for the purpose of this verification.

2.5 Resolution of Findings

KBS applies the rule-based approach aimed at focusing on focusing on the fulfillment of the rules determined by the VCS Standard. A few discrepancies were found during the verification and the verification report was submitted to the project proponent, indicated under the titles corrective action requests (CARs) and clarification requests (CLs). CARs and CLs had to be addressed by PP. Criteria for judging items as CAR, CL or FAR are as follows:

Corrective action request (CAR):

- The project participants have made mistakes that will influence the ability of the project activity to achieve real, measurable additional emissions reductions,
- The Voluntary Carbon Standard's requirements have not been met, or
- There is a risk that emission reductions cannot be monitored or calculated.

Clarification request (CL):

Information is insufficient or not sufficiently clear to determine whether the applicable VCS requirements have been met.

Forward Action Request (FAR):

FARs is to be raised to highlight issues related to project implementation that require review during the first verification of the project activity. FARs does not relate to VCS requirements for registration.

CARs and CLs are to be resolved or closed out if the PP modifies the project description, rectifies the MR or provides adequate additional explanations or evidence that satisfies the concerns. If this is not completed, the project activity cannot be recommended for issuance under VCS registry.

The monitoring report was revised addressing the CARs and CLs by KBS. After reviewing the revised and resubmitted MR; resolving the CARs & CLs raised and outstanding concerns, KBS issues this final verification report and opinion.

The list of CARs/CLs raised and the response provided, the means of verification, reasons for their closure and references to correction in the MR are provided in appendix 2 of this report. The revised MR with changes incorporated as per the issues raised were rechecked with the documentary evidences and found to be inline.

A summary of all raised findings is provided below:

Areas of verification findings	No. of CL	No. of CAR	No. of FAR
Compliance of the monitoring report with the monitoring report form	--	01	--
Compliance with Sustainable Development Contributions requirements		02	
Compliance of the project implementation and operation with the registered PD	01	--	--
Deviations	--	--	--
Compliance of the registered monitoring plan with the methodologies including applicable tools and standardized baselines	--	--	--
Compliance with the calibration frequency requirements for measuring instruments	02	--	--
Compliance of monitoring activities with the registered monitoring plan	03	03	--
Assessment of data and calculation of emission reductions or net removals	04		--
No net harm and Local stakeholder consultation	--	--	--
Total	04	03	0

2.5.1 Forward Action Requests

No FAR has been raised during validation stage and during the current verification.

2.6 Eligibility for Validation Activities

KBS Certification Services Private Limited is accredited for validation and verification for sectoral scope 1 under the VCS scheme.

The name and reference numbers of five registered projects KBS has validated under the VCS Program and CDM are below provided:

	GHG Program	Name	ID/Ref.
1	VCS	AAC blocks manufacturing unit based on an energy efficient brick/block manufacturing technology by Biltech Building Elements (Budge-Budge)	1338
2	VCS	Bundled Wind Power Projects in Rajasthan by Friends Group	842
3	CDM	Solar PV power project based on polycrystalline technology by Aravali Infrapower Limited	8379
4	CDM	25 MW Solar PV Project in Gujarat	6151
5	CDM	Mampuri Wind Power Project 2	7374

3 VALIDATION FINDINGS

3.1 Participation under Other GHG Programs

There is no evidence that the project activity is participating under other GHG Programs. The PP has declared that this project will not claim any carbon credit in any other mechanism.

3.2 Methodology Deviations

The verification team confirms that the registered VCS PD complies with the requirements in the applied monitoring methodology ACM0002 version 19.0. As a result of the documental review, it is concluded that there are no methodology deviations.

3.3 Project Description Deviations

The monitoring report for the present monitoring period contains 3 project description deviations regarding:

1. Project start date: this deviation was already raised and assessed during the first verification. The validated Project Description identifies the Project start date as 12 December 2018. However, the VCS project actual start date is 12 November 2018, when Chubut Norte I wind farm started to operate under testing phase dispatching electricity to the electricity system.

The verification team assessed if the deviation had any impact in the applicability of the methodology, additionality, and the appropriateness of the baseline scenario and concluded that the change in the project start date did not cause any impacts.

2. Electricity meters calibration frequency: The validated PD stated that "The verification of the meters will be done as established by the national authorities or alternatively at least once every three years." However, during the present verification it was found that all the wind farms meters had their initial calibration/verification conducted by CAMMESA as part of the Commercial Authorizations (Chubut Norte I (24/10/2018), Chubut Norte II (11/09/2020), Pomona I (24/05/2019), Pomona II (24/05/2019), Villalonga I (23/01/2018) and Villalonga II (21/01/2019)), but no further calibrations/verifications have been conducted. Thus, the three years calibration frequency stated in the registered PD has not been accomplished.

The PP clarified in section 3.2.2 of the MR that the electricity meters are calibrated as established by the national authorities and that the PP does not have free access to intervene the meters and perform the calibration.

It has been verified that the Electric-Commercial Metering System (Sistema de Medición Eléctrico Comercial – SMEC) meters (main and back-up) of each power plant are sealed and that the national grid coordinator (CAMMESA) is responsible for their verification as per CAMMESA's Technical Procedure 14 (SMEC External Audits: <https://cammesaweb.cammesa.com/auditoria/>; <https://cammesaweb.cammesa.com/normativa/>) and that there is not a fixed calibration frequency established for the meters.

As stated in the procedure, annually CAMMESA determines the sample of SMEC meters to be verified.

Regarding CAMMESA quality measurement audits (verifications or calibrations) and how CAMMESA determines the sample of SMECs to be audited in a given year, CAMMESA webpage

(<https://cammesaweb.cammesa.com/auditoria/#acalidad>) indicates:

“The Measurement Quality Audits are intended to verify that the SMEC nodes that are already commercially enabled continue to meet the quality standards with which they were originally audited and are in line with current regulatory requirements. Within this framework, 240 measurement points are audited per year, divided equally between the North and South zones. The selection of the nodes to be audited is random, following a sampling grid that allows a global panorama of the entire SMEC node park. In this way, the audits to be carried out are proportionally distributed among the different types of MEM Agents in order to obtain a balanced sample. In addition to the annual audit plan, the regulations provide that CAMMESA may require a specific audit to be carried out on a SMEC node in the event of alleged deviations in its quality.” Thus, it is confirmed that the project electricity meters’ calibration and their frequency is out of the control of the PP.

Thus, the PP description of the calibration frequency deviation from the registered PD in section 3.2 of the MR was found acceptable and correct. Furthermore, the PP assessed if the deviation impacts the applicability of the methodology, additionality, or the appropriateness of the baseline scenario as per section 3.20 of VCS Standard v4.4 and given that the PD deviation only encompasses a change of the meters’ calibration frequency, which is in accordance with the national regulations, the PP assessment conducted is found correct and acceptable based on the below VVB assessment:

- As per project additionality: The project additionality has been demonstrated in the registered PD through investment analysis and common practice analysis. The present PD deviation do not apply under the category of changes that may impact the validity of investment analysis, as per the CDM Guidelines on assessment of different types of changes from the project activity as described in the registered PDD, such as: changes in the effective output capacity due to increased installed capacity or number of units, addition of component or extension of technology, removal or addition of one (or more) site of a project activity registered with multiple-sites, or different values of those actual operational parameters relevant to determination of emission reduction which are within the control of project participant and which result in the IRR passing the benchmark as described in the registered PD.

For all this explained above, this PD deviation does not affect the additionality of the project activity.

- As per appropriateness of the baseline scenario: The present project activity, as stated in the registered PD it is a greenfield project, and according to the applicable methodology ACM0002 (version 19.0): "If the project activity is the installation of a Greenfield power plant, the baseline scenario is the 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."

The present PD deviation does not affect the project activity connection to the Argentinean national grid (SADI). For the reasons explained above, this PD deviation does not impact the appropriateness of the baseline scenario of the project.

- As per applicability of the methodology: The present PD deviation does not impact the applicability of the methodology since the calibration frequency does not affect or impact any of the ACM0002 (version 19.0) applicability criteria that were demonstrated in section 2.2 of the registered PD. Thus, the project remains in compliance with the applied methodology.

Consequently, it has been verified that the above-described PD deviation does not impact the applicability of the methodology, additionality or the appropriateness of the baseline scenario, and the project remains in compliance with the applied methodology.

3. Amount of electricity meters at each wind farm: the registered VCS PD states that "A main and a backup meter will be installed for each power plant." However, during the remote site inspection, the main and back-up meters installed at each wind farm were checked through videocalls with the wind farms' O&M personnel and it was found that at Chubut Norte I, Chubut Norte II and Pomona I wind farms there are two sets of main meter and back-up meter at each wind farm and they declared that this is the meters configuration since the project start date and CAMMESA commercial authorization and calibration/verifications.

Thus, a CAR was raised and the PP described all the meters installed at each wind farm in MR section 4.3 and provide reference documents of their calibration/verification and the line diagrams of the meters at each wind farm.

Additionally, as per section 3.20 of VCS Standard v4.4 the PP described the PD deviation in section 3.2 of the MR and assessed if the deviation impacts the applicability of the methodology, additionality, or the appropriateness of the baseline scenario and concluded that this deviation has no impact.

Given that this PD deviation only encompasses an increase in the number of electricity meters in Chubut Norte I, Chubut Norte II and Pomona I wind farms (2 sets of main meters and back-up meter at each wind farm instead of 1 set), that were authorized by CAMMESA before the projects' operation start date, the assessment conducted by the PP is found correct and acceptable based on the below VVB assessment:

- As per project additionality: The project additionality has been demonstrated in the registered PD through investment analysis and common practice analysis. The present PD deviation do not apply under the category of changes that may impact the validity of investment analysis, as per the CDM Guidelines on assessment of different types of changes from the project activity as described in the registered PDD, such as: changes in the effective output capacity due to increased installed capacity or number of units, addition of component or extension of technology, removal or addition of one (or more) site of a project activity registered with multiple-sites, or different values of those actual operational parameters relevant to determination of emission reduction which are within the control of project participant and which result in the IRR passing the benchmark as described in the registered PD.

For all this explained above, this PD deviation does not affect the additionality of the project activity.

- As per appropriateness of the baseline scenario: The present project activity, as stated in the registered PD it is a greenfield project, and according to the applicable methodology ACM0002 (version 19.0): "If the project activity is the installation of a Greenfield power plant, the baseline scenario is the 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."

The present PD deviation does not affect each wind farm connection to the Argentinean national grid (SADI). For the reasons explained above, this PD deviation does not impact the appropriateness of the baseline scenario of the project.

- As per applicability of the methodology: The present PD deviation does not impact the applicability of the methodology since the calibration frequency does not affect or impact any of the ACM0002 (version 19.0) applicability criteria that were demonstrated in section 2.2 of the registered PD. Thus, the project remains in compliance with the applied methodology. Consequently, it has been verified that the above-described PD deviation does not impact the applicability of the methodology, additionality or the appropriateness of the baseline scenario, and the project remains in compliance with the applied methodology.

3.4 Grouped Project

The project activity is not a grouped project.

4 VERIFICATION FINDINGS

4.1 Project Implementation Status

The project activity is in operation stage as evidenced by the remote inspection of the site and cross-checked with publicly available information at CAMMESA website.

All the physical components and project boundary are in conformity with the description in registered VCS PD.

The capacity of project equipment's has been confirmed during the remote inspection, also through the technical specifications and publicly available reports of CAMMESA and found in-compliance with the registered VCS PD.

The six wind farms of the project activity have been commissioned as commissioning certificates and started operation under testing as per historical electricity generation registries.

On the basis of the remote inspection and the reviewed project documentation like the technical specification, photographs of meters and equipment nameplates, energy reports, operational license and permits, commissioning certificates, calibration certificates of energy meters, etc. the verification team confirms that the project was implemented and operated as described in the registered VCS PD.

Further, the verification team confirms that:

- There is no any material discrepancy between project implementation and the project description in the registered VCS PD. As described on section 3.3, a Project Description Deviation was done without any implication on the application of the methodology, additionality or the appropriateness of the baseline scenario.
- The monitoring plan is completely implemented and is suitable with actual monitoring system (i.e., process and schedule for obtaining, recording, compiling and analysing the monitored data and parameters).
- There is no methodology deviation applied to this project.

The project activity consists of six wind farms with a total installed capacity of 223.38 MW, which was verified during the remote audit.

Further it was noticed that during the monitoring period the project activity operated under normal conditions and no significant event that may have impact on monitoring of GHG emission reductions was observed. Same has been checked from the operational data during remote auditing.

- Ownership and other programs:

The ownership of the project activity has been demonstrated through the following evidence:

- Commissioning letters,
- Environmental Licenses,
- Genneia 2021 Balance Sheet.

PP has declared that the project activity is not registered under other GHG programs such as CDM or Gold Standard. Thus, emission reductions generated by project will be solely claimed by PP and PP has the right of use, which is acceptable.

PP will not claim any other the environmental/carbon credits under any other GHG emission reduction scheme for the crediting period under VCS and PP has provided declaration on the same during the validation. Hence, there is no possibility of double counting.

- Sustainable Development Contributions:

As confirmed during the remote audit, the project displaces electricity produced in fossil fuel-based power plants, by using clean renewable source to generate electricity and thereby contributes to sustainable development through reduction in greenhouse gas (GHG) emissions.

It has also been confirmed that the project implementation has led in significant environmental and socio-economic benefits (as stated in the submitted MR) and contributes to the social, economic, technological and environmental well-being. The project supplies clean and renewable energy without reliance on fossil fuels for generation of electricity to meet the growing demands in the country. Also, the implementation of project is providing employment to locals with a decent and secure work environment.

The monitoring report addressed the following SDGs:

Row number	SDG Target	SDG Indicator	Net Impact on SDG Indicator	Current Project Contributions	Contributions Over Project Lifetime
1)	7.2	7.2.1 Renewable energy share in the total final energy consumption	Implemented activities to increase	The project was able to supply the Argentinian power grid with 878,430.01 MWh of renewable energy, taking advantage of the wind potential in the south of the country.	2,375,673.7 MWh of renewable energy supplied to the Argentinian national grid over the lifetime of the project.
2)	8.5	8.5.2 Unemployment rate, by sex, age and persons with disability	Implemented activities to decrease	The project has created 28 jobs related to operation y maintenance.	During operation and maintenance stage, the project created 28 jobs.
3)	13.0	Tonnes of greenhouse gas emissions avoided or removed	Implemented activities to increase emissions avoided	The project has reduced 393,884 tCO ₂ through the delivery of 878,430.02 MWh of renewable energy that in the absence of the project would have been generated by other grid-connected including fossil fuel-based power plants.	Over the lifetime, the project has reduced 1,065,248 tCO ₂ .

The sustainable Development contributions were evaluated through the evidence provided by the PP and it can be concluded that the project contributes to the selected SDGs.

- Management and operational system:

Verification team was able to verify that authorities and responsibilities for monitoring and reporting of all data related to the emission reductions were clearly defined for the related monitoring period.

The task and responsibilities are followed by the PP appointed personnel as described in the registered VCS PD.

The monitoring plan described in section 4.3 of the MR is confirmed to be correct. All the parameters of the monitoring plan are monitored using appropriate metering system.

The verification team has interviewed the plant personnel who is involved in the monitoring of the parameters and confirmed based on the interviews that the plant's team is competent enough to monitor the parameters as described in the monitoring plan.

As above discussed, the verification team concludes that management and operational system of the project is implemented and operated well. Thus, it ensures the quality of data which is required in calculating the emission reductions.

- Implementation status of the monitoring plan:

Verification team confirms through remote inspection and from the document review (See Appendix I) the actual monitoring system complies with the monitoring plan mentioned in the registered VCS PD and there is no deviation in monitoring plan and procedures.

During the verification, all relevant monitoring parameters of the registered monitoring plan have been verified with regard to the appropriateness of the verification method; the correctness of the values applied for ER calculation, the accuracy and applied QA/QC measures. All monitoring parameters have been measured / determined without material misstatements and are in line with all applicable standards and relevant requirements. It is confirmed that the monitoring mechanism is effective and reliable.

Therefore, from the document review and remote inspection, it is confirmed that all the parameters were monitored in accordance with the registered monitoring plan during the monitoring period. Following are the details of monitoring in accordance with the monitoring plan of the registered VCS PD:

Data / Parameter	EG _{facility,y}				
Data unit	MWh/yr				
Description	Quantity of net electricity generation supplied by the project plant/unit to the grid in year y.				
Source of data	Measurement in the power plant.				
Description of measurement methods and procedures to be applied	The meters installed are bi-directional, taking into account both the quantity of electricity supplied by the project plant to the grid and the quantity of electricity delivered to the project plant from the grid. In this case, the individual values are not required. During remote site visit it has been verified that there are a main meter and a back-up meter at each wind farm. The electricity data from the main meters is used as the official data for invoicing purposes and the back-up data is available in case a failure is identified in the main meter.				
Frequency of monitoring/recording	Continuous measurement and at least monthly recording. Typically, the measured data is read once every 24 hours using tele-metering technology (remotely). During remote assessment, it has been verified that the energy is monitored continuously and reported on a dailly basis.				
Value monitored			2021		
	Chubut Norte I		125,793.65		
	Chubut Norte II		92,624.01		
	Pomona I		366,693.91		
	Pomona II		46,642.70		
	Villalonga I		231,482.42		
	Villalonga II		15,193.32		
Monitoring equipment		Serial	Model	Brand	Accura-cy
	Chubut Norte I				
	Circuit 1				
	Main meter	351608675	402-MT5A-26D	Circutor	0.2%
	Back-up meter	351608684	402-MT5A-26D	Circutor	0.2%

	Circuit 2				
	Main meter	351608687	402-MT5A-26D	Circutor	0.2%
	Back-up meter	351608663	402-MT5A-26D	Circutor	0.2%
	Chubut Norte II				
	Circuit 1				
	Main meter	351806297	402-MT5A-26D	Circutor	0.2%
	Back-up meter	351806295	402-MT5A-26D	Circutor	0.2%
	Circuit 2				
	Main meter	351806294	402-MT5A-26D	Circutor	0.2%
	Back-up meter	351806296	402-MT5A-26D	Circutor	0.2%
	Pomona I				
	Circuit 1				
	Main meter	351803677	402-MT5A-26D	Circutor	0.2%
	Back-up meter	351803678	402-MT5A-26D	Circutor	0.2%
	Circuit 2				
	Main meter	351803679	402-MT5A-26D	Circutor	0.2%
	Back-up meter	351803680	402-MT5A-26D	Circutor	0.2%
	Pomona II				

	Main meter	351803681	402-MT5A-26D	Circutor	0.2%
	Back-up meter	351803682	402-MT5A-26D	Circutor	0.2%
	Villalonga I				
	Main meter	MW-1706B236-02	ION8650	SCHNEIDER ELECTRIC	0.2%
	Back-up meter	MW-1706B242-02	ION8650	SCHNEIDER ELECTRIC	0.2%
	Villalonga II				
	Main meter	MW-1706B261-02	ION8650	SCHNEIDER ELECTRIC	0.2%
	Back-up meter	MW-1706B601-02	ION8650	SCHNEIDER ELECTRIC	0.2%
	During the remote inspection and through document review, it has been confirmed that the data has been monitored continuously by the bidirectional meters above described.				
QA/QC procedures to be applied	The calibration/verification of the meters and their frequency has been established by the national authorities. In addition, the generation values are cross-checked with the information available on the website of the electricity wholesale market management company (CAMMESA). Calibration/Verification dates of the energy meters at each wind farm are as follow:				
	Wind farm		Calibration/Verification dates of main and back-up meters		
	Chubut Norte I		24/10/2018		
	Chubut Norte II		11/09/2020		
	Pomona I		24/05/2019		
	Pomona II		24/05/2019		
	Villalonga I		23/11/2018		

	Villalonga II	21/01/2019
Purpose of the data	There is not an established calibration/verification frequency by CAMMESA and the SMEC electricity meters (that are sealed by CAMMESA) and their calibration/verification are out of the control of the PP. As stated in CAMMESA's <i>Technical Procedure 14 (SMEC External Audits)</i>: https://cammesaweb.cammesa.com/auditorial/; https://cammesaweb.cammesa.com/normativa/, annually CAMMESA determines the sample of SMEC meters to be verified randomly. The net electricity generation used in the ER calculation has also been cross-checked with the data generation from Genneia wind farms' meters available in CAMMESA web site. The audit team could verify the data is line and correct for each month of this monitoring period and in case of slight differences between the wind farms' and CAMMESA' values the PP has conservatively selected the lowest values.	
Calculation method	Measured directly. During the remote inspection and through document review, it has been confirmed that the readings of net electricity supplied can be taken from the main and back- up meters installed at each wind farm. The metering readings are used for emission reduction calculation purpose. The net electricity can also be downloaded from CAMMESA web site in monthly reports.	
Comments	As confirmed during the remote inspection, all data collected as part of the monitoring process is archived electronically and kept for at least two years after the end of the last crediting period.	

- Ex-ante parameters:

The following is the ex-ante parameter used in the ER calculation which is in compliance with the registered VCS PD:

Parameter	Description	Source/Justification
EF _{grid,CM,y} (tCO ₂ /MWh)	Combined Margin CO ₂ emission factor for grid connected power generation in year y (last three years with available data were used).	The combined margin emission factor was been calculated in accordance with "Tool to calculate the emission factor for an electricity system", version 7.0 in the registered PD. The value of 0.4484 tCO ₂ e/MWh has been used for the calculation of the baseline emissions and is found to be consistent with the registered VCS PD.

- Findings:

Please refer to the 03 CAR and 04 CL and its closure for details in Annex I.

- Final Assessment

The verification team confirms that:

- The project activity has been implemented and operated as per the registered VCS PD and that all physical features (technology, project equipment, and monitoring and metering equipment) of the project are in place, as per the documents provided by the PP and remote audit,
- The project activity is operational, and no major breakdowns have happened since start-up,
- The proof of title of the project activity was checked through evidence provided such as the commissioning letters from CAMMESA and Environmental Licenses,
- The monitoring complies with the requirement of the applied methodology,
- The information inflow (from data generation, to recording, calculation and reporting) is included above under each parameter and confirms to the requirement of the registered VCS PD,
- The values included in the monitoring report and corresponding emission reductions spreadsheets are verified and included under each monitoring parameter.

- As per MR, the baseline emission is given through the quantity of net electricity generation supplied by the project plant/unit to the grid in year y. The project emission and leakage is considered zero '0' according to the applied methodology.
- There is no evidence of double counting as the project is not registered in other carbon program. Furthermore, the project has not participated or being rejected under other Carbon program. This has been declared by the PP in the MR.
- The implementation of the project is in accordance with the VCS PD and is confirmed by the verification team.
- The project activity has demonstrated to contribute to SDGs 7, 8 and 13.

4.2 Safeguards

4.2.1 No Net Harm

No potential negative environmental and socio-economic impacts have been identified as per the EIA and Environmental Licences of each wind farm.

The project activity fulfils all legal requirements with respect to operational and environmental perspective.

Additionally, Genneia is certified under ISO 14001 and ISO 45001.

4.2.2 Local Stakeholder Consultation

Genneia has established a method for ongoing communication with local stakeholders that includes various communication and dialogue channels: telephone numbers, email address, mailbox at the entrance of the sites, complaints, queries and claims book; etc.

During the verified monitoring period the company received 7 e-mails from local stakeholders in the project' wind farms. Nevertheless, according to the PP registries the verification team has verified that none of the emails contains negative evaluations about the project.

Thus, the verification team confirms that no relevant stakeholders' comments were received during the verified monitoring period. Interviews with employees confirmed the same.

4.3 AFOLU-Specific Safeguards

Not applicable as the project activity is not an AFOLU project.

4.4 Accuracy of GHG Emission Reduction and Removal Calculations

The verification team has reviewed the emission reduction (ER) spreadsheet and checked all the formulae and verified them to be correct and in line with the monitoring plan of the registered VCS PD and the applied monitoring methodology.

All the monitored parameters are described above in section 4.1. All the ex-ante parameters which are used in the calculation of emission reduction are presented in section 4.1 of the MR transparently. It is confirmed that all the ex-ante parameters have been correctly used in the emission reduction calculation.

- Baseline emissions:

According to ACM0002 Version 19.0 baseline emissions include only CO₂ emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity. The methodology assumes that all project electricity generation would have been generated by existing grid-connected power plants and the addition of new grid-connected power plants.

The baseline emissions are to be calculated as follows:

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

Where:

BE_y = Baseline emissions in year y (tCO₂/yr)

$EF_{grid,CM,y}$ = Combined margin CO₂ emission factor for grid connected power generation in year y calculated using the latest version of the "Tool to calculate the emission factor for an electricity system" (tCO₂/MWh)

The calculation of the actual net GHG removals by sinks is calculated as follow:

According to ACM0002, Version 19.0 the quantification of net GHG emission reductions is as follow:

$$ER_y = BE_y - PE_y$$

Where:

ER_y = Emission reductions in year y (tCO_{2e}/yr)

BE_y = Baseline emissions in year y (tCO_{2e}/yr)

PE_y = Project emissions in year y (tCO_{2e}/yr).

As no project emissions (PE_y) were identified for Genneia Wind Projects in Argentina, $ER_y = BE_y$.

Therefore,

$$ER_y = EG_{\text{facility},y} \times EF_{\text{grid},CM,y}$$

For the Combined margin CO₂ emission factor ($EF_{\text{grid},CM,y}$), it is calculated ex-ante according to the Tool to calculate the emission factor for an electricity system" (Version 7.0.). The value applied for the entire Monitoring Period is 0.4484 tCO₂e/MWh.

- Project Emissions:

No project emissions are considered for the project activity as the project activity has no fossil fuels consumption for electricity generation. The same has been checked and according to the applied methodology and compliance with the registered VCS PD.

- Leakage:

As per the methodology ACM0002, version 19.0. and as defined in the registered VCS PD, no leakage is considered in the project activity and the same is followed in this monitoring period also. Thus, it is in compliance with the registered VCS PD.

All arrangements described in the Monitoring Plan have been checked. No deviations have been identified.

- Final Assessment

The verification team confirms that:

- According to the applied methodology, the conservativeness of the achieved emission reduction was checked, and the detailed emission reduction calculation has been transparently provided in the ER sheet.
- All the formulae and the calculation procedure were checked by the verification team.
- In the opinion of verification team, the assumptions, emission factors and default values that were applied in the calculations have been justified. Also, the verification team confirms that there were no manual transposition errors between the data sets in the ER spreadsheets during the current monitoring period.

- It is confirmed that the data has been measured directly from meters and it was cross-checked from the official monthly records downloaded from CAMMESA web site.
- All the formulae have been found to be correctly applied in the GHG emission removals calculations.
- The excel spreadsheets were cross checked with the archived monitored data and no discrepancies were found.
- After revision of the MR and calculation spreadsheet, it is concluded that the GHG emission reductions spreadsheets are transparent and clearly referenced.
- Thus, the verification team is confident that the GHG calculation is correct, accurate, traceable, and conservative.

4.5 Quality of Evidence to Determine GHG Emission Reductions and Removals

For the evidence assessment the following activities have been performed:

- Assessment of all calibration certificates of the main and back-up meters,
- Assessment of all installed meters to confirm that they are state of the art and bidirectional.
- Review of all energy generation data from PP,
- Review of the energy generation directly from the web site of CAMMESA to cross- check the information.

All relevant documents were checked to assess the correctness and quality of data submitted by the project participants, which are used to determine GHG emissions reductions.

All records needed for monitoring are archived in line with the requirements of the registered monitoring plan. No significant lack of evidence and missing data were detected during remote audit discussion and video inspection.

Hence, the verification team confirms that the monitoring system ensures required quality of the monitoring system to ensure the quality of the monitored data.

All internal data are subjected to QA/QC measures. The monitoring parameters have been measured / determined without material misstatements and is in line with all applicable standards and relevant requirements.

The information inflow (from data generation, aggregation, to recording, calculation and reporting) is included in section 4.1 under each parameter and confirms to the requirement of the registered VCS PD. The electricity data is measured by the electricity meters and recorded continuously, and CAMMESA reports are generated monthly.

It was also verified through remote audit inspection that the plant's team involved in the monitoring of project activity is well experienced.

Hence, the verification team concludes that competent staff is employed by the project proponent to carry out the relevant tasks with sufficient accuracy.

All documents were verified through remote visit interviews and cross-check of the information between the different data sources. The verification team finds to be sufficiency of quantity, and appropriateness of quality, of the evidence used to determine the GHG reductions and removals. The verification team finds the quality to be of adequate level to assure confidence in the accurate quantification of the GHG emission removals and reductions.

- Final Assessment:

Documents used as evidence for input values of GHG emissions reductions calculation were assessed and found to be reliable and authentic. The verification team concludes that there is sufficient evidence available, and that the evidence and the data have an acceptable level of quality. All input parameters and monitoring methods can be confirmed as per best project praxis.

4.6 Non-Permanence Risk Analysis

Not applicable for this project.

5 VERIFICATION OPINION

KBS Certification Services Pvt. Ltd. was commissioned by Swiss Carbon Value Ltd. to carry out the Verification of the project "Genneia Wind Projects in Argentina" with regard to the requirements of VCS standard, Version 4.4.

The project involves the GHG emissions reductions through renewable wind energy in the host country Argentina.

The project applies the CDM large-scale consolidated methodology ACM0002 – Grid-connected electricity generation from renewable sources, version 19.0.

In the course of the VCS Verification, 03 Correction Action Requests (CAR) and 04 Clarification Requests (CL) were raised and successfully closed. No Forward Action Requests (FAR) nor Clarification Requests (CL) have been raised.

The VCS Verification was based on the monitoring report, emission reduction calculation spreadsheet, the monitoring plan as set out in the registered VCS PD and supporting documents made available to the KBS Certification Services Pvt. Ltd. by the project participant.

As a result of this verification, the verifier confirms that:

- All operations of the project are implemented and installed as planned and described in the registered VCS PD,
- The monitoring plan is in accordance with the applied approved CDM methodology, i.e., ACM0002, version 19.0,
- The equipment essential for measuring parameters required for calculating emission reductions are properly maintained,
- The monitoring system is in place and functional. The project has generated GHG emission reductions.

In addition, the verifier confirms that the GHG emission reductions are calculated without material misstatements in a conservative and appropriate manner. KBS herewith confirms that the project has achieved GHG emission reductions in the as follows:

Verification period: From 01-January-2021 to 31-December-2021 (including both days)

Verified GHG emission reductions and removals in the above verification period, broken down by calendar year:

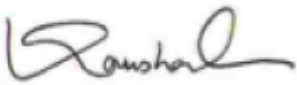
Year	Baseline emissions or removals (tCO ₂ e)	Project emissions or removals (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Net GHG emission reductions or removals (tCO ₂ e)
2021	393,884	0	0	393,884
Total	393,884	0	0	393,884

Year	Ex-ante emissions reductions /removals	Achieved emissions reductions/removals	Percent difference	Justification for the difference
2021	444,180	393,884	11.3%	Fluctuations in wind potential are common and are due to numerous factors.
Total	444,180	393,884	11.3%	

Location: Faridabad

Date: 05- April-2023

Authorized Signatory:



Kaushal Goyal
Managing Director
KBS Certification Services Pvt. Ltd.

APPENDIX I: REFERENCES

PP Documents

Reference	Document
1.	Monitoring Report of the current Monitoring Period: - Version 01, 06 December 2022 - Version 02, 02 March 2023
2.	Emission reductions spreadsheet: - 221206_ER_Genneia_wind.xlsx
3.	Commissioning and operation start date: - Commercial authorization letter from CAMMESA of each wind farm - Evidence of operation start date of each wind farm under testing
4.	Technical documents of the project activity: - Technical specification of the wind turbine generators - Project engineering
5.	No Net Harm: - EIA - Environmental licenses of each wind farm - Genneia ISO 14001 certificate - Genneia ISO 45001 certificate
6.	Local Stakeholders consultation: - Registry of 2021 comments, complaints, and claims. File: "2021_MQCYR.xlsx"
7.	Electricity generation data: - Raw electricity generation data from each wind farm, - Monthly electricity generation reports from CAMMESA, https://cammesaweb.cammesa.com/
8.	Metering System: - Calibration/Verification certificates of the meters - Pictures of the meters.
9.	SDG Evidence: - Registry of personnel per wind farm in December 2021
10.	Project ownership: - Commissioning letters - Environmental Licenses - Genneia Balance Sheet 2021

Regulatory Documents searched and referred by VVB

Reference	Document
1.	ACM0002, Version 19.0. "Consolidated baseline methodology for grid-connected electricity generation from renewable sources"

2.	• Tool for the demonstration and assessment of additionality, version 07.0.0. • Tool to calculate the emission factor for an electricity system, version 07.0. • Baseline, project and/or leakage emissions from electricity consumption and monitoring of electricity generation, version 03.0. • Methodological Tool: Investment Analysis (version 09.0).
3.	• Verified Carbon Standard v4.4 • VCS Program Guide, v4.3 • VCS Methodology Requirements, v4.3 • Program Definitions, v4.3 • Registration and Issuance Process, v4.3 • Monitoring Report Form, v4.2 • Verification Report Form v4.2
4.	• Validation Report for Genneia Wind Projects in Argentina. Ruby Canyon Environmental, Inc.28-December-2019. • Verification Report for Genneia Wind Projects in Argentina. Ruby Canyon Environmental, Inc., 15-July-2021.
5.	IPCC publications, www.ipcc-ggip.iges.or.jp
6.	UNFCCC, http://cdm.unfccc.int
7.	VERRA VCS https://verra.org/programs/verified-carbon-standard/

APPENDIX II: FINDINGS

Summary of findings	CL	CAR	FAR
	04	03	00

Table 1. Remaining FAR from validation and previous verifications

FAR		Section no.		Date:	
Description of FAR					
Project participant response			Date:		
Documentation provided by project participant					
DOE assessment				Date:	

Table 2. CL from this validation/verification

CL ID	CL 01	Section no.	3.1	Date: 26/01/2023	
Description of CL					
No information regarding the operation of the project activity(s) during the present monitoring period, including any information on events that may impact the GHG emission reductions or removals and monitoring has been provided has been provided in section 3.1. The PP is requested to clarify in section 3.1 of the MR if each project instance operated under normal conditions during the present monitoring period or report any event that may have occurred that impacted the GHG emission reductions and monitoring. Additionally, Additionally, the PP is requested to clarify the exact operation start date for Chubut Norte II wind farm in 2021 and provide evidence of it and the operation start dates under testing of the other five wind farms.					
Project participant response			Date: 13/02/2023		
Information about events occurring during the operation of the project in the relevant monitoring period has been included.					

Information has also been provided regarding the start of operation of the Chubut Norte II project.

Documentation provided by project participant

A document (230214_Chunor_Gen_Feb-May) is shared with the daily generation from February where the project started the operational testing phase to May.

DOE assessment

Date: 13/03/2023

The PP clarified in section 3.1 of the MR that the project operated under normal conditions and some transmission line failures occurred, but it has not impacted the generation recorded since the plants have a system of remote sensors used to pause operations when these events occur.

PP also provided evidence of operation start date of each wind farm under testing of the 6 wind farms (230214_Chunor_Gen_Feb-May and 230214_Chunor_Gen_Feb-May) and it was confirmed that the dates correspond with the operation start dates in the MR.

CL is closed.

CL ID	CL 02	Section no.	4.2	Date: 26/01/2023
Description of CL				
Regarding the QA/QC procedures to be applied, in the Monitoring Report Version 1 it is stated that: "The verification of the meters will be done as established by the national authorities." Meanwhile, the validated PD states: "The verification of the meters will be done as established by the national authorities or alternatively at least once every three years." The calibration/verification certificates provided for the main and back-up meters of each project' instances are dated as follow: - Chubut Norte I: 24/10/2018 - Chubut Norte II: The copy of the commercial authorization certificate from 12/04/2021 does not contain the energy meters verification sheets. - Pomona I: The copy commercial authorization certificate from 25/06/2019 does not contain the energy meters verification sheets. - Pomona II: The commercial authorization certificate from 25/06/2019 does not contain the energy meters verification sheets. - Villalonga I: The commercial authorization certificate from 05/12/2018 does not contain the energy meters verification sheets. - Villalonga II: The commercial authorization certificate from 14/08/2019 does not contain the energy meters verification sheets. The PP is requested to clarify if the electricity meters, particularly Chubut Norte I and Villalonga I meters, are calibrated at least once every three years as stated in the validated PD and provide the calibration/verification sheets not included in the above-mentioned commercial authorization certificates provided.				

Project participant response	Date: 12/02/2023
According to the Argentine context, several permanent deviations to the validated project design have been proposed. Please see the relevant section 3.2.2 for more information. Initial calibration/installation certificates are again provided.	
Documentation provided by project participant	
_Acta_SMEC_CHUN1_1 _Acta_SMEC_CHUN1_2 _Acta_SMEC_CHUN2_1 _Acta_SMEC_CHUN2_2 _Acta_SMEC_POM01_1 _Acta_SMEC_POM01_2 _Acta_SMEC_POM02_1 _Acta_SMEC_VIL1_1 _Acta_SMEC_VIL2_1	
DOE assessment	Date: 13/03/2023
The PP clarified in section 3.2.2 of the MR that the electricity meters are calibrated as established by the national authorities and that the PP does not have free access to intervene the meters and perform the calibration. It has been verified that the Electric-Commercial Metering System (Sistema de Medición Eléctrico Comercial – SMEC) meters (main and back-up) of each power plant are sealed and that the national grid coordinator (CAMMESA) is responsible for their verification as per CAMMESA's Technical Procedure 14 (SMEC External Audits: https://cammesaweb.cammesa.com/auditoria/; https://cammesaweb.cammesa.com/normativa/) and that there is not a fixed calibration frequency established for the meters. As stated in the procedure, annually CAMMESA determines the sample of SMEC meters to be verified. Regarding CAMMESA quality measurement audits (verifications or calibrations) and how CAMMESA determines the sample of SMECs to be audited in a given year, CAMMESA webpage (https://cammesaweb.cammesa.com/auditoria/#acalidad) indicates: “The Measurement Quality Audits are intended to verify that the SMEC nodes that are already commercially enabled continue to meet the quality standards with which they were originally audited and are in line with current regulatory requirements. Within this framework, 240 measurement points are audited per year, divided equally between the North and South zones. The selection of the nodes to be audited is random, following a sampling grid that allows a global panorama of the entire SMEC node park. In this way, the audits to be carried out are proportionally distributed among the different types of MEM Agents in order to obtain a balanced sample. In addition to the annual audit plan, the regulations provide that	

CAMMESA may require a specific audit to be carried out on a SMEC node in the event of alleged deviations in its quality.” Thus, it is confirmed that the project electricity meters’ calibration and their frequency is out of the control of the PP.

Thus, the PP description of the calibration frequency deviation from the registered PD in section 3.2 of the MR is found acceptable and correct.

Furthermore, the PP assessed if the deviation impacts the applicability of the methodology, additionality, or the appropriateness of the baseline scenario as per section 3.20 of VCS Standard v4.4 and given that the PD deviation only encompasses a change of the meters’ calibration frequency, which is in accordance with the national regulations, the assessment conducted is found correct and acceptable to prove this PD deviation does not impact the additionality and appropriateness of the baseline scenario of the project, and that the PD deviation remains in compliance with the applied methodology.

Finally, the PP has provided the calibration/verification certificates of all the meters contained in the commercial authorization certificates of each power plant and their dates and verification results has been checked and found acceptable: Chubut Norte I (24/10/2018), Chubut Norte II (11/09/2020), Pomona I (24/05/2019), Pomona II (24/05/2019), Villalonga I (23/011/2018) and Villalonga II (21/01/2019).

CL is closed.

CL ID	CL 03	Section no.	4.3	Date: 26/01/2023
Description of CL				
The ID (CHN2M62P) and Serial number (351806294) of Chubut Norte II main meter provided in the MR differs from the ID (CHN2M61P) and Serial Number (351806297) contained in the commercial authorization certificate from 12/04/2021. The Serial number (MW-1706B597-02) of Villalonga II main meter provided in the MR differs from the Serial Number (MW1705B26102) contained in the commercial authorization certificate from 14/09/2019 and information of the back-up meter is not included in the authorization certificate. The PP is requested to clarify the differences and missing data.				
Project participant response		Date: 13/02/2023		
All serial numbers in the MR have been corrected and now match the commercial authorization certificates.				
Documentation provided by project participant				
_Acta_SMEC_CHUN1_1 _Acta_SMEC_CHUN1_2				

_Acta_SMEC_CHUN2_1	
_Acta_SMEC_CHUN2_2	
_Acta_SMEC_POM01_1	
_Acta_SMEC_POM01_2	
_Acta_SMEC_POM02_1	
_Acta_SMEC_VIL1_1	
_Acta_SMEC_VIL2_1	
DOE assessment	Date: 13/03/2023
Updated serial numbers of the electricity meters in the MR were checked against the calibration/verification certificates contained in the commercial authorizations of each power plant and found correct. CL is closed.	

CL ID	CL 04	Section no.	Emission reductions spreadsheet	Date: 26/01/2023
Description of CL				
For Chubut Norte I in the ER spreadsheet there is no electricity generation data from the wind farm meters from February to May and there is data from CAMMESA electricity generation monthly reports. The PP is requested to clarify in the ER spreadsheet why there is no electricity generation data from the wind farm meters and provide evidence.				
Project participant response		Date: 13/02/2023		
Chubut Norte II with no values due to SMEC failures. Values prior to the authorization are not considered under contract and therefore are not considered by the treasury department. However, the records were collected on a day-to-day basis in the SCADA system.				
Documentation provided by project participant				
230214_Chunor_Gen_Feb-May (Day-to-day records of the Chubut Norte II farm)				
DOE assessment			Date: 13/03/2023	
PP clarification is found acceptable, and it has been included in the ER spreadsheet to avoid misunderstanding about the difference in the electricity records from the power plant SCADA system and CAMMESA records. CL is closed.				

Table 3. CAR from this validation/verification

CAR ID	CAR 01	Section no.	VCS Standard, Version 4.4, item 3.5.4	Date: 26/01/2023
Description of CAR				
The Monitoring Report utilizes the VCS Monitoring Report template Version 4.1. PP is requested to update the Monitoring Report to the latest approved VCS Monitoring Report template Version 4.2 available on the Verra website and adhere to all instructional text within the template.				
Project participant response		Date: 13/02/2023		
MR has been updated to the new template				
Documentation provided by project participant				
230213_MR_Wind_final				
DOE assessment				Date: 13/03/2023
The updated MR has been revised and it and it is considered in accordance with the latest template version 4.2 and filled as per the instructional text in the template. CAR is closed.				

CAR ID	CAR 02	Section no.	1.11	Date: 26/01/2023
Description of CAR				
The sustainable development contributions brief description contains 212 words exceeding the 100 words length required in the Monitoring Report template instructions. The PP is requested to correct the description. The information contained in column “Contributions Over Project Lifetime” of Table 1 refers to the contributions during the present monitoring period instead over the project lifetime. The PP is requested to correct the information under column “Contributions Over Project Lifetime”. Regarding the 28 O&M jobs created during the current monitoring period, evidence was not included in the appendices of the monitoring report. The PP is requested to include the evidence in the MR appendices, as per the MR template instructions				
Project participant response		Date: 13/02/2023		
The section has been adjusted and evidence has been included.				
Documentation provided by project participant				

230213_MR_Wind_final	
DOE assessment	Date: 13/03/2023
The sustainable development contributions brief description has been corrected and now contains 90 words in line with the maximum 100 words length required in the Monitoring Report template instructions. The PP has corrected the column “Contributions Over Project Lifetime” of Table 1 in line with the monitoring report instructions and electricity generation and GHG emission reductions values has been checked against previous and current verification. The O&M jobs created have been supported with a table included in Appendix I. CAR is closed.	

CAR ID	CAR 03	Section no.	4.2	Date: 26/01/2023
Description of CAR				
The registered VCS PD states that “A main and a backup meter will be installed for each power plant.” Section 4.3 of MR v01 states that “Two 0.2s precision meters are installed for each wind farm, one of them acting as a back-up unit.” and provide information and photographs about one main meter and one back-up meter at each wind farm. However, during the remote site inspection on 26/01/2023, the main and back-up meters installed at each wind farm were checked trough videocalls with the wind farms’ O&M personnel and it was found that at Chubut Norte I, Chubut Norte II and Pomona I wind farms there are two sets of main meter and back-up meter at each wind farm. PP shall describe all the meters installed at each wind farm in MR section 4.3 and provide reference documents of their calibration/verification and the line diagrams of the meters at each wind farm. Additionally, as per section 3.20 of VCS Standard v4.4 the PP shall describe the PD deviation in section 3.2 of the MR and assess if the deviation impacts the applicability of the methodology, additionality, or the appropriateness of the baseline scenario, consistent with the CDM Guidelines on assessment of different types of changes from the project activity as described in the registered PDD, mutatis mutandis.				
Project participant response		Date: 13/02/2023		
All information has been included in section 4.3 and a permanent deviation to the validated project design has been proposed. See more details in section 3.2.2.				
Documentation provided by project participant				
230213_MR_Wind_final				

DOE assessment	Date: 13/03/2023
PP has provided the calibration/verification certificates and the line diagrams of all the meters (main and back-up) installed at each wind farm and it was checked that they correspond with the total number of meters and description and specifications provided in the updated MR section 4.3. PP has described in section 3.2 the deviation and assessed its impact in the applicability of the methodology, additionality, or the appropriateness of the baseline scenario as per section 3.20 of VCS Standard v4.4 and given that this PD deviation only encompasses an increase in the number of electricity meters in Chubut Norte I, Chubut Norte II and Pomona I wind farms (2 sets of main meters and back-up meter at each one), that were authorized by CAMMESA before the projects' operation start date, the assessment conducted is found correct and acceptable to prove this PD deviation does not impact the additionality and appropriateness of the baseline scenario of the project, and that the PD deviation remains in compliance with the applied methodology. CAR is closed.	

Table 4. FAR from this verification

FAR		Section no.		Date:
Description of FAR				
Project participant response		Date:		
Documentation provided by project participant				
DOE assessment			Date:	

APPENDIX III: ABBREVIATIONS

BAU	Business as usual
CL	Clarification request
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalent
CP	Certification Program
CL	Clarification Request
DNA	Designated National Authority
EB	CDM Executive Board
EIA	Environmental Impact Assessment
ER	Emission Reduction
FAR	Forward Action Request
GHG	Greenhouse gas(es)
GWP	Global Warming Potential
IPCC	Intergovernmental Panel on Climate Change
MP	Monitoring Plan
MR	Monitoring Report
PP	Project Proponent
QC/QA	Quality control/Quality assurance
UNFCCC	United Nations Framework Convention on Climate Change
VCS	Verified Carbon Standard
VCS – PD	VCS – Project Description
VCU	Verified Carbon Unit
VT	Verification team
VVB	Validation/Verification Body
WTG	Wind Turbine Generator
XLS	Emission Reduction Calculation Spread Sheet

APPENDIX IV: COMPETENCE OF TEAM MEMBERS

Personnel Name:		Raúl González Mitre	
Qualified to work as:			
Team Leader	☒	Technical Expert	☒
Validator/Verifier	☒	Financial Expert	☒
Technical Reviewer	☒	Local Expert (Latin America)	☒
Area(s) of Technical Expertise			
Sectoral Scope	Technical Area		
SS: 01: Energy industries(renewable/non-renewable sources)	TA 1.1: Thermal energy generation from fossil fuels and biomass including thermal electricity from solar TA 1.2: Energy generation from renewable energy sources		
SS 3: Energy demand	TA 3.1: Energy Demand		
SS 4: Manufacturing Industries	TA 4.1: Cement and lime production		
SS 7: Transport	TA: 7.1: Transport		
SS 13: Waste handling and disposal	TA 13.1: Waste Handling and Disposal		
	TA 13.2: Manure		
SS 14: Afforestation and reforestation	TA 14.1: Afforestation and reforestation		
Approved by (Manager C & T)	Shikha Sharma		
Approval date:	06/12/2021		

Personnel Name:		Adriana Torchelo	
Qualified to work as:			
Team Leader	☐	Technical Expert	☒

Validator/Verifier	☒	Financial Expert	☒
Technical Reviewer	☐	Local Expert (Argentina, Uruguay, Chile)	☒
Area(s) of Technical Expertise			
Sectoral Scope	Technical Area		
SS: 01: Energy industries (renewable/non-renewable sources)	TA 1.2: Energy generation from renewable energy sources		
SS 13: Waste handling and disposal	TA 13.1 Waste Handling and Disposal		
SS 14: Afforestation and reforestation	TA 14.1 Afforestation and reforestation		
Approved by (Manager C & T)	Shikha Sharma		
Approval date:	02/09/2022		

Personnel Name:	Sanjay Patankar		
Qualified to work as:			
Team Leader	☒	Technical Expert	☒
Validator/Verifier	☒	Financial Expert	☐
Technical Reviewer	☒	Local Expert (India)	☒
Area(s) of Technical Expertise			
Sectoral Scope	Technical Area		
SS: 01: Energy industries (renewable/non-renewable sources)	TA 1.1: Thermal energy generation from fossil fuels and biomass including thermal electricity from solar		
	TA 1.2: Energy generation from renewable energysources		
SS 3: Energy demand	TA 3.1. Energy Demand		
Approved by (Manager C & T)	Dr. Indu Dwivedi		
Approval date:	17/02/2023		