



VERIFICATION REPORT

PARQUE EÓLICO MALDONADO



Document Prepared By LGAI Technological Center, S.A. (Applus+ Certification)

Project Title	Parque Eólico Maldonado
Version	01.0
Report ID	BELL_VCS_VER_9022

Report Title	Parque Eólico Maldonado
Client	R del Sur S.A.
Pages	56
Date of Issue	13/12/2022
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Summary:

LGA Technological Center, S.A. (hereafter referred to as “Applus+ Certification”) was commissioned by R del Sur, S.A. to perform the 2nd periodic verification of greenhouse gas (GHG) emission reductions for the project-based initiative registered under VCS (VCS project activity) titled “Parque Eólico Maldonado” (VCS Ref. No. 1308) (hereafter referred to as “the VCS project activity”). Applus+ Certification verification assessment and its verification opinion are based on information and data reported in the latest version of the Monitoring Report ^{/1/} for the monitoring period from 01/10/2016 to 31/12/2021 of the VCS project activity (hereby termed as “the considered monitoring period”). GHG emission reductions for the considered monitoring period are claimed as Verified Carbon Units (VCU) under guidelines, rules and procedures of the Verified Carbon Standard (VCS) version 4.3 ^{/5/}.

The VCS project activity was both previously validated and had its 1st periodic verification performed by the Validation and Verification Body (VVB) AENOR INTERNACIONAL S.A.U. (AENOR). Details for the VCS project activity are available online at the VERRA/VCS registry

(<https://registry.verra.org/app/projectDetail/VCS/1308>).

The VCS project activity encompasses the installation and operation of a 50 MW wind farm, located at the department of Maldonado, in the Southeast region of Uruguay. The energy generated by the project is supplied to the national grid of Uruguay.

As part of the VCS project activity electricity is generated through the utilization of wind power in the project’s electricity generation infrastructure encompassing 25 turbines with capacity of 2 MW. As confirmed by the Applus+ Certification’s verification team and as appropriately outlined in the Monitoring Report ^{/1/}, purchase of main equipment happened on 20/07/2012, when the wind turbines were bought. The wind farm started its construction on 19/11/2012 and got its environmental authorization on 07/11/2012. Commercial operation started on 10/04/2014, since then, has been in continued operation. Also, the power plant is expected to operate for 20 years along with the displacement of 190,500 MWh/year from the national power grid. (109,818 tCO₂ per year and 1,098,180 tCO₂ during its first 10-year crediting period).

During the considered monitoring period, the project has operated mostly without operational stops, with no significant periods without electricity generation been reported ¹. Moreover, the identified delay in the calibration of the electricity meter was an atypical event occurred during the considered monitoring period.

¹ Situations with no significant effect on electricity measurement records or emission reduction calculations occurred on the operation of the backup electricity meter for 14 hours during the whole monitoring period as follows:

- 09/01/2018 from 11 PM to 12 PM
- 06/10/2018 from 1 AM to 11 PM
- 02/09/2020 from 12PM to 3 AM

The Parque Eólico Maldonado serves as source of electricity from renewable sources to be supplied to the National grid of Uruguay. The VCS project activity promotes real and permanent GHG emission reductions through displacing electricity that would otherwise be generated (in the same amount) in the absence of the VCS project activity (baseline scenario) by existent grid-connected electricity generation facilities (incl. fossil fuel fired power plants) and addition of new power generation sources within the National Electricity Grid of Uruguay.

The purpose and scope of the VCS verification assessment is to ensure that reported emission reductions for a VCS project activity within a considered monitoring period are deemed/sufficiently complete, accurate and determined based on appropriate monitoring and calculation approaches under conformance with applicable VCS standard regulatory documents ^{/5/} and applied baseline and monitoring methodology, in order to be certified. Extensive document desk review, interviews with representatives of the project proponents and additional complementary auditing measures were conducted by the verification team appointed by Applus+ Certification in order to verify and confirm the correctness and appropriateness of information and data included in the Monitoring Report ^{/1/}.

Applus+ Certification confirms the following documentation has been reviewed:

- Monitoring plan included in the registered VCS Project Description (VCS-PD) ^{/2/} (version 2.6, dated 31/03/2016);
- The Validation Report for the VCS project activity ^{/3/} (version 02, dated 31/03/2016);
- Verification Report from the 1st monitoring period from 10/04/2014 to 30/09/2016 for the VCS project activity ^{/26/};
- Monitoring Report ^{/4/} for the monitoring period from 01/10/2016 to 31/12/2021 for the VCS project activity (version 3.0, dated 03/11/2022)");
- The applied CDM baseline and monitoring methodology:
 - ACM0002 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources"; Version 16.0 ^{/6/}
 - "Tool to calculate the emission factor for an electricity system --- Version 05.0" ^{/19/}
 - "Tool for the demonstration and assessment of additionality --- Version 07.0.0" ^{/18/}
 - "Combined tool to identify the baseline scenario and demonstrate additionality --- Version 06.0.0" ^{/13/}
- VCS standard (version 4.3) ^{/5/} and VCS guidance Validation and Verification Manual (version 3.2) ^{/21/}, as well as relevant applicable UNFCCC CDM requirements.
- All information and references relevant to the VCS project activity resulting in emission reductions.

As part of the performed verification assessment, a set of nine (9) Corrective Action Requests (CARs) were identified/raised by the appointed Applus+ Certification's verification team. All of such CARs were confirmed as being appropriately addressed by the project proponents through the completion of a revised latest version of the Monitoring Report ^{/1/} for the considered monitoring period.

Applus+ Certification hereby confirms that in general the VCS project activity is implemented and has operated within the considered monitoring period from 01/10/2016 to 31/12/2021 under conformance with project design details established in its previously completed and registered VCS PD ^{/2/}.

As also confirmed by the Applus+ Certification's verification team, the design of the monitoring plan for the VCS project activity is under conformance with applicable requirements of the applied CDM baseline and monitoring methodology ACM0002 (version 16.0) ^{/6/} + applied CDM methodological tools.

Furthermore, as also confirmed by the Applus+ Certification's verification team, monitoring related activities for the VCS project activity have been carried out during the considered monitoring period under full conformance with requirements and guidance of the monitoring plan as per the registered VCS PD ^{/2/}. The monitoring system for the VCS project activity is in place and has been operated in a way that emission reductions achieved are correctly determined based on available monitoring data without material misstatements and under a deemed reasonable level of assurance.

Based on assessed and reviewed information, Applus+ Certification hereby confirms that the implementation of the project and its operation resulted on achieved GHG emission reductions of 483,557 tCO₂e during the monitoring period from 01/10/2016 to 31/12/2021 (including both days)

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1 INTRODUCTION

1.1 Objective

LGA Technological Center, S.A. (Applus+ Certification) was commissioned by R del Sur S.A. to perform the 2nd periodic verification assessment of GHG emission reductions for the VCS project activity titled “Parque Eólico Maldonado” (VCS Ref. No. 1308) for the monitoring period from 01/10/2016 to 31/12/2021 as reported in the Monitoring Report ^{/1/}.

LGA Technological Center, S.A. (Applus+ Certification) as the Validation and Verification Body (VVB) responsible for the verification assessment is accredited as a Designated Operational Entity (DOE) by UNFCCC for the technical scopes the VCS project activity falls into (Technical scope 1) and also meets applicable competence requirements as established in Standard ISO 14065:2007. These aspects and status qualify Applus+ Certification to act as a Validation and Verification Body (VVB) responsible for performing periodic verifications for the VCS project activity.

The objective of the verification assessment is to have an independent review and ex-post determination by a VVB of monitored reductions in GHG emissions that have occurred as a result of the registration of VCS project and its operation during a considered monitoring period. Certification is the written assurance by the VVB/DOE that, during a considered monitoring period, a VCS project activity achieved reductions in anthropogenic emissions by sources of GHGs under a reasonable level of assurance.

The objective of this verification/certification assessment is to verify and certify emission reductions, reported for the VCS project activity “Parque Eólico Maldonado”, for the monitoring period from 01/10/2016 to 31/12/2021.

1.2 Scope and Criteria

The verification scope is defined as an independent and objective review of the content of the registered VCS PD ^{/2/} (incl. the project’s baseline study), Monitoring Report (MR) for the considered monitoring period and other relevant documents. The information in these documents is reviewed inter alia against VCS Standard Version 4.3 requirements, UNFCCC rules.

The verification assessment is not meant to provide any consulting towards the project proponents and/or any other Party. However, stated requests for forward actions and/or corrective actions may eventually provide input(s) for improvement of the project monitoring.

1.3 Level of Assurance

In line with applicable VCS requirements and under conformance with Standard ISO 14064-3:2006 /^{8/}, a reasonable level of assurance was defined and was followed for the performance of the verification assessment for the VCS project activity. Applus+ Certification has established an internal quality control process in order to ensure, as part of its technical assessment, that information and values provided in the Monitoring Report /^{1/} are materially correct and fairly represent the implementation status and operation of the VCS project activity within the considered monitoring period, is completed under conformance with applicable VCS requirements + specific requirements of the applied CDM methodology being also sufficiently met for the calculation and reporting of GHG quantification and monitoring activities within the considered monitoring period.

1.4 Summary Description of the Project

Project title	Parque Eólico Maldonado
VCS reference number	1308
Project Proponent	R del Sur S.A.
Other entities involved in the project	-
Location of the project	The VCS project activity is located in the municipality of San Carlos, Maldonado, Uruguay Geographic coordinates: UTM (21h) Longitude: 689,559 Latitude: 6,173,601
Project start date	Construction date: constructed and commissioned between years 2012 and 2014 Operation start date: 10/04/2014
Project Crediting Period	From 10/04/2014 to 09/04/2024. Type Renewable.

	Current CP: 1 st Crediting Period.
Version of VCS PD	Version 2.6, dated 31/03/2016 /2/
Monitoring period	01/10/2016 to 31/12/2021
Initial version of the Monitoring Report	Version 1.0, dated 20/07/2022
Final version of the Monitoring Report	Version 3.0, dated 03/11/2022
Applied Methodology/Version	ACM0002 “Consolidated baseline methodology for grid-connected electricity generation from renewable sources” (version 16.0) /6/
Scope/Technical Area	1

The VCS project activity encompasses the installation and operation of a wind power energy generation unit located at Parque Eólico Maldonado, in the department of Maldonado, in Southeast region of Uruguay. The total combined installed capacity of the VCS project activity is 50 MW (consisting of 25 turbine sets with each capacity of about 2 MW).

Parque Eólico Maldonado serves as renewable energy generation unit with expected displacement of a total amount of 190,500 MWh/year. During the considered monitoring period, the VCS project activity promoted real and permanent GHG emission reductions by displacing electricity that would otherwise be generated in the absence of the VCS project activity (baseline scenario) by existent grid-connected electricity generation facilities (incl. fossil fuel fired power plants) and addition of new power generation sources within the National Electricity Grid of Uruguay.

The VCS project activity was previously validated by a Validation and Verification Body (VVB) accredited under VERRA/VCS. Details and related documents are available online (<https://registry.terra.org/app/projectDetail/VCS/1308>).

2 VERIFICATION PROCESS

2.1 Method and Criteria

The verification assessment was performed by applying Applus+ Certification's procedures in line with the requirements specified in the VCS Standard (version 4.3) ^{/5/}, the latest version of the CDM Validation and Verification Standard for project activities (version 03.0) and relevant UNFCCC requirements (whenever applicable) as well as through the application of standard auditing techniques.

As part of performed verification assessment, Applus+ Certification completed a strategic review and risk assessment of the VCS project activity and processes in order to gain a full understanding of:

- Activities, aspects and circumstances associated with all the sources contributing to the project related GHG emissions (baseline and project emissions) and emission reductions.
- Protocols and methodological approaches used to measure and/or determine GHG emissions associated with these sources.
- Collection and handling of monitoring data.
- Controls on the gathering, processing, recording and reporting of monitoring data.
- Means of verifying reported monitoring data; and
- Compilation of the Monitoring Report ^{/1/}.

Applus+ Certification verified the implementation and operationalization of the monitoring plan for the VCS project activity and performed a detailed assessment of monitoring data reported in the Monitoring Report ^{/1/} for the considered monitoring period. This assessment work was fully based on a desk review of the content of the Monitoring Report, interviews with representatives of the project proponents and additional auditing measures.

The information of the assessment team is included in below:

Assessment team

According to the applicable sectoral scope / technical area and experience in the sectoral or national business environment, Applus+ Certification has composed an assessment team in compliance with the Contract Review and Assessment Team appointment rules in the internal Quality Management System of Applus+ Certification as well as in compliance with the applicable requirements in the Accreditation Standard.

The composition of the Assessment Team has been approved by Applus+ Certification during the Contract Review process ensuring that the required skills and capabilities are covered.

The qualification levels for Assessment Team members that are assigned by aforementioned appointment rules are as presented below:

- Lead Auditor (LA).
- Auditor (A).
- Technical Expert (TE).
- Technical Reviewer (TR).
- Any of the above-mentioned roles in training (iT, e.g. AiT for auditor in training).

The Sectoral Scope / Technical Area required knowledge linked to the applied methodology (ies) is covered by the Assessment Team as shown below:

Verification Team:

Name	Qualification	Coverage of scope	Coverage of technical Area	Host country experience	Attendance to the On-Site Assessment
Marco A. Ratton	LA/TE	Y	Y	Y	N

Technical Review and Approval Team:

Name	Qualification
Miguel A. Cortes Díaz	Technical Reviewer / Technical Expert
Agustín Calle de Miguel	Report Approver

The curricula vitae of the Applus+ Certification's verification team members are provided below:

Mr. Marco A. Ratton:

Marco A. Ratton is based in Brazil and has acted as a GHG auditor since 2007. He holds vast experience with independent assessments of GHG project activities within the area of renewable energies, solid waste management and effluent treatment implemented in Latin America and other regions. He also has previous working experience with planning of municipal waste management as well as educational background in mechanical fabrication and manufacturing technologies, economics and environmental management & policy. He has undergone extensive training on GHG validation and verification and is a qualified Expert for Sectoral Scope 13 under Technical Area “Waste management” and Sectoral Scope 1, among others and in accordance with procedures of Applus+. He also has years-long previous experience on conducting ISO 9001/14001 assessments.

Mr. Miguel Cortes Díaz:

Miguel Cortes Díaz has a Master Degree and Bachelor Degree in Civil Engineering. Mr. Cortes has 11 years of GHG experience, of which 6 years he has acted as a project developer and with other 6 years has acting as a Technical Reviewer and Lead Assessor within different Designated Operational Entities (DOEs). As member of assessment or technical review certification teams, Mr. Cortes has been involved with 26 validations and 22 verifications in Renewable Energies (Scope 1), Manufacturing (Scope 4), Mineral Production (Scope 8) and Metal Production (Scope 9) under the CDM and other schemes/standarts for GHG emission reduction initiatives. Furthermore, he has accumulated more than 9 years of direct technical and management experience within the Cement industry (including cement production and mineral extraction/mining related activities). His CDM experience also includes provision of consultancy and advisory services for GHG emission reduction projects within in the sectoral scopes involving manufacturing, mining, metal production, (including waste heat recovery (WHR) initiatives), biofuels, biomass production and hydropower projects.

2.2 Document Review

The initial version of the Monitoring Report ^{/1/} was submitted to Applus+ Certification. This document was initially assessed as part of the performed desk review of project documentation. The main objectives of the desk review step as part of the verification assessment are summarized as follows:

- Verifying the completeness of the data and the information presented in the initial version of the Monitoring Report ^{/1/}.
- Checking the compliance of the Monitoring Report ^{/1/} with respect to the monitoring plan described in the registered VCS PD for the VCS project activity ^{/2/}, inter alia by verifying that all applicable monitoring requirements (as established by the applied CDM baseline and monitoring methodology and as outlined in the VCS PD ^{/2/}) were sufficiently and reasonably met for the considered monitoring period. Particular attention to the frequency of measurements, specification requirements and functional aspects of monitoring equipment/instruments was paid by the Applus+ Certification's verification team (including compliance of applicable calibration and functional requirements of equipment/instruments, any eventually occurred deviations of requirements of the monitoring plan as per the VCS PD ^{/2/}, and the quality assurance and quality control procedures considered as part of the application of the monitoring plan of the VCS project activity;
- Evaluating data management and the quality assurance and quality control system in the context of their influence on fairly generation and appropriate reporting of the operation of the VCS project activity within the considered motoring period as well as reporting of achieved emission reductions.

A complete list of documents reviewed by the Applus+ Certification's verification team is available in Appendix 1 of this Verification Report.

2.3 Interviews

The key personnel interviewed by the Applus+ Certification's verification team on 22/09/2022 are summarized in the table below:

Interviewed personnel	Role / organization	Subject
Ms. Cristina Blázquez	SMARTENER SL	Interviews remotely performed using Skype application and encompassing the following topics (+ production/generation of set of sequential live videos (movies) + photographs (pictures) ^{/9/} to allow confirmation/assessment of the Applus + verification team for the topics): - General implementation and operational aspects of the VCS project activity. - Technical equipment and operational issues for installed equipment. - Specifications and operation of monitoring and measurement equipment/Instruments. - Calibration procedures for installed monitoring instruments/equipment. - Quality management system and related compliance with valid QA/QC procedures. - Implementation and operation of the project's monitoring plan. - Monitoring data handling and management (incl. data gathering, recording and reporting).
Mr. Javier Rodriguez	SMARTENER SL	
Mr. Diego Bonacchi	R del Sur S.A.	
Mr. Martin Peña	R del Sur S.A.	
Ms. Elena Oliva Pellon Gil	NTT DATA EUROPE & LATAM GREEN ENGINEERING	
Ms. Laura Vaquero Morion	NTT DATA EUROPE & LATAM GREEN ENGINEERING	

		- Data uncertainty and residual risks. - Performance of emission reduction calculations. - Procedural aspects of the verification. - Performance of related maintenance and repair events.
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2.4 Site Inspections

No physical on-site inspection (with the physical presence of the Applus+ Certification's verification team) was conducted as part of the performed VCS verification assessment.

As a result of raised travelling restrictions related to the COVID-19 pandemic, the Applus+ Certification's verification team proposed to the VCS project proponent R del Sur S.A., as an alternative, consider postponing such on-site visit by taking into account not only travelling restriction related official decisions and recommendations from local authorities (i.e. restrictions and recommendations from the Government of Uruguay), but also related travelling restriction policy announced by Applus+ Certification's central office due to the COVID-19 pandemic. As an answer to such proposal from Applus+ Certification, the representatives of the project proponents highlighted to the Applus+ Certification's verification team that they were not in a position to accept any postponing of on-site visit that would result on potential delay on issuance of VCUs for the considered monitoring period.

Furthermore, the above summarized travelling restrictions were expected to indeterminately continue in light of the COVID-19 pandemic situation in South America. The content of the VCS Guidance titled "COVID-19 Travel Guidance for Projects issued by VERRA/VCS" (issued on 18/03/2020) ^{/14/} was also considered by the Applus+ Certification's verification team.

By acknowledging that the previously planned physical on-site inspection could not be performed as part of the verification assessment due to related travelling restrictions because of the COVID-19 pandemic, by also assuming that such on-site inspection could not be postponed, the Applus+ Certification's verification team thus performed its document review and interviews with representatives of the project proponents (of which details are included in Sections 2.2 and 2.3 respectively) by incorporating the following additional checking's/assessments (complementary auditing measures) as part of a remote inspection to the project site which was performed on 22/09/2022 as per the prepared document VCS – Verification Work Plan: Parque Eólico Maldonado (dated 21/09/2022) ^{/23/}:

- *Remotely (online) watching/visualizing by the Applus+ Certification's verification team of set of sequential live videos (movies) + photographs (pictures) produced/generated by member of project operational staff located on-site (allowing remote complete and comprehensive assessment and observations for the VCS project activity as if the Applus+ verification team were on site):*

Upon previous request from the Applus+ Certification's verification team, the representatives of the project proponent R del Sur S.A. organized the production of a sufficiently complete set of sequential live videos (movies) + photographs (pictures) ^{/9/} produced/generated online in the project site by using appropriate ICT tools (e.g. mobile phone with camera) with the goal of making it possible to the Applus+ Certification's verification team to remotely assess and confirm the implementation and operation of the VCS project activity (as if the verification team were on-site).

The set of sequential live videos (movies) + photographs (pictures) ^{/9/} were watched/visualized online by the Applus+ Certification's verification team while being produced/generated on 22/09/2022 and were later fully made available to Applus+ Certification for further assessment/watching and archiving as auditing evidence. By watching/visualizing (more than once) the content of the set of sequential live videos (movies) + photographs (pictures) ^{/9/}, the Applus+ Certification's verification team was able to have a comprehensive and complete remote assessment of the VCS project activity as if the team were on-site. The produced set of sequential live videos (movies) + photographs (pictures) ^{/9/} (recorded as .mp4 video format files and .jpg picture format) include/show the following:

- Details of the whole project's infrastructure promoting renewable energy generation from wind resources (e.g. equipment of the project's electricity generation infrastructure, etc.);
- Details about all monitoring instruments/equipment (of which the latest version of the Monitoring Report ^{/1/} refers to),
- Details about the functioning of the process for gathering, recording and archiving of monitoring data (i.e. measurement records for electricity generated by the VCS project activity).

Watching and visualizing the set of sequential live videos (movies) + photographs (pictures) /9/ sufficiently and successfully provided to the appointed Applus+ Certification's verification team the following assessment outcomes:

- The possibility of having a complete and transparent remote visualization of the current implementation and operation of the VCS project activity (as if the Applus+ Certification's verification team were on site), thus making it possible to the verification team to confirm the correctness of information included in the Monitoring Report /1/ and VCS PD /2/ regarding both the implementation of the VCS project activity (project design) and its operation.
- The possibility of having a complete and transparent remote visualization of the implementation and operation of available information and data flows/procedures for generating, gathering, aggregation, recording and reporting data for the ex-post determined monitoring parameters (as if the Applus+ Certification's verification team were on site), thus making it possible to the verification team to confirm the correctness and appropriateness of related data gathering, processing, recording and data recording by the available project's monitoring infrastructure as well as to confirm correctness of related information included in the Monitoring Report /1/ and VCS PD for the VCS project activity /2/.
- The possibility of performing a remote (but comprehensive) checking of all project's monitoring instruments/equipment (including confirmation of occurred performance of appropriated related calibration events in such instruments/equipment) as well as checking of monitoring practices as part of the operation of the VCS project activity vis-à-vis related requirements of the registered VCS PD /2/ as well as the applied CDM baseline and monitoring methodology. Such checking included confirmation of existence and archiving in the project site of original documents (e.g. certificates of calibration) in the project site + additional documentation used for cross-checking of calculation and information, with electronic format copies of such documents and evidences being also made available to the Applus+ Certification's verification team for its remote assessment (as part of the performed desk review assessment phase).
- The possibility of performing a comprehensive checking of the project's quality control and quality assurance (QA/QC) procedures in place to prevent and/or identify and/or correct errors or omissions in the reported monitoring parameters.

Based on its accumulated expertise and experience with CDM/VCS assessments for other similar project-based initiatives (including previous experience of the Applus+ verification team with the performance of remote inspections to the project sites of CDM/VCS project activities which promote renewable electricity generation), it is Applus+ Certification's opinion that objectives to be expected for a physical on-site inspection to the project site were sufficiently reached by the Applus+ Certification's verification team through watching/visualizing online (and later re-watching/re-visualizing for further assessment/review) of the set of sequential live videos

(movies) ^{/9/} and pictures produced on-site by the representatives of the project proponent R del Sur S.A. on 22/09/2022.

In summary, by taking all above-presented aspects into account vis-à-vis applicable requirements established in VCS Standard (version 4.3) ^{/5/}, CDM Validation and Verification Standard for project activities (version 03.0) ^{/24/}, VCS/VERRA [COVID-19](#) Travel Guidance for Projects (18/03/2020) ^{/14/} and VCS Validation and Verification Manual (version 3.2) ^{/21/}, as well as the recently published guidelines from the CDM titled “Amendments to version 03.0 of the CDM validation and verification standard for project activities on remote validation or verification by DOEs” (version 01.0) ^{/25/}; the Applus+ Certification’s verification team judged that performing the above-described additional checking’s/assessments (complementary auditing measures) instead of performing the previously scheduled physical on-site inspection to the project site is deemed acceptable and sufficient to have the overall quality and completeness of the performed verification assessment not being negatively affected.

It is the opinion of Applus+ Certification verification team that the decision made of not performing a physical on-site inspection as part of the verification assessment and applying the above-summarized additional checking's/assessments (complementary auditing measures) instead are under conformance with applicable guidelines added in the guidance titled VERRA/VCS "COVID-19 Travel Guidance for Projects issued by VERRA/VCS" (18/03/2020) which is made available at the VERRA/VCS website ^{/14/}.

2.5 Resolution of Findings

As an outcome of a VCS verification process, the appointed verification team may raise different types of findings for identified issues.

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

- Non-compliance with applicable requirement from the monitoring plan and/or applied baseline and monitoring methodology is identified in applied monitoring and/or reported in the Monitoring Report ^{/1/} and/or reporting and has not been sufficiently documented by the VCS project proponents, or if the evidence provided to prove conformity is insufficient.
- Occurred modifications to the implementation, operation and monitoring of the VCS project activity occurred and were not sufficiently documented and/or reported in the Monitoring Report ^{/1/}.
- Errors, inconsistencies and/or mistakes in applying assumptions, data and/or calculations of emission reductions (that impact the quantity of emission reductions) are identified.
- Issues previously identified in Forward Action Request (FAR) as part of validation or previously performed verification assessment for the VCS project activity (which would be required to be considered/addressed for the monitoring period encompassed by the verification assessment) are not addressed by the project proponents.

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

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

As part of the performed verification assessment, the following 9 CARs were raised by the Applus+ Certification's verification Team. No CL and no FAR were raised as part of the performed verification assessment.

CAR 1: Different Sections of the Monitoring Report includes grammar mistakes and typographical errors (e.g. incorrect use of “,” and “.” for thousands and decimals respectively).

CAR 2: The Monitoring Report refers in Section 1.6 to a version of the VCS standard that is not the currently valid latest version of the Standard.

CAR 3: The ex-ante determined parameter Net electricity generated by power plant/unit m or k in year y (($EG_{m,y}$ and $EG_{k,y}$) Plant yearly generation (last 3 years)) despite of being considered only during the validation phase, is not even listed nor mentioned in the registered PD.

Furthermore EF_{OM} and $EF_{BM,2013}$ are mentioned in the Monitoring Report however these parameters are not listed in the registered PD.

CAR 4: Specification details for monitoring instruments installed and under operation as part of the project activity within the considered monitoring period (e.g. electricity meters), as presented in the Monitoring Report, do not include references to the name of the manufacturers of such meters. Furthermore, the Monitoring Report does not include numbers/references for Calibration Certificates applicable/valid for such electricity meters within the considered monitoring period.

CAR 5: As per reported information, delays in the performance of every 2-years calibration events for the electricity meter apparently occurred during the period from 07/01/2016 to 14/12/2016 and from 20/08/2020 to 27/08/2020. Clarification/justification that such apparently occurred delays do not represent non-conformance with maintenance and testing procedures (as per requirements set by the grid operators or national requirements) is to be provided.

CAR 6: For sake of completeness and transparency, details about the period in use for each individual electricity meter (meters with different serial numbers) used under positions M1 and M2 within the considered monitoring period are to be included in Section 4.2.

CAR 7: The initial version of the Monitoring Report wrongly refers to the VCS project activity as being registered under the UNFCCC's Clean Development Mechanism (CDM).

CAR 8: The Monitoring Report does not include clarification on how the consumption of grid-sourced electricity by the VCS project activity (during eventual time periods in which no electricity was generated by the project activity) is accounted/considered for in the determination of net electricity generation by the project activity during the considered monitoring period.

The reason for the difference between the amount of energy supplied and the amount reported in ADME invoices is to be transparently indicated in the Monitoring Report for sake of completeness and transparency.

CAR 9: In accordance with rules and practices of the power market in Uruguay, the operation of project activity is confirmed to have multiple events during the considered monitoring period in which its activity level was deliberately reduced (reduction in the amount of generated electricity) as a result of mandates of the electricity dispatch coordination authority (ANDE) in the context of the procedure/ operational requirement named “Restricciones operativas” (operational restrictions). While such procedure/practice has resulted in direct reduction in the amount of electricity generated and related GHG emission reductions within the considered monitoring period, general details and aspects about such particular events (incl. their impacts in terms of the amount of electricity generated by the project activity) are not reported/described in the Monitoring Report for sake of completeness and transparency.

The Applus+ Certification's verification team was able to confirm that above-listed 9 raised CARs were sufficiently and appropriately addressed by the project proponent for the VCS project

activity. List of raised CARs is summarized in Appendix 2. The summaries of responses of project proponent for the raised CAR and the related assessment by the Applus+ Certification's verification team are provided in Appendix 2.

2.5.1 Forward Action Requests

No Forward Action Request (FAR) was raised as part of the performed verification assessment. Furthermore, there are no FAR previously raised (as part of the previously performed validation or verification assessments for the VCS project activity) which would be required to be considered/addressed for the considered monitoring period encompassed by the verification assessment.

2.6 Eligibility for Validation Activities

This section is not applicable for present verification, as Applus+ Certification holds the accreditation for Validation of projects under this Sectoral Scope.

3 VALIDATION FINDINGS

3.1 Participation under Other GHG Programs

Through reviewing the registered VCS PD ^{/2/} and validation report ^{/3/}, it was validated that the project has been registered as VCS project which is available at <https://registry.verra.org/app/projectDetail/VCS/1308>. The project does not participate in the other emissions trading program by checking public information on Internet, interviewing with project owner and statement issued by project owner.

As noted by the Applus+ Certification's verification team, the following disclaimer is added in the registered VCS PD ^{/2/} confirming that the VCS project activity has never participated in other GHG program:

"The project is not registered under any other GHG programs. In the past, it has been seeking registration under the CDM scheme, but it is no longer the case"

Therefore, Applus+ Certification considers the project is eligible to participate under the VCS Program as there is no double counting for the emission reduction during any period.

3.2 Methodology Deviations

Not applicable as no deviation from the application of the selected baseline and monitoring methodology and/or from the application of the monitoring plan (as per the registered VCS PD ^{/2/}) occurred within the considered monitoring period (encompassing the 2nd periodic verification of the VCS project activity) or within the previous monitoring period (encompassing the 1st periodic verification of the VCS project activity).

3.3 Project Description Deviations

As confirmed by the Applus+ Certification's verification team there are no deviations from existing project description (as per the registered VCS PD ^{/2/}) applicable for the considered monitoring period (encompassing the 2nd periodic verification of the VCS project activity).

3.4 Grouped Project

Not applicable, The VCS project activity does not represent and is not part of Grouped Project under VCS and/or under any other GHG program.

4 VERIFICATION FINDINGS

4.1 Project Implementation Status

The Applus+ Certification's verification team was able to confirm as part of performed assessment through performed document desk review, interviews with representatives of the project proponent and additional complementary measures (summarized in Section 2.4) that all physical features of the VCS project activity as included in its project design description in the registered VCS PD ^{/2/} are in place, thus confirming the implementation status of the monitoring plan and the completeness of monitoring, including the suitability of the implemented monitoring system (i.e., process and schedule for obtaining, recording, compiling and analyzing the monitored data and parameters).

The project activity started its commercial operations on 10/04/2014 along with the starting date of the crediting period (that ends on 09/04/2024). From this date till the current monitoring period, the wind power plant has operated mostly without operational stops, with no significant periods without electricity generation been reported ². Moreover, the identified delay in the calibration of the electricity meter was an atypical event occurred during the considered monitoring period.

Electricity generated as part of the operation of the VCS project activity is transmitted to the National Electricity Grid of Uruguay through a power transformer and the power substation "Estación Francisco Vieira", there are no changes on the key equipment and technology considered at the time of validation of the VCS project activity.

No additional special event which would affect the monitoring of the VCS project activity during the time the VCS project activity was under regular operation within the considered monitoring period was observed or noted by the Applus+ Certification's verification team.

The purpose of the project is to utilize wind power for electricity generation. It includes electricity generation infrastructure encompassing 25 turbines with a capacity of 2 MW each until the end of the considered monitoring period.

In accordance with rules and practices of the power market in Uruguay, the operation of project activity is confirmed to have multiple events during the considered monitoring period in which its activity level was deliberately reduced (reduction in the amount of generated electricity) as a result of mandates of the electricity dispatch coordination authority (ANDE) in the context of the procedure/ operational requirement named "*Restricciones operativas*" (operational restrictions). Such procedure/practice has resulted in direct reduction in the amount of electricity generated and related GHG emission reductions within the considered monitoring period, general details

² Situations with no significant effect on electricity measurement records or emission reduction calculations occurred on the operation of the backup electricity meter for 14 hours during the whole monitoring period as follows:

- 09/01/2018 from 11 PM to 12 PM
- 06/10/2018 from 1 AM to 11 PM
- 02/09/2020 from 12PM to 3 AM

and aspects about such particular events ^{/22/} (incl. their impacts in terms of the amount of electricity generated by the project activity) are reported/described in the Section 3.1. of the latest version of the Monitoring Report ^{/1/} as follows: *“The 97% of Uruguay’s electricity comes from renewable sources. Because of this fact and given that there is no active cross-border market (only occasional interchanges), electricity generation in the country tends to exceed its demand (especially during nighttime). Therefore, the need for power curtailments is very difficult to avoid. In addition, as it is more expensive to restart a thermal power plant once it has stopped (rather than to limit the production of a wind farm), power curtailments are mainly directed towards grid-connected renewable energy power plants.*

Power curtailments in Uruguay are defined in the Decree 59-015 dated 17/02/2015 and are implemented following the Article 3 where it mentioned the following: “The ADME will determine the electrical energy that the generating plant would have potentially generated if it had not been affected by the operational restrictions established by the National Load Dispatch as indicated in article 1, after verifying that the plant was in effective conditions to generate”.

In Parque Eólico Maldonado, the internal process happens through a communication link from the wind farm server to the SCADA infrastructure that the electricity grid dispatch entity UTE uses to regulate power generation nationwide. In this regard, UTE is able to remotely set the power output (from 0 MWh to 50 MWh) they need from Parque Eólico Maldonado at every single time. Once UTE has selected a power generation range or value for the wind farm, the facility’s internal Programmable Logic Controller (PLC) infrastructure chooses automatically the most suitable wind turbines and sets them in real time to operate at the best speed (rotation) to achieve the desired power generation objective. This process is based on a specific algorithm that optimizes all the parameters (wind direction, wind speed, air temperature, air humidity, air pressure, etc.) to reach the defined power generation goal in the most efficient manner.

In Parque Eólico Maldonado, total energy curtailments for the project activity during the considered monitoring period represent 10% of all the electricity supplied to the grid by the wind farm during the period. In other words, without power curtailments the project would have achieved 10% more electricity generation. However, only the net electricity generated by the project activity and exported to the grid is considered for the calculation of the emissions reduction during the monitoring period”.

Applus+ Certification’s verification team has assessed both the Monitoring Report ^{/1/} and the emission reduction calculation spreadsheet ^{/1/} in order to confirm that this clarification is sufficiently presented in a correct and transparent manner.

The assessment team confirmed that there is no proposed or actual change to the project design during this monitoring period.

All required equipment and procedures are available and implemented in an appropriate manner.

The VCS project activity was confirmed as being operational during the considered monitoring period. The non-existence of any material discrepancies between project implementation and the

project description was confirmed by the Applus+ Certification's verification team.

As assessed in Section 1.9 of the Monitoring Report ^{/4/}, the Applus+ Certification's verification team was able to confirm that the VCS project activity is not currently registered and was not previously rejected under any other GHG programs since validation or previous verification. It is also sufficiently confirmed that the VCS project activity has not previously received or sought any other form of environmental credit or has become eligible to do so since validation or previous verification. It is also confirmed that GHG emission reductions generated by the VCS project activity were not and have become included in an emissions trading program or any other mechanism that includes GHG allowance trading.

As outlined in the Validation Report "Parque Eólico Maldonado" (version 02, dated 31/03/2016) ^{/3/}; it was previously assumed and confirmed that the VCS project activity contributes towards sustainable development.

As assessed in Sections 3.2 and 3.3, there are no methodology deviations or project description deviations applicable for the VCS project activity.

In summary, the Applus+ Certification's verification team was able to confirm that the VCS project activity has been implemented and has been under operation until the end of the considered monitoring period as described in its VCS PD ^{/2/}.

4.2 Safeguards

4.2.1 No Net Harm

As per the previously issued and assessed/approved Environmental Impact Assessment documents for the wind farm, (i.e. the EIA license and EIA Report for the Project Activity), as well as the information provided in the registered PD ^{/02/} version 2.6 dated 31/03/2016 and the proposed Monitoring Report ^{/1/}, it is confirmed that the project activity has larger positive impacts than those considered as negative and also poses that the project does not generate significant negative impacts in environmental and social matters.

The EIA related documents ^{/17/}, which were previously assessed and approved by the host country's competent organism/authorities, show an identification and mitigation measures proposed for the project activity, in construction and operation phases, as well as in environmental, economic and social aspects.

Also, no potential environment or social economic negative matter was found during the performed interviews. The project is a renewable energy project and thus it is presumable that it will create no net harm in air or water quality on its implementation site.

Hence, it is confirmed by the Applus+ Certification team the information that is provided in the proposed Monitoring Report ^{/1/}, as follows:

- Impact on Birds and Mammals: To minimize the risks biodiversity and mortality are monitored seasonally.
- Creation of an assisted regeneration area (ARA) with native plants and a conservation area as a compensation measure for the high voltage installation connected to the substation.
- Environmental impacts: No negative impacts have been identified. Project was approved from local authorities and has presented action plan for ongoing monitoring.

Sustainability Reports were also provided as evidence by the project participant R del Este S.A. and further assessed by Applus+ Certification Verification team. The following reports attest the commitment of R de Este S.A. with the mitigation of possible environmental/social impacts:

- o Social Impact Study 2012 issued by R del Sur S.A. ^{/17/}
- o Sustainability Report 2017 issued by R del Sur S.A. ^{/17/}
- o Sustainability Report 2018 issued by R del Sur S.A. ^{/17/}
- o Sustainability Report 2020 issued by R del Sur S.A. ^{/17/}
- o Sustainability Report 2021 issued by R del Este S.A. ^{/17/}
- o Participation Plan of Social Actors 2021 issued by R del Este S.A. ^{/17/}

4.2.2 Local Stakeholder Consultation

The following related to local stakeholder consultation is confirmed by the Applus+ Certification's verification team as being outlined in the registered VCS PD (version 2.6, dated 31/03/2016) ^{/2/}:

"Project participant has made a report on social impact for the project "Estudio de Impacto Social R. del Sur - Rivero 2012". In this report, opinions and comments from stakeholders have been taken into account.

According to the report "As for the nearest neighbours, in general, are part of the enterprise itself, as it is installed on different grounds and all have negotiated their participation conveniently to your interests", also "The municipal authorities consulted expressed no drawbacks in the project."

In order to address possible concerns by the stakeholders involved, "The intendancy held workshops with residents to discuss the issue of the installation of wind farms. In the same emerge as the most important concerns for noise and the theme of birds in migration circuit."

Also according to the project proponent's communication plan, "Plan de Comunicaciones y Vinculación con el Entorno" there is an active web page for anyone to leave any comments or complaints about the project. All comments to date have been addressed by the project proponent."

Details about the previously conducted Local Stakeholder Consultation are sufficiently provided in the registered PD ^{/02/} version 2.6 dated 31/03/2016 for the project activity with related assessment details being also sufficiently provided in the Validation Report ^{/03/}. The same has been checked by the Applus+ Certification team and found acceptable.

No additional local stakeholder consultation was held as part of the performed verification assessment for the 2nd periodic verification assessment for the VCS project activity (monitoring period from 01/10/2016 to 31/12/2021). This is under conformance with applicable VCS rules.

As also confirmed by the Applus+ Certification's verification team, the Monitoring Report includes in its Section 2.2 sufficient details about the local stakeholder consultation previously conducted as part of the development of the Environmental Impact Assessment (EIA) for the project activity.

It is the opinion of the Applus+ Certification's verification team that related details included in Section 2.2 of the Monitoring Report ^{/4/} includes inter alia sufficient information about procedures and methods used for documenting of outcomes of performed local stakeholder consultation as well as details for the applied mechanism for on-going communication with local stakeholders.

4.3 AFOLU-Specific Safeguards

Not applicable. The VCS project activity is a non-AFOLU project.

4.4 Accuracy of GHG Emission Reduction and Removal Calculations

As per the applied monitoring procedure and in accordance with the requirements of the CDM baseline and monitoring methodology ACM0002 (version 16.0) ^{/6/} and related provisions of the registered VCS PD ^{/2/}, GHG emission reductions are calculated based on measurement records and selected values of the *ex-post* monitored parameters (of which monitoring details are presented in the tables below) and also correctly considering values for *ex-ante* determined parameters.

Assessment of ex-ante determined parameters:

Values for the following ex-ante selected parameters are correctly reported in the Monitoring Report ^{/1/} and considered in GHG calculations for the considered monitoring period:

Ex-ante determined parameter	Applied value	
Amount of fossil fuel type i consumed by power plant/unit m or k in a year y ($FC_{i,m,y}$; $FC_{i,k,y}$)	See attached calculations and also section 4.1 of the registered VCS PD ^{/2/}	
Net calorific value (energy content) of fossil fuel type i in year y. ($NCV_{i,y}$)	Net calorific value (GJ/Gg)	
	Fuel Oil	39,800
	Gas Oil	41,400
	Natural Gas	46,500
	Landfill Gas	25,400
CO ₂ emission factor of fossil fuel type i used year y ($EF_{CO_2,i,y}$)	EF (tCO ₂ /GJ)	
	Fuel Oil	0.07550
	Gas Oil	0.07260
	Natural Gas	0.05430
	Landfill Gas	0.04620

Net electricity generated by power plant/unit m or k in year y ($EG_{m,y}$ and $EG_{k,y}$ Plant yearly generation (last 3 years))	See section 4.1 of the registered VCS PD ^{/2/}
Combined margin CO ₂ emission factor for grid connected power generation in year y calculated using the “Tool to calculate the emission factor for an electricity system” Version 05.0 ($EF_{grid,CM,y}$)	0.5765 tCO ₂ /MWh

It is noteworthy that the above-mentioned ex-ante determined values were applied in the context of the ex-ante emission factor calculation as per the registered PD ^{/2/}, thus the permanent monitoring of such parameters is not applicable for the calculation of emission reductions achieved during the current monitoring period.

Assessment for the previously occurred selection of values for the above-summarized ex-ante determined parameters are included in the Validation Report ^{/3/} for the VCS project activity.

Assessment of parameters monitored ex-post:

The Applus+ Certification’s verification team has assessed whether the monitoring parameter of which monitoring ex-post is required as per the monitoring plan of the VCS PD ^{/2/} was correctly monitored during the considered monitoring period.

As confirmed by the Applus+ Certification’s verification team, monitoring activities for the VCS project activity were performed for the considered monitoring period under full conformance with related requirements as established in the monitoring plan of the registered VCS PD ^{/2/} for the project activity ^{/2/}. Assessment details for monitoring the parameter monitored ex-post for the considered monitoring period are summarized below in the following table:

Assessment details for the monitoring parameter “Quantity of net electricity generation supplied by the project plant to the grid in year y” (EG_{facility}):

Data / Parameter: (as per the monitoring plan of the VCS PD):	Quantity of net electricity generation supplied by the project plant to the grid in year y (EG_{facility})
Measuring, recording and reporting frequencies:	During the considered monitoring period, accumulated values of continuously measurements of the monitoring parameter EG_{facility} were aggregated and recorded/reported hourly by entity Administración del Mercado Eléctrico del Uruguay (National Operator of Energy in Uruguay) (ADME) with related records being made available and utilized by the project proponents as part of the application of the monitoring plan of the VCS project activity. ADME is the technical and economical managing and operating entity for the National Electricity Grid of Uruguay. As confirmed by the Applus+ Certification’s verification team, based on measurements performed by installed monitoring instruments (electricity meters), ADME generates a report with hourly values for generated electricity which delivered to the grid daily with records being record in a data platform from which historical records can be retrieved online. Monthly reports with accumulated measurement values for electricity generated by the VCS project activity are generated by using ADME application data ^{/16/}. All net electricity generated by the VCS project activity is exported. Monthly sales receipts of generated electricity ^{/20/} were made available and were assessed by the Applus+ Certification’s verification team. As confirmed by the Applus+ Certification’s verification team, the following checking procedure (which is outlined in the VCS PD ^{/2/}) has been systematically applied during the considered monitoring period: <i>“The measurement results recorded monthly will be used for cross check with records of sold electricity and/or with DTE. The SMEC meters should be periodically calibrated at least one every two years during the verification of the system, according with Resolution 14/002”.</i>

Are measuring, recording and reporting frequencies in accordance with the monitoring plan and applied baseline and monitoring methodology? (Yes / No)	As per the registered VCS PD ^{/2/} continuous measurements of EG_{facility} are to be recorded and reported under an at least every month frequency. The applied CDM baseline and monitoring methodology ACM0002 (version 16.0) ^{/6/} does not clearly indicate recording and reporting frequencies for continuous measurements for the parameter EG_{facility}. Thus, the adopted measuring, recording and reporting frequencies are assumed as in accordance with the monitoring plan of the registered VCS PD ^{/2/} as well as with applicable guidance of the CDM baseline and monitoring methodology ACM0002 (version 16.0) ^{/6/}. Monthly reports with accumulated measurement values for electricity generated by the VCS project activity are generated by using ADME application data ^{/16/}. All net electricity generated by the VCS project activity is exported. Monthly sales receipts of generated electricity ^{/20/} were made available and were assessed by the Applus+ Certification's verification team. Moreover, net electricity data is automatically calculated by the electricity meters as the subtraction between outcoming energy (gross electricity generated by the VCS project activity) and incoming energy (electricity consumed by the VCS project activity).										
Type of monitoring equipment/instrument:	Net electricity generated by the VCS project activity during the considered monitoring period was measured by electricity meters (main meter and backup unit) which are installed, maintained, and calibrated by ADME. The specifications of the installed electricity meters are as follows: <table border="1" data-bbox="641 1460 1394 1868"> <thead> <tr> <th colspan="2">Specifications of the main electricity meter</th></tr> </thead> <tbody> <tr> <td>Manufacturer</td><td>ITRON Inc.</td></tr> <tr> <td>Model</td><td>ITRON SL7000</td></tr> <tr> <td>Serial Numbers</td><td>30023003</td></tr> <tr> <td>Accuracy</td><td>±0.2%</td></tr> </tbody> </table> Source: ^{/15/}	Specifications of the main electricity meter		Manufacturer	ITRON Inc.	Model	ITRON SL7000	Serial Numbers	30023003	Accuracy	±0.2%
Specifications of the main electricity meter											
Manufacturer	ITRON Inc.										
Model	ITRON SL7000										
Serial Numbers	30023003										
Accuracy	±0.2%										

	Specifications of the backup electricity meter ³															
	Manufacturer	EMH metering GmbH & Co. KG														
	Model	EMH LZGJ-XC														
	Serial Numbers	3970853														
	Accuracy	±0.5%														
	Source: /15/															
	<table><tr><th>Year</th><th>EG_{facility} (MWh) ⁴</th></tr><tr><td>2016 (from 01/10/2016 to 31/12/2016)</td><td>38,065.06</td></tr><tr><td>2017</td><td>137,440.98</td></tr><tr><td>2018</td><td>146,976.74</td></tr><tr><td>2019</td><td>170,129.79</td></tr><tr><td>2020</td><td>183,407.18</td></tr><tr><td>2021</td><td>162,761.61</td></tr></table>		Year	EG _{facility} (MWh) ⁴	2016 (from 01/10/2016 to 31/12/2016)	38,065.06	2017	137,440.98	2018	146,976.74	2019	170,129.79	2020	183,407.18	2021	162,761.61
	Year	EG _{facility} (MWh) ⁴														
	2016 (from 01/10/2016 to 31/12/2016)	38,065.06														
	2017	137,440.98														
2018	146,976.74															
2019	170,129.79															
2020	183,407.18															
2021	162,761.61															
Is the accuracy of the monitoring equipment/instrument as	The registered VCS PD /2/ and the CDM baseline and monitoring methodology ACM0002 (version 16.0) /6/ do not specify any accuracy requirement for the electricity meter installed. The															

³ As mentioned in the Monitoring Report ^{/2/}, the backup electricity meter S/N 3970853 operated for 14 hours within the considered monitoring period (from 01/10/2016 to 31/12/2021) as follows:

- 09/01/2018 for 11 PM to 12 PM
- 06/10/2018 for 1 AM to 11 PM
- 02/09/2020 for 3 AM

⁴ Reported values of this table present results of measurement after the application of the discount factor due to calibration delayed of the electricity meter.

stated in the VCS PD? If the VCS PD does not specify the accuracy of the monitoring equipment/instrument, does the utilization of the monitoring equipment/instrument represents good monitoring practice?	accuracy range for the installed instruments is confirmed as being $\pm 0.2\%$ and $\pm 0.5\%$ for the main and backup electricity meters, respectively, through assessment of its specification sheets ^{/15/}. Based on its sectoral expertise and experience with other similar project-based initiative under VCS and other GHG programs (such as the CDM) (initiatives promoting electricity generation using renewable sources), it is the opinion of Applus+ Certification that the use of the installed instrument represents good practice for monitoring generation of electricity and is under sufficient conformance with the monitoring plan as per the registered VCS PD ^{/2/} for the project activity.
If applicable, has the reported monitoring data been cross-checked with other available data or source?	Yes. By comparing reported values ^{/16/} against values indicated in monthly electricity commercialization receipts ^{/20/} valid for the project's electricity generation infrastructure during the considered monitoring period, the Applus+ Certification's verification team was able to confirm the correctness of monthly reported values for EG_{facility} which are considered in the determination of baseline emissions for the VCS project activity.
How were the values in the Monitoring Report (and/or supporting documents, i.e emission reduction calculation spreadsheet) verified and/or compared?	The Applus+ Certification's verification team has confirmed that accumulated monthly values for the monitoring parameter EG_{facility} as reported in the emission reduction calculation spreadsheet and Monitoring Report ^{/1/} are in accordance with both primary monitoring records for electricity generation from ADME (which are reported every hour) and with monthly electricity commercialization receipts ^{/20/} valid for the project's electricity generation infrastructure during the considered monitoring period.
Does the applied monitoring data management process (from monitoring equipment/instrument to emission reduction calculation) ensure correct recording, transferring and reporting of data to be used for the emission	Details for monitoring management and quality assurance related aspects for the VCS project activity are also included in the end of this Section.

reductions calculations? Are necessary/applicable QA/QC processes in place?	
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Assessment of meeting of calibration requirements of applied monitoring instruments/equipment:

The Applus+ Certification's verification team has assessed whether all monitoring instruments/equipment installed at the project site have operated during the monitoring period from 01/10/2016 to 31/12/2021 under full compliance with calibration requirements as per both related provisions from the registered VCS PD ^{/2/} and recommendations/guidance from the instrument/equipment manufacturers. The following tables include assessment details for calibration events performed on the monitoring instruments/equipment used for performance of measurements monitoring the ex-post determined parameters during the considered monitoring period:

Assessment of performed calibration events for equipment/instruments used for monitoring the parameter "Quantity of net electricity generation supplied by the project plant to the grid in year y" ($EG_{facility}$):

Data / Parameter: (as per the monitoring plan of the VCS PD):	Quantity of net electricity generation supplied by the project plant to the grid in year y ($EG_{facility}$)
Calibration frequency /interval for the monitoring equipment/instrument:	According to the registered VCS PD ^{/2/} the installed electricity meters are to be calibrated at every two years. As confirmed by the Applus+ Certification's verification team through assessment of the specification sheet for the installed electricity meters, the selected calibration frequency is as per the recommendations of the instrument manufacturer. <i>Calibration events of the main installed electricity meter SL7000 S/N 30023003:</i> - Calibration date: 08/01/2014 Certificate number: 133691 ^{/12/} Calibration performed by: UTE Laboratory - Calibration date: 14/12/2016 Certificate number: 163936 ^{/10/} Calibration performed by: UTE Laboratory

	- Calibration date: 21/11/2018 Certificate number: 183727 ^{/7/} Calibration performed by: UTE Laboratory - Calibration date: 27/08/2020 Certificate number: 202349 ^{/4/} Calibration performed by: UTE Laboratory <i>Calibration events of the backup installed electricity meter LZQJ-XC S/N 3970853⁵:</i> - Calibration date: 23/07/2014 Certificate number: 142153 ^{/12/} Calibration performed by: UTE Laboratory - Calibration date: 14/12/2016 Certificate number: 163937 ^{/10/} Calibration performed by: UTE Laboratory - Calibration date: 21/11/2018 Certificate number: 183728 ^{/7/} Calibration performed by: UTE Laboratory - Calibration date: 27/08/2020 Certificate number: 202350 ^{/4/} Calibration performed by: UTE Laboratory
Is the calibration interval in line with the monitoring plan of the VCS PD? If the VCS PD does not specify the frequency of calibration, does the selected frequency represent good monitoring practice?	The applied CDM baseline and monitoring methodology ACM0002 (version 16.0) ^{/6/} does not explicitly specify any calibration frequency requirements for the installed electricity meters. The registered VCS PD ^{/2/} states the following regarding calibration of monitoring instrument for the monitoring parameter EG_{facility}:

⁵ An interval with no valid calibration is identified from 22/07/2016 to 13/12/2016, however as mentioned previously the backup electricity meter was in operation only during the following periods: 09/01/2018 for 11 PM to 12 PM, 06/10/2018 for 1 AM to 11 PM and 02/09/2020 for 3 AM, thus the lack of valid calibration event does not represent a negative effect for emission reduction purposes.

	<i>“The SMEC meters should be periodically calibrated at least one every two years during the verification of the system, according with Resolution 14/002”</i> It is important to note that the installed electricity meters are approved/certified by the entity Administración del Mercado Electrico (ADME). ADME is the technical and economical managing and operating entity for the National Electricity Grid of Uruguay. Calibration frequency as per the registered VCS PD ^{/2/} of every 2 years for the electricity meters is confirmed to be in accordance with related requirements/ recommendations as established by the meters manufacturer. However, due to the identified delay in calibration interval, the applied calibration frequency during the considered monitoring period is not in accordance with the monitoring plan of the registered VCS PD ^{/2/}.
Did the performed calibration(s) confirm proper functioning of monitoring equipment/instrument? (Yes / No):	Not completely. The performed calibration events in both the main and backup electricity meters confirm appropriate functioning of these electricity meters when the meters were properly calibrated, none of the reported identified errors were above the permissible interval.
Is(are) the performed calibration(s) valid for the whole reporting period?	The performed calibrations are not completely valid for the whole monitoring period. As outlined in the Monitoring Report ^{/4/}, relative delay on performing the calibration events for both installed main and backup electricity meters occurred as follows. Applus+ Certification was able to confirm the validity of the performed calibration event for the installed electricity meter as follows: <i>Calibration events of the main installed electricity meter SL7000 S/N 30023003:</i> - Calibration event performed in 08/01/2014, valid until 07/01/2016 (2 years) ^{/12/} - Calibration event performed in 14/12/2016, valid until 13/12/2018 (2 years) ^{/10/}

- Calibration event performed in 21/11/2018, valid until 20/11/2020 (2 years) ^{/7/}
- Calibration event performed in 27/08/2020, valid until 26/08/2022 (2 years) ^{/4/}

Calibration events of the backup installed electricity meter LZQJ-XC S/N 3970853:

- Calibration event performed 23/07/2014, valid until 22/07/2016 (2 years) ^{/12/}
- Calibration event performed in 14/12/2016, valid until 13/12/2018 (2 years) ^{/10/}
- Calibration event performed in 21/11/2018, valid until 20/11/2020 (2 years) ^{/7/}
- Calibration event performed in 27/08/2020, valid until 26/08/2022 (2 years) ^{/4/}

Thus, a conservative correction factor was systematically applied in all related every-hour measurement records for the monitoring parameter $EG_{\text{facility},y}$ as follows:

Serial Number	Correction factor applied	Period during which correction factor is applied:
30023003	-0.2%	From 01/10/2016 to 31/12/2016 ⁶

The 0.2% represents the assumed maximum permissible error of the main electricity meter, which is higher than the measurement deviation error (0.06%) which was obtained as a result of the performed delayed calibration event in the instrument as confirmed in the calibration performed on 14/12/2016 ^{/27/}.

⁶ Although the period with no valid calibration event is from 01/10/2016 (start of the monitoring period) to 13/12/2016, the project participant decided for more conservative action by applying the discount factor for the whole months of 10/2016, 11/2016 and 12/2016.

As a conclusion, the Applus+ Certification's verification team was able to confirm that calibration events performed for monitoring instruments/equipment of the VCS project activity were conducted in accordance with the monitoring plan from the VCS PD ^{/2/}, the applied CDM baseline and monitoring methodology during the considered monitoring period. Documented evidence for performed calibration events allowed the Applus+ Certification's verification team to confirm that applied monitoring instruments/equipped operated under appropriate manner during the considered monitoring period.

Assessment of GHG calculations:

A calculation spreadsheet correctly and sufficiently summarizes the achieved baseline emissions due to the displacement of the equivalent amount of electricity generated by the VCS project activity (which would otherwise be generated by existing grid-connected power plants, including fossil-fuel fired power plants (and addition of new power generation units) within the National Electricity Grid of Uruguay) vis-à-vis applicable GHG calculation approach as per the registered VCS PD ^{/2/}.

Project and leakage emissions by the VCS project activity are correctly and sufficiently demonstrated in the registered VCS PD ^{/2/} as both equal to zero according to the CDM ACM0002: "Consolidated baseline methodology for grid connected electricity generation from renewable sources" (version 16.0) ^{/6/}.

The determination of achieved emission reductions by the VCS project activity during the considered monitoring period is confirmed by the Applus+ Certification's verification team as being correctly and appropriately calculated as the equal to the achieved baseline emissions, as the achieved project and leakage emissions are both null.

Assessment of determination of baseline emissions:

The Applus+ Certification's verification team assessed whether the methods and formulae used to determine baseline emissions for the considered monitoring period are correct and appropriate. The performed assessment encompassed checking whether applied methods and formulae as described in the monitoring plan of the registered VCS PD ^{/2/} and applicable CDM baseline and monitoring methodology + methodological tools were correctly applied, including confirmation whether the Monitoring Report ^{/1/} includes all parameters and monitored data at the intervals required by the applied CDM baseline and monitoring methodology + methodological tools as per the registered VCS PD ^{/2/}.

The correctness of application of emission factor and default values (ex-ante determined/fixed parameters) as per the registered VCS PD ^{/2/} was also verified.

Through assessment of the Monitoring Report ^{/1/}, the Applus+ Certification's verification team was able to verify that baseline emissions (BE_y) for the considered monitoring period are correctly calculated as follows:

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

Where:

$EG_{PJ,y}$ Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the VCS project activity in year y.

Monthly accumulated records of net electricity generated by the VCS project activity during the considered monitoring period are confirmed by the Applus+ Certification's verification team as being correctly reported in the Monitoring Report ^{/4/} and considered in the determination of baseline emissions as follows:

Year	Amount of net electricity generated (MWh/year)
2016 ⁷	38,065.06 ⁸
2017	137,440.98
2018	146,976.74
2019	170,129.79
2020	183,407.18
2021	162,761.61

Further monitoring details for $EG_{PJ,y}$ are summarized above. These values were crosschecked with monthly electricity commercialization receipts ^{/20/}.

$EF_{grid,CM,y}$ Combined margin CO₂ emission factor for grid connected power generation in year y was ex-ante determined using the "Tool to calculate the emission factor for an electricity system" (version 05.0) ^{/19/}. As defined in the VCS PD ^{/2/}, $EF_{grid,CM,y}$ is ex-ante determined as 0.5765 tCO₂/MWh.

⁷ Period from 01/10/2016 to 31/12/2016

⁸ The monitored value for electricity generated is 38,141 MWh, however after applying the deduction factor from 01/10/2016 (first day of the considered monitoring period) to 31/12/2016 (due to the occurred delay of the calibration event), the reported electricity generated in 2016 for emission reductions purpose is 38,065.06 MWh.

The calculated value for baseline emissions for the considered monitoring period from 01/10/2016 to 31/12/2021 is correctly determined as 483,557 tCO₂e.

Assessment of determination of project emissions:

The Project Emissions are considered as zero (i.e. $PE_y = 0$) as the project is a wind farm, hence complies with the provisions in the applied methodology ^{/07/}. Thus $PE_y = 0$.

In summary, the Applus+ Certification's verification team was able to confirm that calculations of baseline emissions and project emissions were correctly performed as per the formulae and methods stated in the registered VCS PD ^{/2/} and under conformance with applicable requirements of the applied CDM baseline and monitoring methodology ACM0002 (version 16.0) ^{/6/}.

As also confirmed by the Applus+ Certification's verification team, reported achieved emission reductions for monitoring period from 01/10/2016 to 31/12/2021 are correctly calculated and reported as the difference between determined accumulated values for baseline emissions and project and leakage emissions (null) for the period and are equal to 483,557 tCO₂e.

Reported achieved emission reductions are in accordance with all applicable measurement, reporting and calculation requirements as per the monitoring plan of the registered VCS PD^{/2/}, CDM monitoring and baseline methodology ACM0002 (version 16.0) ^{/6/} and applicable CDM methodological tools.

Assessment of related monitoring management and quality assurance procedures for the VCS project activity:

The Applus+ Certification's verification team was able to confirm that robust quality control and quality assurance (QA/QC) procedures are implemented by the project proponent and project operator for preventing or identifying and correct eventual errors or omissions in the reported monitoring parameters.

As verified by the Applus+ Certification's verification team, competent and sufficiently trained staff are recruited for operating the VCS project activity and handling related monitoring data. Such employees are found with knowledge not only about the operation of the VCS project activity, but also with sufficient knowledge and competence to ensure the application of all related QA/QC procedures for data recording and storage.

As also assessed by the Applus+ Certification's verification team, the VCS project activity has been operated by sufficiently trained staff by correctly following guidance and instructions of internal documented working procedures.

As confirmed by the Applus+ Certification's verification team, the applied procedures for data collection, data reporting, performance of calibration events and other aspects related to the applied procedures for determining the emission reductions are systematically implemented and have been appropriately followed by the project proponents. While watching (and later further assessing/reviewing (re-watching)) the produced set of live videos (movies) and pictures ^{/9/}, the Applus+ Certification's verification team was also able to verify that the operational structure of the VCS project activity is also in line with the information made available in the registered VCS PD ^{/2/} and in the Monitoring Report ^{/1/}.

In summary, Applus+ Certification was also able to verify that detailed management and operational work procedures are in place and confirmed that an operational structure for the VCS project activity is established with responsibilities clearly identified. Moreover, trained staff is employed to ensure data quality.

4.5 Quality of Evidence to Determine GHG Emission Reductions and Removals

Monitoring related activities for the VCS project activity were confirmed by the Applus+ Certification's verification team as being carried out under sufficient conformance with the monitoring plan as per the registered VCS PD ^{/2/} for the project activity (version 2.6, dated 31/03/2016).

As a result of performed verification assessment for the considered monitoring period, Applus+ Certification's verification team was able to confirm that relevant details for all parameters required for the ex-post determination of emission reductions are sufficiently included in the Monitoring Report ^{/1/} and emission reduction calculation spreadsheet ^{/2/} with all figures, assumptions and calculations being consistent and under conformance with applicable requirements and/or guidance of the applied CDM baseline and monitoring methodology ACM0002 (version 16.0) ^{/6/} and the monitoring plan contained in the registered PD.

After verifying the reported figures with the raw data sources, it's confirmed that the values of the parameters from the raw data sources are consistent with those quoted in the ER Calculation Spreadsheet and the MR Report. The verification process for the same has been clearly described above in section 4.4 of the report.

4.6 Non-Permanence Risk Analysis

Not applicable as this is a renewable project type.

5 VERIFICATION CONCLUSION

LGAI Technological Center, S.A. (referred to as “Applus+ Certification” or the VVB) has been contracted by R del Sur S.A. (referred to as the Client) to perform the 2nd periodic Verification of GHG Emission Reductions for the project activity: “Parque Eólico Maldonado”, VCS project ID #1308 (referred to as the project activity or PA).

The monitoring period included in the Monitoring Report ^{/1/} for which this verification applies is: 01/10/2016 to 31/12/2021.

The management of R del Sur S.A. is responsible for the preparation of the GHG emissions data and the reported GHG emissions reductions on the basis set out within the project’s Monitoring Plan in the registered Project Description (PD) version 2.6 dated 31/03/2016 ^{/02/}.

Operation project staff of the project proponents R del Sur S.A. and also the environmental consultancy NTT DATA EUROPE & LATAM GREEN ENGINEERING are responsible for the previously occurred implementation of the VCS project activity and monitoring related activities since its starting of operations, including measurement, recording and reporting of monitoring data and determination of GHG emission reductions achieved by the VCS project activity within the considered monitoring period on the basis applicable monitoring procedures and requirements which are established in the project’s monitoring plan as per the registered VCS Project Description (VCS-PD) (version 2.6, dated 31/03/2016) ^{/2/}.

The verification assessment performed by Applus+ Certification is based on approach defined as per applicable guidance and requirements of VCS rules and/or relevant UNFCCC requirements (whenever applicable). The performed verification assessment applied a risk-based approach, drawing on an understanding of the risks associated with reporting GHG emissions data and the controls in place to mitigate these. As part of the performed verification assessment, Applus+ Certification was able to confirm the following:

- The VCS project activity is implemented and has operated during the considered monitoring period under conformance with its previously defined design and with monitoring related activities/tasks being performed under sufficient compliance with monitoring requirements defined in the monitoring plan as per registered VCS PD for the project activity ^{/2/}.
- The monitoring plan for the VCS project activity as previously defined in the registered VCS PD was designed and has been operated under full conformance with the applied CDM Baseline and monitoring methodology ACM0002 “Consolidated baseline methodology for grid-connected electricity generation from renewable sources” (version 16.0) ^{/6/}.
- The Monitoring Report ^{/1/} and other supporting documents provided are confirmed as being sufficiently complete, verifiable and with texts, assumptions, descriptions and calculation under full conformance with the applicable VCS requirements.

- Monitoring instruments required for measurements which are instrumental for the determination ex-post of GHG emission reductions achieved by the VCS project activity during the considered monitoring period were confirmed to be under correct and reliable operation with related maintenance and calibration being appropriately and timely performed.
- GHG emission reductions achieved by the VCS project activity during the considered monitoring period are confirmed as being calculated without material misstatements.

In summary, Applus+ Certification was able to confirm that information included in the Monitoring Report ^{/1/} is deemed complete and correct and that the emission reductions achieved by the VCS project activity during the monitoring period from 01/10/2016 to 31/12/2021 are correctly determined and fairly stated and were calculated without material misstatements. Applus+ Certification hereby confirms and certifies that GHG emission reductions achieved by the VCS project activity “Parque Eólico Maldonado” during the monitoring period from 01/10/2016 to 31/12/2021 as reported in Monitoring Report (version 3.0, dated 03/11/2022) ^{/1/} represents the figures summarized below:

Monitoring Period	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)
2016 (from 01/10/2016)	21,944.51	0	0	21,944.51
2017	79,234.72	0	0	79,234.72
2018	84,732.09	0	0	84,732.09
2019	98,079.82	0	0	98,079.82
2020	105,734.24	0	0	105,734.24
2021	93,832.07	0	0	93,832.07
Total	483,557	0	0	483,557

In table below it is possible to check the verified difference between the estimation of emission reductions as per the registered PDD ^{/2/} and the actual achieved emission reductions for the same period of comparison.

Year	Ex-ante emissions reductions/removals	Achieved emissions reductions/removals	Percent difference	Justification for the difference
2016 (from 01/10/2016 to 31/12/2016)	27,680 ⁹	21,944.51	25.84	The verified difference is explained by the project participant as occurred due to remarks on the projected climate conditions by the time of the validation stage when compared to the actual/verified conditions by the time of the considered monitored period.
2017	109,818	79,234.72	27.84	The verified difference is explained by the project participant as occurred due to remarks on the projected climate conditions by the time of the validation stage when compared to the actual/verified conditions by the time of the considered monitored period.
2018	109,818	84,732.09	22.84	The verified difference is explained by the project participant as occurred due to remarks on the projected climate conditions by the time of the validation stage when compared to the actual/verified conditions by the time of the considered monitored period.
2019	109,818	98,079.82	10.68	The verified difference is explained by the project participant as occurred due to remarks on the projected climate conditions by the time of the validation stage when compared to the actual/verified conditions by the time of the considered monitored period.
2020	109,818	105,734.24	3.71	The verified difference is explained by the project participant as occurred due to remarks on the projected climate conditions by the time of the validation stage when compared to the actual/verified conditions by the time of the considered monitored period.
2021	109,818	93,832.07	14.55	The verified difference is explained by the project participant as occurred due to remarks on the projected climate conditions by the time of the validation

⁹ Percentual estimation of emission reductions based on the reported annual value as per the registered PD /2/ as 109,818 tCO₂e for 365 days resulting in the average value of 27,680 tCO₂e for 92 days period of time.

				stage when compared to the actual/verified conditions by the time of the considered monitored period.
<i>Total</i>	576,770	483,557	16.16	The verified difference is explained by the project participant as occurred due to remarks on the projected climate conditions by the time of the validation stage when compared to the actual/verified conditions by the time of the considered monitored period.

APPENDIX 1: REFERENCE LIST

1	R del Sur S.A.: Monitoring report for the VCS project activity “Parque Eólico Maldonado” / monitoring period from 01/10/2016 to 31/12/2021, version 3.0, dated 03/11/2022 (including emission reduction calculation spreadsheet) Monitoring report for the VCS project activity “Parque Eólico Maldonado” / monitoring period from 01/10/2016 to 31/12/2021, version 3.0, dated 03/11/2022 (including emission reduction calculation spreadsheet)
2	R del Sur S.A.: Registered VCS PD the VCS project activity “Parque Eólico Maldonado” (version 2.6, dated 31/03/2016)
3	AENOR Asociación Española de Normalización y Certificación: “Validation report for the project Parque Eólico Maldonado” (version 02, dated 31/03/2016);
4	UTE Laboratory: Calibration event performed on main electricity meter SL7000 S/N 30023003. Certificate number 202349. Dated: 27/08/2020 UTE Laboratory: Calibration event performed on backup electricity meter LZQJ-XC S/N 3970853. Certificate number 202350. Dated: 27/08/2020
5	VCS/VERRA: VCS standard version 4.3 (dated 22/06/2022).
6	UNFCCC / CDM: Baseline and monitoring methodology ACM0002 “Consolidated baseline methodology for grid-connected electricity generation from renewable sources”; Version 16.0. Available online: https://cdm.unfccc.int/methodologies/DB/XP2LKUSA61DKUQC0PIWPGWDN8ED5PG
7	UTE Laboratory: Calibration event performed on main electricity meter SL7000 S/N 30023003. Certificate number 183727. Dated: 21/11/2018

	UTE Laboratory: Calibration event performed on backup electricity meter LZQJ-XC S/N 3970853. Certificate number 183728. Dated: 21/11/2018
8	International Organization for Standardization (ISO) Standard ISO 14064-3:2006
9	R del Sur S.A.: Set of sequential live videos (movies) + photographs (pictures) of the VCS project activity “Parque Eólico Maldonado” produced/generated on 22/09/2022
10	UTE Laboratory: Calibration event performed on main electricity meter SL7000 S/N 30023003. Certificate number 163936. Dated: 14/12/2016 UTE Laboratory: Calibration event performed on backup electricity meter LZQJ-XC S/N 3970853. Certificate number 163937. Dated: 14/12/2016
11	AENOR Asociación Española de Normalización y Certificación: Verification report “Parque Eólico Maldonado” for the 1st Monitoring Period from 10/04/2014 to 30/09/2016 (version 2, dated 27/02/2017);
12	UTE Laboratory: Calibration event performed on main electricity meter SL7000 S/N 30023003. Certificate number 133691. Dated: 08/01/2014 UTE Laboratory: Calibration event performed on backup electricity meter LZQJ-XC S/N 3970853. Certificate number 142153. Dated: 23/07/2014
13	UNFCCC/CDM: Methodological tool “Combined tool to identify the baseline scenario and demonstrate additionality” (Version 06.0.0). Available online: https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-02-v2.2.pdf/history_view
14	VCS/VERRA:

	COVID-19 Travel Guidance for Projects (18/03/2020) Available online: https://verra.org/covid-19-travel-guidance/
15	Ittron Inc.: ITRON SL7000 Technical Data Sheet of the main electricity meter. Available online: https://www.itron.com/br/solutions/product-catalog/ace-sl7000 EMH metering GmbH & Co. KG: EMH LZGJ-XC Technical Data Sheet of the backup electricity meter. Available online: https://emh-metering.com/en/products/special-meters/lzqj-xc/
16	ADME: Primary monitoring records for electricity generation and electricity consumption (period from 01/10/2016 to 31/12/2021) for the electricity generation infrastructure implemented as part of the VCS project activity “Parque Eólico Maldonado”
17	Environmental licence/permit for the construction and operation of electricity generation infrastructure to be implemented as part of the VCS project activity “Parque Eólico Maldonado”. R del Sur S.A.: Social Impact Study 2012 Sustainability Report 2017 Sustainability Report 2018 Sustainability Report 2020 Sustainability Report 2021 Participation Plan of Social Actors 2021
18	UNFCCC/CDM: Methodological tool “Tool for the demonstration and assessment of additionality” (Version 07.0.0). Available online: https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-01-v5.2.pdf/history_view
19	UNFCCC/CDM: Methodological tool “Tool to calculate the emission factor for an electricity system” (Version 05.0).

	Available online: https://cdm.unfccc.int/methodologies/PAMethodologies/tools/am-tool-07-v1.1.pdf/history_view?gclid=Cj0KCQjw94WZBhDtARIsAKxWG-99NTmogI2xQD60A1avU8ecrTFq5ibefzQwm0F6JaUJHKScB2VsbFEaAingEALw_wcB
20	R del Sur S.A.: Monthly invoices for purchasing of grid-sourced electricity period from 01/10/2016 to 31/12/2021) for the electricity generation infrastructure implemented as part of the VCS project activity “Parque Eólico Maldonado”
21	VCS/VERRA: Validation and verification manual, version 3.2 dated 19/10/2016 https://verra.org/wp-content/uploads/2018/03/VCS_Validation_Verification_Manual_v3.2.pdf
22	R del Sur S.A.: Documented evidence of “<i>Restricciones operativas</i>”
23	Applus+ Certification: VCS – Verification Work Plan: Parque Eólico Maldonado dated 21/09/2022
24	UNFCCC/CDM: CDM Validation and Verification Standard for project activities (version 03.0) Available online: https://cdm.unfccc.int/Reference/Standards/index.html
25	UNFCCC/CDM: Amendments to version 03.0 of the CDM validation and verification standard for project activities on remote validation or verification by DOEs (version 01.0) Available online: https://cdm.unfccc.int/Reference/Standards/index.html
26	AENOR INTERNACIONAL S.A.U.: Verification Report valid for the 1st monitoring period from 10/04/2014 to 30/09/2016

	Available online: https://registry.terra.org/app/projectDetail/VCS/1308 Dated: 26/04/2017
27	R del Sur S.A.: Procedure/ operational requirement named “Restricciones operativas”

APPENDIX 2: LIST OF RAISED CORRECTIVE ACTION REQUESTS (CAR)

The descriptions of Correction Action Requests (CARs) issued by the Applus+ Certification's verification team as part of the performed verification assessment are summarized in the tables below, which also includes the summary of the actions and responses from the project proponents for successfully addressing and closing the raised CARs.

CAR ID	01	Date: 27/09/2022
Description of CAR		
Different Sections of the Monitoring Report includes grammar mistakes and typographical errors (e.g. incorrect use of “,” and “.” for thousands and decimals respectively)		
Project proponent response		Date: 10/10/2022
Grammar review performed on the entire document. Typography error identified and corrected in the data of the EG _{facility} Parameter in section 4.2.		
DOE assessment		Date: 11/10/2022
As confirmed by the Applus+ Certification's verification team, related amendments/corrections made in the revised version of the Monitoring Report sufficiently address the raised CAR. This CAR is thus closed.		

CAR ID	02	Date: 27/09/2022
Description of CAR		
The Monitoring Report refers in Section 1.6 to a version of the VCS standard that is not the currently valid latest version of the Standard.		
Project proponent response		Date: 10/10/2022

The most current version of VCS Standard is 4.3. However, v3.4 is the version with which it was registered, and the project is consistent. To avoid confusion, it is proposed to delete the information of Section 1.6 related to the VCS Standard document.

DOE assessment

Date: 11/10/2022

As confirmed by the Applus+ Certification's verification team, related amendments/corrections made in the revised version of the Monitoring Report sufficiently address the raised CAR. This CAR is thus closed.

CAR ID	03	Date: 27/09/2022
Description of CAR		
The ex-ante determined parameter Net electricity generated by power plant/unit m or k in year y (($EG_{m,y}$ and $EG_{k,y}$) Plant yearly generation (last 3 years)) despite of being considered only during the validation phase, is not even listed nor mentioned in the registered PD. Furthermore EF_{OM} and $EF_{BM,2013}$ are mentioned in the Monitoring Report however these parameters are not listed in the registered PD.		
Project proponent response		Date: 05/10/2022
Despite not being a parameter used in the verification, $EG_{m,y}$ and $EG_{k,y}$ have been included in section 4.1 of the Monitoring Report and the EF_{OM} and $EF_{BM,2013}$ parameters have been deleted according to the content of the registered PD.		
DOE assessment		Date: 11/10/2022
As confirmed by the Applus+ Certification's verification team, related amendments/corrections made in the revised version of the Monitoring Report sufficiently address the raised CAR. This CAR is thus closed.		

CAR ID	04	Date: 27/09/2022
Description of CAR		

Specification details for monitoring instruments installed and under operation as part of the project activity within the considered monitoring period (e.g. electricity meters), as presented in the Monitoring Report, do not include references to the name of the manufacturers of such meters. Furthermore, the Monitoring Report does not include numbers/references for Calibration Certificates applicable/valid for such electricity meters within the considered monitoring period.

Project proponent response
Date: 05/10/2022

The table of the EG_{facility} parameter in section 4.2 shows the data related to the meters and their characteristics. This can also be found in Table 6 of the Monitoring report, where the Calibration Certificate numbers are also indicated. Only the manufacturer's information has been added both in 4.2 and table 6.

DOE assessment
Date: 11/10/2022

As confirmed by the Applus+ Certification's verification team, related amendments/corrections made in the revised version of the Monitoring Report sufficiently address the raised CAR. This CAR is thus closed.

CAR ID

05

Date: 27/09/2022

Description of CAR

As per reported information, delays in the performance of every 2-years calibration events for the electricity meter apparently occurred during the period from 07/01/2016 to 14/12/2016. Clarification/justification that such apparently occurred delays do not represent non-conformance with maintenance and testing procedures (as per requirements set by the grid operators or national requirements) is to be provided

Project proponent response
Date: 25/10/2022

No further evidence is available to justify the calibration delays. For this reason, and despite not being delays that depend on the project proponent, finally a reduction of the emission reductions is assumed by applying the 0.2% error of the main meter in the net electricity for the periods that do not present a valid calibration as recorded in the PD (at least once every two years).

In addition, the link that did not work has been replaced by document "20220630_160151_0000" provided as evidence.

DOE assessment
Date: 03/11/2022

As confirmed by the Applus+ Certification's verification team, related amendments/corrections made in the revised version of the Monitoring Report along with the application of discount factor in the emission reductions spreadsheet sufficiently address the raised CAR. This CAR is thus closed.

CAR ID	06	Date: 27/09/2022
Description of CAR		
For sake of completeness and transparency, details about the period in use for each individual electricity meter (meters with different serial numbers) used under positions M1 and M2 within the considered monitoring period are to be included in Section 4.2		
Project proponent response		Date: 10/10/2022
The following information has been included at the end of the Section 4.2: The generation records of the monitoring period were made with the main meter M1 (S/N 30023003). However, the back-up meter M2 (S/N 3970853) has been used for generation measurement only for 14 hours in the monitoring period: 09/01/2018 for 11 PM and 12 PM 06/10/2018 for 1 AM to 11 PM 02/09/2020 for 3 AM The previous information about the meters used is available on the ADME website by accessing from the private profile of the project proponent (R del Sur).		
DOE assessment		Date: 11/10/2022
As confirmed by the Applus+ Certification's verification team, related amendments/corrections made in the revised version of the Monitoring Report sufficiently address the raised CAR. This CAR is thus closed.		

CAR ID	07	Date: 27/09/2022
Description of CAR		

The initial version of the Monitoring Report wrongly refers to the VCS project activity as being registered under the UNFCCC's Clean Development Mechanism (CDM).

Project proponent response

Date: 05/10/2022

This mistake has been identified and corrected in section 1.6 Project crediting period. According to section 1.9, the project is not registered under CDM scheme.

DOE assessment

Date: 11/10/2022

As confirmed by the Applus+ Certification's verification team, related amendments/corrections made in the revised version of the Monitoring Report sufficiently address the raised CAR. This CAR is thus closed.

CAR ID

08

Date: 27/09/2022

Description of CAR

The Monitoring Report does not include clarification on how the consumption of grid-sourced electricity by the VCS project activity (during eventual time periods in which no electricity was generated by the project activity) is accounted/considered for in the determination of net electricity generation by the project activity during the considered monitoring period.

The reason for the difference between the amount of energy supplied and the amount reported in ADME invoices is to be transparently indicated in the Monitoring Report for sake of completeness and transparency

Project proponent response

Date: 15/11/2022

"medidasSMEC XXX.xlsx" files and the DTE files are data obtained from ADME's internal platform to which the Project Participant has private access. It was not aware of spreadsheet "medidasSMEC XXX.xlsx" contained deviations (from DTE records) due to ADME adjustments. Performing the crosscheck initially, these deviations were not identified by mistake until verification process, so the ER calculations were redone with the DTE data records, which is the official and valid source to carry out the crosscheck against invoice as can be seen in the "GEN Maldonado I Monitoring Period 1_v3" spreadsheet.

The Project participant has consulted ADME about these adjustments, but no response has been obtained. These are deviations between data sources that do not affect the project and are not related to the project participant.

DOE assessment	Date: 17/11/2022
As confirmed by the Applus+ Certification's verification team, related amendments/corrections made in the revised version of the Monitoring Report sufficiently address the raised CAR. This CAR is thus closed.	

CAR ID	09	Date: 27/09/2022
Description of CAR		
In accordance with rules and practices of the power market in Uruguay, the operation of project activity is confirmed to have multiple events during the considered monitoring period in which its activity level was deliberately reduced (reduction in the amount of generated electricity) as a result of mandates of the electricity dispatch coordination authority (ANDE) in the context of the procedure/ operational requirement named "Restricciones operativas" (operational restrictions). While such procedure/practice has resulted in direct reduction in the amount of electricity generated and related GHG emission reductions within the considered monitoring period, general details and aspects about such particular events (incl. their impacts in terms of the amount of electricity generated by the project activity) are not reported/described in the Monitoring Report for sake of completeness and transparency.		
Project proponent response		Date: 05/10/2022
An explanation on the operation of the Operational Restrictions in Uruguay has been added in section 3.1 Implementation Status of the Project Activity, where the data of generated energy that could not be supplied to the grid for this reason (10%) is also indicated. This explanation is described under the title "Operating restrictions in Uruguay". In addition, GEN Maldonado I Monitoring Period 2_v2 spreadsheet is delivered as evidence of the calculation of the operating restrictions generated.		
DOE assessment		Date: 11/10/2022
As confirmed by the Applus+ Certification's verification team, related amendments/corrections made available in Section 3.1 Implementation status of the project activity in the revised version of the Monitoring Report along with the procedure/ operational requirement named "Restricciones operativas" (operational restrictions) (reference inserted in the Verification Report number 27) sufficiently address the raised CAR. This CAR is thus closed.		