VERIFICATION REPORT FOR THE VTRM RENEWABLE ENERGY 2

Document Prepared by RINA Services s.p.A.

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Contact	Via Corsica 12, 16128 Genoa, ITALY +3901053851 *laura.severino@rina.org* www.rina.org
Approved By	**Laura Severino** (Authorized officer signing for the VVB) Head of Sustainability Compliance & New Scheme Development Coordination Unit 
Work Carried Out By	Andrea Leiroz

Summary:

RINA has performed the verification of the emission reductions reported for the "VTRM Renewable Energy 2" for the period 01 March 2019 to 30 September 2020, to review and determine the monitored reductions in GHG emissions have occurred as a result of the project activity.

The verification was conducted by means of document review, follow-up interviews and remote site inspection, and the resolution of outstanding issues. The review of the VCS monitoring report and the subsequent follow-up interviews and remote audit have provided RINA with sufficient evidence to determine the fulfilment of stated criteria.

The "VTRM Renewable Energy 2" located within the geographic are of Brazil, is a Grouped Project, that consists on the implantation and operation of wind power plants (WPPs). All wind power plants will supply clean electricity to the Brazilian National Interconnected System (SIN). The project has applied the CDM methodology ACM0002 "Grid-connected electricity generation from renewable sources", version 19.0.

In summary, it is RINA's opinion that the project activity "VTRM Renewable Energy 2" as described in the VCS MR, dated 18 January 2021, meets all relevant VCS requirements for VCS projects and correctly applies the CDM methodology ACM0002 "Grid-connected electricity generation from renewable sources", version 19.0. In addition, the GHG emission reductions reported for the project in the VCS monitoring report (version 2.0) of 18 January 2021 are fairly stated. The GHG emission reductions were calculated correctly on the basis of the CDM methodology ACM0002 "Grid-connected electricity generation from renewable sources", version 19.0.

RINA is able to certify to a reasonable level of assurance that the emission reductions from the project activity "VTRM Renewable Energy 2" during the period 01 March 2019 to 30 September 2020 amount to 522,964 tonnes CO_2 equivalent.

RINA does not assume any responsibility towards the issuance and utilization of the VCUs hereby verified and certified. Request for issuance of VCUs shall be made by the project proponent to an approved VCS Program Registry based on the requirements set out under the most recent version of the VCS Program Guidelines clause on VCS Registration.

The verification of reported emission reductions is based on the information made available to RINA and the engagement conditions detailed in this report. RINA cannot be held liable by a party for decisions made or not made based on this report.

The following were raised during the verification approval request on 24 May 2021. The verification report was updated accordingly.

Section 4.1.8(4) of the VCS Standard, v4.1 states that "the threshold for materiality with respect to the aggregate of errors, omissions and misrepresentations relative to the total reported GHG emission reductions and/or removals shall be five percent for projects and one percent for large projects."

Section 1.7 of the project description for Project 1903 states that the project is a large project.

Section 1.3 of the verification report states that "RINA applies materiality threshold of 5 per cent with respect to omission or misstatement concerning reported quantities as per VCS Standard."

The VVB is requested to clarify the threshold for materiality applied to this verification and to update the verification report, as needed.

RINA response: Section 1.3 was updated accordingly to address the question.

The following were raised during the verification approval request on 08 July 2021. The verification report was updated accordingly.

Section 1.3 of the verification report was updated to clarify that RINA applied a 1% materiality threshold for the verification. The VVB is now requested to clarify what percentage was ultimately achieved by the verification.

RINA response: Section 1.3 was updated accordingly to address the question.

In accordance with the VVS, paragraph 326 the threshold applied for the project activity is (b) 1 per cent of the emission reductions or removals for project activities achieving a total emission reduction or removal of between 300,000 and 500,000 tonnes of carbon dioxide equivalent per year.

A remote audit has been performed on 28 December 2020 and it is confirmed that the monitoring arrangements in the monitoring plan are feasible within the project design. The monitoring is based only on data measured. The CERs calculation is based only in data obtained through the monitoring. The data presented in the monitoring report were assessed by reviewing in detail project documentation, collection of monitored data, observation of established monitoring and reporting practices and assessment of the reliability of monitoring equipment. The implementation of the project activity was verified through pictures and videos taken during the remote audit by PP. Data for energy

generation is publicity available by CCEE and emission factor is published available by the Brazilian DNA and could be confirmed remotely.

Therefore, it is RINA's opinion that the claimed emission reductions are free from material errors, omissions or misstatements, with reasonable level of assurance.

1 INTRODUCTION

1.1 Objective

VTRM Energia Participações S.A has contracted RINA to conduct the verification of the grouped project "VTRM Renewable Energy 2" for the period from 01 March 2019 to 30 September 2020 (both days included).

Verification is the periodic independent review and ex-post determination by an accredited verification body of the monitored reductions in GHG emissions that have occurred as a result of the registered VCS project activity during a defined verification period.

A verification statement is the written assurance by a verification body that, during a specific period in time, a project activity achieved the emission reductions as verified.

1.2 Scope and Criteria

The scope of verification is:

- To verify that actual monitoring systems and procedures are in compliance with the monitoring systems and procedures described in the monitoring plan.
- To evaluate the GHG emission reduction data and express a conclusion with a reasonable level of assurance about whether the reported GHG emissions reduction data is free from material misstatement.
- To verify that reported GHG emissions data is sufficiently supported by evidence.

The VCS MR is reviewed against the criteria stated in the VCS Version 4.0, and the relevant documents and policy announcements made by the VCSA, and the criteria stated in the CDM methodology ACM0002 "Grid-connected electricity generation from renewable sources", version 19.0.

The verification shall ensure that reported emission reductions are complete and accurate in order to be verified.

1.3 Level of Assurance

RINA provides reasonable assurance that the "VTRM Renewable Energy 2" meets VCS criteria. To ensure complete transparency, any clarification or corrective actions raised have been included in the Appendix A. The verification expresses a conclusion with a reasonable level of assurance about whether the reported GHG emission reduction data is free from material misstatement.

In accordance with the VVS, paragraph 326 the threshold applied for the project activity is (b) 1 per cent of the emission reductions or removals for project activities achieving a total emission reduction or removal of between 300,000 and 500,000 tonnes of carbon dioxide equivalent per year.

A remote audit has been performed on 28 December 2020 and it is confirmed that the monitoring arrangements in the monitoring plan are feasible within the project design. The monitoring is based only on data measured. The CERs calculation is based only in data obtained through the monitoring. The data presented in the monitoring report were assessed by reviewing in detail project documentation, collection of monitored data, observation of established monitoring and reporting practices and assessment of the reliability of monitoring equipment. The implementation of the project activity was verified through pictures and videos taken during the remote audit by PP. Data for energy generation is publicity available by CCEE and emission factor is published available by the Brazilian DNA and could be confirmed remotely.

Therefore, it is RINA's opinion that the claimed emission reductions are free from material errors, omissions or misstatements, with reasonable level of assurance.

All the revisions of the validation and verification report before being submitted to the client were subjected to an independent internal technical review to confirm that all validation and verification activities had been completed according to the pertinent RINA instructions, with reasonable level of assurance.

The technical review was performed by a technical reviewer(s) qualified in accordance with RINA's qualification scheme for VCS and CDM validation and verification.

The verification team and the technical reviewers consist of the following personnel.

Role	Last Name	First Name	Country
Lead Assessor	Leiroz	Andrea	External Auditor - Rina Brazil
Technical Reviewer	Principe Branco Saettoni	Geisa Maria	Rina Brazil

1.4 Summary Description of the Project

The "VTRM Renewable Energy 2" located within the geographic are of Brazil, is a Grouped Project, that consists on the implantation and operation of wind power plants (WPPs). All wind power plants will supply clean electricity to the Brazilian National Interconnected System (SIN).

The first instance included in the Grouped Project is a complex called Ventos do Piauí Complex composed by seven WPPs with a total installed capacity of 205.8 MW that generated total GHG emission reductions of 522,964 tCO_2.

2 VERIFICATION PROCESS

2.1 Method and Criteria

The verification consisted of the following three phases in accordance with the applied methodology, the VCS Standard version 4.0 and other relevant VCS requirements:

- A desk review of the project documents.
- Follow-up interviews with project stakeholders and site inspection.
- The resolution of outstanding issues and the issuance of the verification report and opinion.

2.2 Document Review

The following tables list the documentation that was reviewed during the verification.

Documents provided by the project participant.

/1/	EQAO: VCS Monitoring Report (VCS MR) for project activity "VTRM Renewable Energy 2", version 1.0 dated 15 December 2020 and version 2.0 dated 18 January 2021.
/2/	EQAO: Emission reductions calculation spreadsheet for project activity "VTRM Renewable Energy 2" version 1.0 and 2.0.
/3/	VTRM: Monitoring report extracted from the meters.
/4/	Geographical coordinates of each aerogenerator and wind plant: VdPI - Aerogeradores.kml.
/5/	Envinromental operation licenses: Vento de São Vicente 08 (Ventos de São Vinícius): # D000447/17 – 003174/17 issued by Secretaria de Meio Ambiente e Recursos Hídricos (SEMAR) on 29 August 2017 and valid until 29 August 2021. Vento de São Vicente 09 (Ventos de Santo Alberto): # D000509/17 – 004944/17 issued by Secretaria de Meio Ambiente e Recursos Hídricos (SEMAR) on 06 October 2017 and valid until 06 October 2021.

	Vento de São Vicente 10 (Ventos de Santo Agostinho): # D000510/17 – 004329/17 issued by Secretaria de Meio Ambiente e Recursos Hídricos (SEMAR) on 06 October 2017 and valid until 06 October 2021. Vento de São Vicente 11 (Ventos de Santa Albertina): # D000511/17 – 004330/17 issued by Secretaria de Meio Ambiente e Recursos Hídricos (SEMAR) on 06 October 2017 and valid until 06 October 2021. Vento de São Vicente 12 (Ventos de São Casimiro): # D000363/17 – 001780/17 issued by Secretaria de Meio Ambiente e Recursos Hídricos (SEMAR) on 19 July 2017 and valid until 19 July 2021. Vento de São Vicente 13 (Ventos de São Adeodato): # D000362/17 – 002784/17 issued by Secretaria de Meio Ambiente e Recursos Hídricos (SEMAR) on 19 July 2017 and valid until 19 July 2021. Vento de São Vicente 14 (Ventos de Santo Afonso): # D000248/17 – 001222/17 issued by Secretaria de Meio Ambiente e Recursos Hídricos (SEMAR) on 31 May 2017 and valid until 31 May 2021.
/6/	Environmental impact assessment (EIA): EIA for Ventos de São Vicente Complex (Ventos de São Vinícius, Ventos de Santo Alberto, Ventos de Santo Agostinho, Ventos de Santa Albertina, Ventos de São Casimiro, Ventos de São Adeodato, Ventos de Santo Afonso) developed by Geoconsult dated October 2015.
/7/	Local stakeholder consultation: on-going communication. – http://www.institutovotorantim.org.br/missaopiaui-programas-e-projetos-sociais-em-acao/ – https://www.venergia.com.br/en/news/votorantim-energia-realiza-terceiro-ciclo-de-palestras-nas-comunidades-situadas-no-entorno-do-complexo-eolico-ventos-do-piaui/ – https://www.venergia.com.br/en/news/programa-votorantim-pela-infancia-e-adolescencia-apresenta-resultados-do-trabalho-desenvolvido-em-santa-filomena-e-araripina/ – https://www.venergia.com.br/en/news/votorantim-energia-inaugura-complexo-eolico-ventos-do-piaui/

Standards, methodologies, and other guidance by the VCSA

/8/	Verified Carbon Standard: VCS Standard version 4.0 dated 19 September 2019.
/9/	Verified Carbon Standard: VCS Validation and Verification Manual, version 4.0 dated 19 September 2019.
/10/	Verified Carbon Standard: VCS Program Definitions version 4.0 dated 19 September 2019.

/11/	CDM Executive Board: Large-scale Consolidated Methodology: ACM0002 – "Grid-connected electricity generation from renewable sources", version 19.0.
/12/	CDM Executive Board: TOOL01 - Methodological tool "Tool for the demonstration and assessment of additionality", version 07.0.0.
/13/	CDM Executive Board: TOOL07 - Methodological tool "Tool to calculate the emission factor for an electricity system", version 07.0.
/14/	CDM Executive Board: TOOL24 - Methodological tool "Common Practice", version 03.1.
/15/	CDM Executive Board: TOOL27 - Methodological tool – "Investment Analysis", version 08.0.
/16/	CDM Executive Board: Guidelines for Application of materiality in verifications, version 02.0.
/17/	CDM Executive Board: Clean Development Mechanism Validation and Verification Standard. Version 02.

Documentation used by RINA to validate / cross-check the information provided by the project participant

/18/	VCS PD&MR for project activity "VTRM Renewable Energy 2", version 04 of 24 July 2019.
/19/	Earthood Services Private Limited: Joint Validation & Verification report for project activity "VTRM Renewable Energy 2", version 01 of 25 July 2019.
/20/	CCEE: report of all plants (extracted directly from CCEE website).
/21/	Authorization for operation – ANEEL's Dispatches: Ventos de São Vicente 08: # 3,396 dated 05 October 2017 (for UG1 to UG7) and #3,513 dated 18 October 2017 (for UG8 and UG14). Ventos de São Vicente 09: # 4,107 dated 05 December 2017 (for UG1 to UG14). Ventos de São Vicente 10: # 3,836 dated 16 November 2017 (for UG1 to UG5, UG13, UG14) and #3,927 dated 22 November 2017 (for UG6 and UG12). Ventos de São Vicente 11: # 3,764 dated 08 November 2017 (for UG1 and UG14). Ventos de São Vicente 12: # 2,670 dated 28 August 2017 (for UG1 to UG7), #2,974 dated 15 September 2017 (for UG8 and UG12) and # 3,401 dated 06 October 2017 (for UG13, UG14).

	Ventos de São Vicente 13: # 3,015 dated 18 September 2017 (for UG1 to UG14). Ventos de São Vicente 14: # 2,328 dated 01 August 2017 (for UG1 to UG7) and #2,529 dated 17 August 2017 (for UG8 and UG14).
/22/	IPCC: 2006 Guidelines on National GHG Inventories.
/23/	National Electric System Operator (ONS): Grid Procedures: Module 12. Procedure for energy meter class: Sub- module 12.2 v2019.08. Available at: http://www.ons.org.br/%2FProcedimentosDeRede%2FMódulo%2012%2FSubmódulo%2012.2%2FSubmódulo%2012.2%202019.08.pdf. Procedure for calibration: Sub-module 12.3 v2016.12. Available at: http://www.ons.org.br/%2FProcedimentosDeRede%2FMódulo%2012%2FSubmódulo%2012.3%2FSubmódulo%2012.3%202016.12. pdf.
/24/	Assured energy: SIGA/ANEEL: Available at: https://bit.ly/2IGf4Q0.
/25/	Interministerial Comission of Global Climate Change (DNA of Brazil): Grid emission factor for the year 2018, 2019 and 2020. Available at Brazilian DNA official website: https://antigo.mctic.gov.br/mctic/opencms/ciencia/SEPED/clima/textogeral/emissao_despacho.html.
/26/	Turbines' technical specification. Folhas de Dados - Aerogerador SGRE (VDP) - G114-IIIA-IIA 2.0MW-.pdf.
/27/	Calibration certificates for electricity meters issued by CAM Brasil: Serial number MW-1608A545-02 (main meter): #7843/Z-16 on 21 September 2016. Serial number MW-1608A683-02 (backup meter): #7871/Z-16 on 21 September 2016.
/28/	Electricity Commercialization Chamber (Câmara de Comercialização de Energia Elétrica in Portuguese - CCEE): Guidelines and Procedures.
/29/	Schneider Electric: Technical data sheet electricity meter model PowerLogic ION8650.

	Available at: https://download.schneider-electric.com/files?p_enDocType=Technical+leaflet&p_File_Name=PLSED310027EN_US_%28web%29.pdf&p_Doc_Ref=PLSED310027EN_Web_US.
/30/	Project page at VERRA's website: https://registry.verra.org/app/projectDetail/VCS/1903
/31/	Land lease contracts: SIM-PI140_CDU_M873.pdf signed on 02 October 2018; SIMPI087_CDU_M3102.pdf signed on 17 October 2018; SIM-PI209-CDU_M506.pdf signed on 05 November 2018.
/32/	Brazilian taxes: – ANEEL taxes (TFSEE): Decree 2,410, 28/11/1997 http://www.planalto.gov.br/ccivil_03/decreto/1997/d2410.htm#:~:text=DECRETO%20N%C2%BA%202.410%2C%20DE%2028,1996%2C%20e%20d%C3%A1%20outras%20provid%C3%AAncias. – Transmission (TUST): ANEEL's approval of 2020-2021 cycle https://bit.ly/3iZIiKF – Electricity sale: – PIS/COFINS: Law 10,637/2002: http://www.planalto.gov.br/ccivil_03/leis/2002/l10637compilado.htm#:~:text=Disp%C3%B5e%20sobre%20a%20n%C3%A3o%2Dcumulatividade,fiscais%2C%20a%20declara%C3%A7%C3%A3o%20de%20inaptid%C3%A3o Law 10,833/2003: http://www.planalto.gov.br/ccivil_03/leis/2003/l10.833.htm – Income tax: Law 9,718/1998: (presumed profit): http://www.planalto.gov.br/ccivil_03/leis/l9718compilada.htm – Social contribution: Law 9,249/1995: http://www.planalto.gov.br/ccivil_03/leis/l9249.htm Law 9,430/1996: http://www.planalto.gov.br/ccivil_03/leis/l9430.htm.
/33/	Social and environmental programs: Relatório Cumprimento PBA VdPI.zip
/34/	National content of equipment: https://valor.globo.com/empresas/noticia/2017/12/15/votorantim-e-cppib-criam-parceria-em-geracao-eolica.ghtml https://www.venergia.com.br/media/1339/df-2017_ventos-de-s%C3%A3o-vicente.pdf https://www.bndes.gov.br/wps/portal/site/home/financiamento/servicos-online/credenciamento-de-equipamentos/normas-aplicaveis-credenciamento/regulamento-credenciamento-financiamento-aerogeradores https://www.bndes.gov.br/wps/wcm/connect/site/10f19d81-33df-4c4c-95e0-d7909975c911/credenciamento_aerogeradores_anexo1.pdf?MOD=AJPERES&CVID=lmylw0v.

/35/	Training and qualification of workers - “Trilha das Usinas” and the Educational Aid Program: Training and Qualification.zip.
/36/	CDM Executive Board agrees to relax mandatory site visits by DOEs until 30 June 2021 because of COVID-19.

2.3 Interviews

On 28 December 2020, Andrea Leiroz from RINA conducted the remote audit to the “VTRM Renewable Energy 2” and performed interviews with project stakeholders.

	Date	Name	Organization	Topic
/37/	28 December 2020	Camila Carvalho	Votorantim Energia	Project operation, energy measurements, project description, energy permits.
/38/	28 December 2020	Julio Chaves	Votorantim Energia	Project operation and project description.
/39/	28 December 2020	Cassiano Machado	Votorantim Energia	Project operation and project description.
/40/	28 December 2020	Italo da Silva	Votorantim Energia	Project operation and project description.
/41/	28 December 2020	Pedro Goltara	Votorantim Energia	Project operation, energy measurements, project description, energy permits.
/42/	28 December 2020	Fernando Vilela	Votorantim Energia	Project operation and project description.
/43/	28 December 2020	Erivaldo Faria	Votorantim Energia	Energy measurements.
/44/	28 December 2020	Fernando Garcia	Votorantim Energia	Energy measurements.
/45/	28 December 2020	Ailton Correa	Votorantim Energia	Energy measurements.

/46/	28 December 2020	Rafael Silva	Votorantim Energia	Energy measurements.
/47/	28 December 2020	Karen Nagai	EQAO	Monitoring report, CERs calculation, meters' calibration.

2.4 Site Inspections

Duration of remote on-site inspection: 28 December 2020				
No.	**Activity performed on-site**	**Site location**	**Date**	**Team member**
1.	Implementation and operation of the proposed project activity. Checked the monitoring equipment, interviewed key personnel of the plant to confirm the operational and data collection procedures, cross-checked between information provided in the monitoring report and data plant.	Seven wind farms and support office	28 December 2020	Andrea Leiroz
2.	Reviewed the information flows for generating, aggregating and reporting the monitoring parameters.	Seven wind farms and support office		
3.	Checked calibration performance, reviewed calculations and assumptions made in determining the GHG data and emission reductions.	Seven wind farms and support office		
4.	Checked the quality control and quality assurance procedures in place to prevent or identify and correct any errors or omissions in the reported monitoring parameters.	Seven wind farms and support office		
5.	Cross-checked between information provided in the monitoring report and data evidence.	Seven wind farms and support office		

A complete desk review of the submitted MR (version 1.0) /1/ and supportive evidences have been checked by the Verification Team.

In addition, audit team has conducted a remote site inspection via videoconference (Teams) with PP on different topics as mentioned under section 2.3 of this report.

Based on the videoconference, MR review, as the review of VCS procedures and guidelines, RINA Verification team has proceeded to skip the presential site visit due to the COVID-19 pandemic /36/. Verification team has used the following alternative means for its assessment and to justify that they are sufficient for the purpose of validation.

- By review of MR;
- By taking follow up actions by conducted interview with PP, to gather information about knowledge of project design, current situation via videoconference. Cross-checked evaluation under the scope of all information and references provided in MR. Details of interviews, topics covered and additional information presented in the above section “2.3 – Interviews”.

2.5 Resolution of Findings

The objective of this phase of the verification was to resolve any outstanding issues that needed be clarified prior to RINA’s positive conclusion on the project design.

A corrective action request (CAR) is issued if one of the following occurs:

- The project participants have made mistakes that will influence the ability of the project activity to achieve real, measurable additional emission reductions.
- The VCS requirements have not been met.
- There is a risk that emission reductions cannot be monitored or calculated.
- Non-conformities with the monitoring plan or methodology are found in monitoring and reporting, or if the evidence provided to prove conformity is insufficient;
- Mistakes have been made in applying assumptions, data or calculations of emission reductions which will impair the estimate of emission reductions.

A clarification request (CL) is raised if information is insufficient or not clear enough to determine whether the applicable VCS requirements have been met.

7 CARs and no CLs were raised and have been adequately addressed by the project participant (refer to Appendix 1).

2.5.1 Forward Action Requests

A forward action request (FAR) is raised during validation to highlight issues related to project implementation that require review during the first verification of the project activity.

A forward action request (FAR) should be issued, where:

1. the actual project monitoring and reporting practices requires attention and /or adjustment for the next consecutive verification period, or
2. an adjustment of the MP is recommended.

No forward action requests (FAR) were identified.

2.6 Eligibility for Validation Activities

Not applicable.

3 VALIDATION FINDINGS

3.1 Participation under Other GHG Programs

The Grouped Project did nor does not participate in any other GHG program and therefore, was not reject by other GHG program.

3.2 Methodology Deviations

Verification Team observed no methodology deviations during the process of verification of this monitoring period.

3.3 Project Description Deviations

Not applicable. No deviations are applied to the Grouped Project during the monitoring period.

3.4 Grouped Project

Not applicable. According to VCS Standard v4.0 /8/, grid-connected wind power plants are excluded from VCS since January 2020 and registered grouped projects are prohibited from adding new project activity instances of this project type.

Therefore, no new instance is included in this Monitoring Report /1/.

4 VERIFICATION FINDINGS

4.1 Project Implementation Status

As part of the remote audit, RINA was able to confirm that the project implementation is in accordance with the project description contained in the VCS PD&MR (version 04 of 24 July 2019) /18/.

The verification team confirmed through the remote inspection and document review that all physical features of the proposed grouped project including data collection systems and storage systems

have been implemented in accordance with the registered VCS PD&MR /18/. RINA confirmed during the remote audit that the project is completely operational.

“VTRM Renewable Energy 2” is a grouped project that consists in the implementation and operation of wind power plants in Brazil. All plants supply clean electricity to the Brazilian National Interconnected System.

The first and unique project activity instance included in the grouped project is a complex called Ventos do Piauí Complex composed by seven wind power plants located at Curral Novo do Piauí, Piauí state with total installed capacity of 205.8 MW.

The project activity instance was implemented and the commercial operation date for the wind power plants have been verified from the ANEEL Dispatches /21/.

The geographical coordinates of the proposed project activity, including positioning of each WTG of the power plants, were validated by RINA and is presented in the document VdPI – Aerogeradores KML file /4/ The first WTG of the power plants was presented in the VCS MR /1/ and was validated by RINA through the ANEEL/SIGEL website /24/.

Wind power plant	Geographical coordinates /24/	
	Latitude	Longitude
Ventos de São Vicente 08	320175	9114007
Ventos de São Vicente 09	317215	9113418
Ventos de São Vicente 10	319490	9114621
Ventos de São Vicente 11	319809	9115824
Ventos de São Vicente 12	321711	9112988
Ventos de São Vicente 13	322396	9115011
Ventos de São Vicente 14	325482	9116524

The brief description of the wind power plants is detailed below:

Wind power plant	Installed capacity (MW) /24/	Nr. WTGs	Assured energy (MW-ave) /24/	PLF (%)	Location	Commercial operation date /21/

Ventos de São Vicente 08	29.4	14	15.20	51.7%	Municipalities of Curral Novo do Piauí, Piauí state	06 October 2017
Ventos de São Vicente 09	29.4	14	15.20	51.7%	Municipalities of Curral Novo do Piauí, Piauí state	06 December 2017
Ventos de São Vicente 10	29.4	14	15.20	51.7%	Municipalities of Curral Novo do Piauí, Piauí state	17 November 2017
Ventos de São Vicente 11	29.4	14	15.00	51.0%	Municipalities of Curral Novo do Piauí, Piauí state	09 November 2017
Ventos de São Vicente 12	29.4	14	15.00	51.0%	Municipalities of Curral Novo do Piauí, Piauí state	29/ August 2017
Ventos de São Vicente 13	29.4	14	15.40	52.4%	Municipalities of Curral Novo do Piauí, Piauí state	19 September 2016
Ventos de São Vicente 14	29.4	14	15.30	52.0%	Municipalities of Curral Novo do Piauí, Piauí state	02 August 2017

The verification team has determined whether the monitoring plan has been properly implemented and followed by PP that the monitoring has been carried out in accordance with the registered monitoring plan; and determined whether all parameters including project emission parameters, baseline emission parameters used for emission reduction calculation stated in the registered monitoring plan are monitored or used appropriately as per the registered VCS PD&MR.

During the verification all monitoring parameters listed in Section 4.2 of MR were compared with monitoring parameters and the monitoring plan of the registered VCS PD&MR and have been verified with regard to appropriateness of the applied measurement / determination method, the correctness of the values applied for ER calculation, the accuracy and applied QA/QC measures.

The verification team has reviewed all the documents like operation start dates /21/, monthly electricity reports /3/ /20/, calibration records /27/ etc. In line with Guidelines for Application of materiality in verifications /16/, a reasonable level of assurance is defined for the verification of the project by complete verification of all the values indicated in the emission reduction spreadsheet at the document review stage and remote site. There are no material errors, omissions or misstatements.

A visual inspection carried out by RINA during the remote audit confirmed that the control system at the wind power plants is automated and assures continuous operation.

There are no material discrepancies between the actual monitoring system, and the monitoring plan set out in the project description and the applied methodology.

The project has not participated or been rejected under any other GHG programs since validation or previous verification.

The project has not received or sought any other form of environmental credit, or has become eligible to do so since validation or previous verification.

The GHG emission reductions or removals generated by the project have not become included in an emissions trading program or any other mechanism that includes GHG allowance trading.

The grouped project contributes to sustainable development of its region as follows:

- reduces greenhouse gas emissions (CO2) from the Brazilian Interconnected System /30/;
- generates extra income for the landowners, while they can continue using the area for other activities, thus it increases and diversifies the lands productivity /31/;
- stimulates the regional economy by increasing tax revenues /32/ for the local government and direct and indirect job opportunities for local workers and service suppliers;
- general improvement of the local infrastructure such as road, electricity transmission system and stimulus for education /33/;
- uses equipment which have a domestic content and therefore induce the development of national technology and improvement of domestic know-how /34/;
- stimulates the development of a proficient tertiary sector in the region, thus creating opportunities for education, professionalization and employment /35/;
- important complement and diversification to the run-of-river hydroelectric generation /24/.

4.2 Safeguards

4.2.1 No Net Harm

For wind power projects, an environmental impact assessment is required as part of the environmental licensing. As described in the MR and verified by RINA through the Environmental Impact Assessment (EIA) /6/, there are no significant negative environmental and social impacts, only low or medium impacts. The main impacts are the following:

- Noise during pre-construction, construction and operational activities;
- Dust generation during construction;

- Soil vibration during Geotechnical studies;
- Risk of soil contamination during construction;
- Increase of soil erosion;
- Increasing of traffic of vehicles in the region;
- Risk of incidents with animals and people during construction activities;
- Impacts on the original landscape;
- Loss of vegetal coverage;
- Decrease of animal's habitats;
- Risks with accidents with birds during operational phase;
- Increase of organic waste generation;
- Change on the dynamics of the ecosystem;
- Impacts on archeological heritage;
- Tension over population related to job creation;
- Decrease of jobs after construction phase;
- Impacts on the community's quality of life.

RINA verified that the wind farms were granted the Environmental Operation License /5/.

In order to mitigate the potential negative environmental and socio-economic impacts, project proponents presented several actions in the Environmental Basic Project (PBA) /6/ such as:

- Environmental Plan During Construction:
    - Construction Signaling Program;
    - Local Workers Training Program;
    - Program of Workers Protection and Safety;
    - Protection Program of Permanent Preservation Areas;
    - Program of Rational Vegetal Suppression;
    - Erosion Monitoring and Prevention;
    - Wastewater Monitoring Program;
    - Waste Management Program;

- Degraded Areas Program.

- Environmental Management Plan:
  - Monitoring Plan of Pre-Construction Environmental;
  - Social Communication Plan;
  - Environmental Education Program;
  - Fauna Rescue Program;
  - Fauna Monitoring Program;
  - Water Quality Monitoring Program;
  - Noise Monitoring Program;
  - Monitoring Program of Environmental and Social indicators of the region;
  - Monitoring Program of Violence Indicators;
  - Health Monitoring Program of communities;
  - Program for creation of a Committee of families impacted by the project;
  - Monitoring plan of land structure of the direct impacted area.

- Special Plans:
  - Plan for Archeological Identification, Rescue and Monitoring;
  - Plan for Paleontological Identification, Rescue and Monitoring;
  - Soil Vibration Monitoring Program;
  - Demobilization Plan.

RINA was able to confirm the implementation of the mitigation actions /33/.

4.2.2 Local Stakeholder Consultation

A public audience has been held as part of the environment impact assessment and one of the main channels of community participation at a local level before project construction. The local stakeholder consultation was conducted prior to validation as required by Para 3.16.2 of VCS Standard version 4.0 /8/.

As per registered VCS PD&MR /18/, there are mechanisms for on-going communication with local stakeholders such as several channels, entrepreneurs communicate to stakeholders /7/.

4.3 AFOLU-Specific Safeguards

Not applicable since the VTRM Renewable Energy 2 is not an AFOLU projects.

4.4 Accuracy of GHG Emission Reduction and Removal Calculations

The GHG emissions reductions for the first and unique project activity instance under the grouped project were calculated correctly on the basis of the baseline and monitoring methodology ACM0002 "Grid-connected electricity generation from renewable sources" version 19.0 /11/ and the formulae given in the VCS PD&MR /18/.

For the monitoring period from 01 March 2019 to 30 September 202, the emission reduction calculations are based on the following parameters:

Data and parameters fixed ex ante

The parameter available at the validation stage, which do not need to monitor during the crediting period, as per the registered VCS PD&MR /18/ are:

- The percentage share of total installed capacity of the specific technology: RINA verified that the value of 8.8% applied is correct as described in the registered VCS PD&MR /18/.
- The total installed capacity of the technology: RINA verified that the value of 14,390,293 MW applied is correct as described in the registered VCS PD&MR /18/.

Data and parameters monitored

According to the monitoring plan of the registered PD, there are two parameters to be monitored:

- Quantity of net electricity supplied by the project plant/unit to the grid in year y;
- Combined margin CO2 emission factor for grid connected power generation in year y.

The below tables describe for each parameter, which is to be measured according to the monitoring plan, how RINA has verified that i) the actual monitoring complies with the monitoring plan and that ii) data have been assessed to correctly support the emission reductions being claimed.

	Assessment/ Observation
Data / Parameter: (as in monitoring plan):	$EG_{facility,y}$ – Quantity of net electricity generation supplied by the project plant to the grid in year *y*
Measured / calculated / default:	Calculated according to measurement parameters ($EG_{facility,y}$).
Value(s) of monitored parameter:	

			Month	$EG_{facility,y}$ (MWh)
		2019	March	37570.32
			April	40668.95
			May	66338.19
			June	98621.82
			July	95734.24
			August	111779.6
			September	92618.81
			October	84405.77
			November	60484.52
			December	60658.11
		2020	January	23670.59
			February	31445.9
			March	30022.82
			April	47503.53
			May	69658
			June	92609.68
			July	115143.9
			August	115347.8
			September	100853.4
		Total		**1.375.136**
Measuring / Reading / Recording frequency:		Verified during the remote site visit that data is continuously monitored, registered every 5 minutes and monthly recorded.		
Is measuring and reporting frequency in accordance with		Yes.		

the monitoring plan and monitoring methodology? (Yes / No)	
Type of monitoring equipment:	Bidirectional electricity meters manufactured by Power logic, model ION 8650, accuracy class 0.2% /29/. The following energy meters are applicable to the monitoring period and confirmed during the remote site visit: Curral Novo do Piauí 2 Substation Serial number: MW-1608A545-02 (main meter) and MW-1608A683-02 (backup meter).
Is accuracy of the monitoring equipment as stated in the monitoring plan? If the monitoring plan does not specify the accuracy of the monitoring equipment, does the accuracy of the monitoring equipment comply with local/national standards, or as per the manufacturer's specification?	The accuracy class of the electricity meters is 0.2% of full-scale rating /29/ and in accordance with national standards /23/.
Is the accuracy valid for the entire measuring range or do different accuracy levels apply to different measuring ranges?	Yes, the accuracy is valid for the entire measuring range.
Calibration frequency /interval:	From 2017 onwards 5 years. /23/.
Is the calibration interval in line with the monitoring plan and/or methodology? If the monitoring plan does not specify the frequency of calibration, is the selected frequency in accordance with the local/national standards, or as	The 5 years calibration frequency are in accordance with national standards /23/.

per the manufacturer's specifications (if local/national standards or the manufacturer's specifications are not available, international standards may be used)?	
Is the calibration of measuring equipment carried out by an accredited person or institution?	The calibration was carried out by CAM Brasil /27/. Serial number: MW-1608A545-02 (main meter) #7843/Z-16 on 21 September 2016. Serial number: MW-1608A683-02 (backup meter) #7871/Z-16 on 21 September 2016.
Did calibration confirm proper functioning of monitoring equipment? (Yes / No):	Yes.
Is(are) calibration(s) valid for the whole reporting period?	Yes. Serial number: MW-1608A545-02 (main meter) calibrated on 21 September 2016; Serial number: MW-1608A683-02 (backup meter) calibrated on 21 September 2016 /27/.
If applicable, has the reported data been cross-checked with other available data?	Data in the monitoring report was cross checked against data collected from the meters available at a web platform /3/ and electricity reports /20/ provided by CCEE - Electricity Chamber Company (energy meters' readings located at the Curral Novo do Piauí 2 substation).
Is the calibration carried out for a measuring range comparable with the range for which	N/A

measurements have been carried out?	
How were the values in the monitoring report verified?	Data in the monitoring report was cross checked against data collected from the meters available at a web platform /3/ and electricity reports /20/ provided by CCEE - Electricity Chamber Company (energy meters' readings located at the Curral Novo do Piauí 2 substation).
Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes. Data management was found to be reliable and appropriate.

	Assessment/ Observation
Data / Parameter: (as in monitoring plan):	$EF_{grid,CM,y}$ – CO_2 emission factor of the Brazilian grid electricity during the year *y*
Measured / calculated / default:	Calculated as the weighted average of the dispatch data analysis Operating Margin (OM) and Build Margin (BM) from the Brazilian DNA. Values for 2019 and 2020 have been used to determine OM /25/.
Value(s) of monitored parameter:	<table><tr><th>Year</th><th>$EF_{grid,CM,y}$ (tCO_2/MWh)</th></tr><tr><td>2019</td><td>0,4186</td></tr><tr><td>2020</td><td>0,3345</td></tr></table>
Measuring / Reading / Recording frequency:	Annually.
Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes.
Type of monitoring equipment:	N/A

Is accuracy of the monitoring equipment as stated in the monitoring plan? If the monitoring plan does not specify the accuracy of the monitoring equipment, does the accuracy of the monitoring equipment comply with local/national standards, or as per the manufacturer's specification?	N/A
Is the accuracy valid for the entire measuring range or do different accuracy levels apply to different measuring ranges?	N/A
Calibration frequency /interval:	N/A
Is the calibration interval in line with the monitoring plan and/or methodology? If the monitoring plan does not specify the frequency of calibration, is the selected frequency in accordance with the local/national standards, or as per the manufacturer's specifications (if local/national standards or the manufacturer's specifications are not available, international standards may be used)?	N/A
Is the calibration of measuring equipment carried out by an accredited person or institution?	N/A
Did calibration confirm proper functioning of monitoring equipment? (Yes / No):	N/A
Is(are) calibration(s) valid for the whole reporting period?	N/A

If applicable, has the reported data been cross-checked with other available data?	N/A
Is the calibration carried out for a measuring range comparable with the range for which measurements have been carried out?	N/A
How were the values in the monitoring report verified?	Data in the monitoring report was cross checked against the Brazilian DNA website /25/.
Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	Yes. Data management was found to be reliable and appropriate.

RINA confirms that appropriate methods and formulae for calculating baseline emissions, project emissions and leakage have been followed, and the assumptions, emission factors and default values that are applied in the calculation have been justified.

According to the applied methodology ACM0002, "Grid-connected electricity generation from renewable sources", version 19.0 /11/, the emission reductions have been calculated based on the following formula:

$ER_y = BE_y$, as project emissions (PE_y) and leakage (LE_y) are zero.

Where,

ER_y – Emission reductions in year y (tCO_{2e}/y);

BE_y – Baseline emissions in year y (tCO_{2e}/y).

Baseline emissions (BE_y in tCO_2) are the product of the combined margin emission factor ($EF_{grid,CM,y}$ in tCO_2/MWh) times the net electricity supplied by the project activity to the grid ($EG_{facility,y}$ in MWh).

The combined margin emission factor of the applicable electricity system is determined using the procedures in the "Tool to calculate the emission factor for an electricity system" version 07.0 /13/.

The OM emission factor ($EF_{grid,OM,y}$) is calculated ex-post for the grid by the Brazilian DNA applying the dispatch data analysis: Brazilian interconnected system, calculated as 0.5241 tCO_2/MWh and 0.4121 tCO_2/MWh based on public available data from 2019 and 2020 respectively since the emission factor is determined for the year in which the project activity displaces grid electricity /25/.

The BM emission factor ($EF_{grid,BM,y}$) is determined ex-post for the grid by the Brazilian DNA applying option 2: Brazilian interconnected system, calculated as 0.1020 tCO_2/MWh and 0.1020 tCO_2/MWh based on public available data from 2019 and 2020 respectively since the emission factor is determined for the year in which the project activity displaces grid electricity /25/. Data for 2019 was applied for 2020 since was the most recent information when the monitoring report was sent to the DOE for verification /25/.

The CM emission factor ($EF_{grid,CM,y}$), expressed in tCO_2e/MWh, is established as 0.4186 tCO_2/MWh for 2029 and 0.3345 tCO_2/MWh for 2020 respectively for Brazilian interconnected system and is calculated ex-post based on data published by the DNA /25/.

RINA verified that the grid emission factor is in accordance with data available by the Brazilian DNA /25/.

$EG_{facility,y}$ is the net electricity generation supplied to the grid, which was derived from the main meters located at Curral Novo do Piauí substation in the period from 01 March 2019 to 30 September 202, which was verified by RINA and cross-checked by CCEE reports /20/.

The resulting total net electricity generated by the project for this 2nd monitoring period is 1,375,136 MWh.

Data source and the emission reductions calculations were verified and are considered accurate. Detailed information regarding the resulted emission reductions is available in the CERs calculation spreadsheet /2/.

The formulas and calculations used for the CERs determination are correctly applied and the resulted emissions calculation is reliable.

4.5 Quality of Evidence to Determine GHG Emission Reductions and Removals

RINA was able to confirm that the calculations are based on continuous and monthly recorded electricity generation records /3/ /20/. The spreadsheet used to calculate the yearly certified emission reduction calculations and all figures were tracked, 100% check and found to be consistent.

4.6 Non-Permanence Risk Analysis

Not applicable.

5 VERIFICATION CONCLUSION

RINA conducted the verification on the basis of the approved methodology ACM0002 (version 19.0), the monitoring plan contained in the VCS joint project description & monitoring report dated 24 July 2019 and the monitoring report (version 2.0) dated 18 January 2021. The verification included i) checking whether the provisions of the monitoring methodology and the monitoring plan were consistently and appropriately applied and ii) the collection of evidence supporting the reported data.

RINA's verification approach draws on an understanding of the risks associated with reporting of GHG emission data and the controls in place to mitigate these. RINA planned and performed the verification by obtaining evidence and other information and explanations that RINA considers necessary to give reasonable assurance that reported GHG emission reductions are fairly stated.

In our opinion the GHG emissions reductions of the "VTRM Renewable Energy 2" for the period 01 March 2019 to 30 September 202 are fairly stated in the VCS monitoring report dated 18 January 2021.

The GHG emission reductions were calculated correctly on the basis of the approved methodology ACM0002 (version 19.0) and the monitoring plan contained in the VCS joint project description & monitoring report dated 24 July 2019.

RINA is able to certify that the emission reductions from the "VTRM Renewable Energy 2" during the period 01 March 2019 to 30 September 202 amount to 522,964 tonnes of CO_2 equivalent, detailed as below.

Verification period: From 01 March 2019 to 30 September 2020

Verified GHG emission reductions and removals in the above verification period:

Year	Baseline emissions or removals (tCO_2e)	Project emissions or removals (tCO_2e)	Leakage emissions (tCO_2e)	Net GHG emission reductions or removals (tCO_2e)
2019	313,453	0	0	313,453
2020	209,510	0	0	209,510
Total	522,964	0	0	522,964

APPENDIX 1: ABREVIATIONS

Abbreviations	Full texts
ANEEL	Brazilian Electricity Energy Agency
BE	Baseline Emissions
BM	Build Margin
CAR	Corrective Action Request
CCEE	Electricity Commercialization Chamber (in Portuguese Câmara de Comercialização de Energia Elétrica)
CDM	Clean Development Mechanism
CER(s)	Certified Emission Reduction(s)
CL	Clarification Request
CM	Combined Margin
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
DNA	Designated national Authority
DOE	Designated Operational Entity
EB	Executive Board
EIA	Environmental Impact Assessment
ER	Emission Reductions
FAR	Forward Action Request
GHG(s)	Greenhouse Gas(es)
IPCC	Intergovernmental Panel on Climate Change
LE	Leakage Emission
MP	Monitoring Plan
MR	Monitoring Report
OM	Operating Margin

ONS	National Electric System Operator (in Portuguese Operador Nacional do Sistema)
PBA	Environmental Basic Project
PD&MR	Joint Project Description & Monitoring Report
PE	Project Emissions
PLF	Plant Load Factor
PP	Project Participant
QA/QC	Quality Assurance / Quality Control
RAS	Simplified Environmental Report
RINA	RINA Services Spa
SEMAR	Secretary of Environment of the State of Piauí (in Portuguese Secretaria de Meio Ambiente e Recursos Hídricos do Estado do Piauí)
SIN	Brazilian National Interconnected System
TA(s)	Technical Area(s)
tCO_2e	Tonnes of Carbon Dioxide Equivalent
UNFCCC	United Nations Framework Convention on Climate Change
VCS	Verified Carbon Standard
VCU	Verified Carbon Unit
VTRM	Votorantim
VVS	Validation and Verification Standard
WPP	Wind Power Plant
WTG	Wind Turbine Generator

APPENDIX 2: CLARIFICATION REQUESTS, CORRECTIVE ACTION REQUESTS AND FORWARD ACTION REQUEST

Table 1. FAR from the joint validation and verification

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

Table 2. CL from this verification

~~**CL ID**~~		~~**Section no.**~~		~~**Date:** DD/MM/YYYY~~
~~**Description of CR**~~				
~~**Project participant response**~~				~~**Date:** DD/MM/YYYY~~
~~**Documentation provided by project participant**~~				
~~**DOE assessment**~~				~~**Date:** DD/MM/YYYY~~

Table 3. CAR from this verification

CAR ID	01	**Section no.**	4.1	**Date:** 15/01/2021
Description of CAR				
The geographical coordinate listed in Table 2 of MR for Ventos de São Vicente 10 and Ventos de São Vicente 11 is not according to the environmental licenses provided during the remote audit. Moreover, according to VCS Standard, for grouped projects, coordinates may be submitted separately as a KML file.				
Project participant response				**Date:** 03/02/2021
Geographical coordinates of the project plants were revised according to the most recent data available from the Brazilian Power Regulatory Agency (ANEEL/SIGEL):				

<https://sigel.aneel.gov.br/Down/>. Please refer to the revised version of MR (table 2) and VCU spreadsheet. Table 2 of the MR presents geographical coordinates of the first WTG of power plants. Location of each WTG of power plants is also attached to this response in KML file.
Documentation provided by project participant
– 1903_VCS_MR_v2.0-track.docx; – 1903_VCS_VCU spreadsheet_v2.0.xlsx; – VdPI - Aerogeradores.kml.
DOE assessment **Date:** 08/02/2021
RINA verified the geographical coordinates of the WTGs of the power plants and confirmed that the information provided in Table 2 of the revised MR and KML file is correct. This CAR is closed.

CAR ID	02	**Section no.**	4.1	**Date:** 15/01/2021
Description of CAR				
PP is requested to provide evidences in order to demonstrate the contribution of the grouped project to the sustainable development of the region.				
Project participant response				**Date:** 03/02/2021

The project contributions to sustainable development is as follows according to documented evidence:

Actions listed in section 1.11 of the PD	**Contributions**	**Evidence**
GHG emission reductions	Project registration and issuance in compliance with the VCS requirements	Project page at VERRA's website: https://registry.verra.org/app/projectDetail/VCS/1903
Extra income for the landowners	Increase and diversification of lands productivity	Land lease contracts
Stimulus of regional economy	Increase of tax revenues for the local government	Taxes due to electricity generation, transmission and sales are mandatory by Brazilian law and are public available: - ANEEL taxes (TFSEE): Decree 2,410, 28/11/1997 - Transmission (TUST): ANEEL's approval of 2020-2021 cycle - Electricity sale: o PIS/COFINS: Law 10,637/2002 and Law 10,833/2003: o Income tax: Law 9,718/1998: (presumed profit) o Social contribution: Law 9,249/1995 and Law 9,430/1996
	Creation of direct and indirect job opportunities for local workers and service suppliers,	The power plant itself creates opportunities for direct jobs hiring for the project operation. Indirect jobs are also created due to maintenance of equipment, systems and services as waste

	which can allow investment in the infrastructure, productive capacity and consequently the satisfaction of the population's basic needs	transportation, occupational health, trainings, implementation and monitoring of programs related to physical, environmental and social aspects of the project (as required by licenses).
Domestic content of equipment	Induce development of national technology and improvement of domestic know-how	The project is financed by BNDES as can be seen in the registered PDD and according to public available information. BNDES requires a minimum of nationalization index in order to approves financing for towers, blades and assembly of WTGs. This requirement aims the increase national content of equipment.
Skilled operators and maintenance staff	Stimulus for the tertiary sector in the region, thus creating opportunities for education, professionalization and employment	The project developer has a specific program for capacitation and professionalization called "Trilha das Usinas" as part of "Nossos Passos" Program from O&M department. The main purpose of the program is to stimulus learning and to make efficient the integrated management, automation and continuous improvement. Courses are promoted depending of employees function and position. Also, the project developer supports learning and qualification through Educational Aid Program by distributing scholarships. In January 2021, twelve scholarships were made available to employees.
Diversification of the energy matrix	Promotion of complementary renewable sources	ANEEL's website: https://bit.ly/2IGf4Q0

Documented evidence is attached to this response.

Documentation provided by project participant

- Land lease contracts: Land lease contracts.zip
- Brazilian taxes:
  - ANEEL taxes (TFSEE): Decree 2,410, 28/11/1997 http://www.planalto.gov.br/ccivil_03/decreto/1997/d2410.htm#:~:text=DECRETO%20N%C2%BA%202.410%2C%20DE%2028,1996%2C%20e%20d%C3%A1%20outras%20provid%C3%AAncias.
  - Transmission (TUST): ANEEL's approval of 2020-2021 cycle https://bit.ly/3iZIiKF
  - Electricity sale:
  - PIS/COFINS: Law 10,637/2002: http://www.planalto.gov.br/ccivil_03/leis/2002/l10637compilado.htm#:~:text=Disp%C3%B5e%20sobre%20a%20n%C3%A3o%2Dcumulatividade,fiscais%2C%20a%20declara%C3%A7%C3%A3o%20de%20inaptid%C3%A3o
    Law 10,833/2003: http://www.planalto.gov.br/ccivil_03/leis/2003/l10.833.htm
  - Income tax:
    Law 9,718/1998: (presumed profit): http://www.planalto.gov.br/ccivil_03/leis/l9718compilada.htm

– Social contribution: Law 9,249/1995: http://www.planalto.gov.br/ccivil_03/leis/l9249.htm Law 9,430/1996: http://www.planalto.gov.br/ccivil_03/leis/l9430.htm – Social and environmental programs: Relatório Cumprimento PBA VdPI.zip; – National content of equipment: https://valor.globo.com/empresas/noticia/2017/12/15/votorantim-e-cppib-criam-parceria-em-geracao-eolica.ghtml https://www.venergia.com.br/media/1339/df-2017_ventos-de-s%C3%A3o-vicente.pdf https://www.bndes.gov.br/wps/portal/site/home/financiamento/servicos-online/credenciamento-de-equipamentos/normas-aplicaveis-credenciamento/regulamento-credenciamento-financiamento-aerogeradores https://www.bndes.gov.br/wps/wcm/connect/site/10f19d81-33df-4c4c-95e0-d7909975c911/credenciamento_aerogeradores_anexo1.pdf?MOD=AJPERES&CVID=lmylw0v – Training and qualification of workers - “Trilha das Usinas” and the Educational Aid Program: Training and Qualification.zip
DOE assessment **Date:** 08/02/2021
RINA checked the evidences provided by PP and concluded that the information is sufficient to demonstrate the contribution of the grouped project to the sustainable development of the region. This CAR is closed.

CAR ID	03	**Section no.**	4.2.1	**Date:** 15/01/2021
Description of CAR				
It is stated in the registered VCS PD&MR that several actions were planned to mitigate these impacts. PP is requested to provide evidences in order to demonstrate that the mitigation actions were implemented.				
Project participant response				**Date:** 03/02/2021
Since the initial steps of the project, many monitoring programs have been implemented and all requirements from the environmental agency have been attended in order to keep licenses valid. Documented evidence regarding mitigation actions in accordance with the licensing process is attached to this response.				
Documentation provided by project participant				
– Social and environmental programs: Relatório Cumprimento PBA VdPI.zip.				
DOE assessment				**Date:** 08/02/2021
RINA was able to confirm the implementation of the mitigation actions. This CAR is closed.				

CAR ID	04	**Section no.**	4.2.2	**Date:** 15/01/2021
Description of CAR				
As per Para 3.16.4 of VCS Standard version 4.0, PP is requested to demonstrate to the verification team what action it has taken in respect of ongoing communications as part of each subsequent verification.				
Project participant response				**Date:** 03/02/2021
Communications with stakeholders around the project were done as part of the licensing process and continued as can be seen by the project developer’s actions, which some of them are publicly available.				

Some actions can be mentioned below:

- PO.VE.SUT.0008: the Project Developer has an Operational Procedure “Programa de Engajamento com Partes Interessadas – Canal Diálogo Aberto” to make available socioenvironmental information of the project. This procedure focus on landowners and the community towards the project. It establishes procedures by mapping stakeholders, communicating with internal and external stakeholders, engaging actions and consultations. Procedure and documented evidence of these actions are attached.

- PO.VE.SGI.0006: the Project Developer has an Operational Procedure “Tratamento de Desvios e NCs e Melhoria Contínua” to promote an open channel specially for employees when dealing with complaints. It establishes procedures for discussing deviations, promoting and monitoring of corrective actions. Procedure and documented evidence of these actions are attached.

- Social communication channels: the project developer made available email and telephone (by free calls) for receiving suggestions and complaints from stakeholders. The availability of these channels was communicated by visiting local stakeholders. Visiting records, flyers and photos are attached to this response.

Please refer to the documented evidence attached to this response.

Documentation provided by project participant

- Communication Plan and Actions.zip;

Publicly available information:

- http://www.institutovotorantim.org.br/missaopiaui-programas-e-projetos-sociais-em-acao/
- https://www.venergia.com.br/en/news/votorantim-energia-realiza-terceiro-ciclo-de-palestras-nas-comunidades-situadas-no-entorno-do-complexo-eolico-ventos-do-piaui/
- https://www.venergia.com.br/en/news/programa-votorantim-pela-infancia-e-adolescencia-apresenta-resultados-do-trabalho-desenvolvido-em-santa-filomena-e-araripina/
- https://www.venergia.com.br/en/news/votorantim-energia-inaugura-complexo-eolico-ventos-do-piaui/

DOE assessment	**Date:** 08/02/2021

PP correctly demonstrated to the verification team what action it has taken in respect of ongoing communications as part of each subsequent verification.
This CAR is closed.

CAR ID	05	**Section no.**	4.4	**Date:** 15/01/2021

Description of CAR

The values applied in the MR are not according to the evidence, electricity reports provided by CCEE - Electricity Chamber Company (energy meters’ readings located at the Curral Novo do Piauí 2 substation), provided during the remote audit.

Project participant response	**Date:** 03/02/2021

Information regarding CCEE measurements were revised in the ER spreadsheet. Please refer to the revised version of the MR and VCU spreadsheet.
It is worth mentioning that $EF_{EL,DD,h}$ parameter of August and September of 2020 was revised based on the latest data from the Brazilian DNA. Please refer to the revised version of the VCU spreadsheet and MR.

Documentation provided by project participant

– 1903_VCS_MR_v2.0-track.docx; – 1903_VCS_VCU spreadsheet_v2.0.xlsx; – Updated data - $EF_{EL,DD,h}$: Despacho_2020_nov.xlsx.
DOE assessment **Date:** 08/02/2021
RINA verified the revised MR and spreadsheet and the values applied are according to the electricity reports provided by CCEE - Electricity Chamber Company provided during the remote audit. This CAR is closed.

CAR ID	06	**Section no.**	4.4	**Date:** 15/01/2021
Description of CAR				
Information regarding electricity meters stated in section 4.2 of the MR is not according to evidences provided during the remote audit. It was checked that there are only two meters (one principal and one backup meter).				
Project participant response				**Date:** 03/02/2021
Electricity meters information was revised in the MR. Information regarding last calibration conducted was also included in the MR and VCU spreadsheet. Please refer to the second version of both documents.				
Documentation provided by project participant				
– 1903_VCS_MR_v2.0-track.docx; – 1903_VCS_VCU spreadsheet_v2.0.xlsx.				
DOE assessment				**Date:** 08/02/2021
RINA verified that the information regarding electricity meters stated in section 4.2 of the revised MR is according to evidences provided during the remote audit. However, it was observed that the calibration frequency of 5 years is only valid from 2017 onwards. Thus, there is a delay in the calibration of the two electricity meters. This CAR is open.				
Project participant response				**Date:** 09/02/2021
The last calibration of energy meters occurred on 21-23/09/2016 and, therefore, the next calibration was forecasted to occur up to 21/09/2018 based on 2-year calibration frequency as determined by the ONS Grid Procedures revision 2. However, the calibration frequency of 5-year period came into force from 01/01/2017 onwards as determined in the revised version of the ONS Grid Procures (revision 2016.12) and by MME Resolution 756/2016. As meters did not change and the 5-year validity of calibration was assured by the applicable ONS Grid Procedures, the next calibration of energy meters is forecast to occur up to 21/09/2021. Therefore, there are no delays in calibration of energy meters used in the project activity. It is important mentioning that current ONS Grid Procedures is under 2020.12 revision, which continues to recommends energy meters calibration each 5 years.				
Documentation provided by project participant				
– MME Resolution 756/2016: http://www.lex.com.br/legis_27263800_RESOLUCAO_NORMATIVA_N_756_DE_16_DE_DEZEMBRO_DE_2016.aspx				
DOE assessment				**Date:** 10/02/2021
RINA understand that the new calibration frequency is valid for calibrations done before 01/01/2017. This CAR is closed.				

CAR ID	07	**Section no.**	4.4	**Date:** 15/01/2021
Description of CAR				
During the remote audit, it was confirmed through interview with project's staff that the description of the monitoring plan in section 4.3 of the MR is not correct.				
Project participant response				**Date:** 03/02/2021
Monitoring plan was revised as discussed during the audit visit and according to registered monitoring plan. Please refer to the revised version of the MR.				
Documentation provided by project participant				
– 1903_VCS_MR_v2.0-track.docx.				
DOE assessment				**Date:** 08/02/2021
RINA verified the revised MR and confirmed that the description of the monitoring plan in section 4.3 was correctly updated. This CAR is closed.				

Table 4. FAR from this verification

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

CERTIFICATO DI QUALIFICA
QUALIFICATION CERTIFICATE

Si attesta che il sig./sig.ra: / *We declare that Mr/Mrs/Ms:* **Andrea LEIROZ**

è qualificato come[1]: / *is qualified as:* **TEC, VAL, VER, TEC**

per le seguenti aree tecniche:
for the following technical areas:

AREE TECNICHE TECHNICAL AREAS	DESCRIZIONE DELL'AREA TECNICA *TECHNICAL AREA DESCRIPTION*	SCOPO SETTORIALE *SECTORAL SCOPE*
1.1	Thermal Energy Generation	1
1.2	Renewables	1
5.1	Chemical industry	5
13.1	Solid waste and wastewater	13
13.2	Manure	13

in accordo alle istruzioni dell'unità Sostenibilità & Cambiamenti Climatici.
in accordance with the instructions of the Sustainability & Climate Change Unit.

REVISIONE *REVISION*	DATA *DATE*	MOTIVAZIONI PER LA REVISIONE *REASON FOR THE REVISION*
0	17/09/2019	First issue with new template (this certificate is linked to CDM qualification)

Il Resp. CCPLS
Head of CCPLS
Laura SEVERINO

[1] Legend:

VAL:	Validator	CDM: Clean Development Mechanism
VER:	Verifier	VCS : Verified Carbon Standard:
TEC:	Technical Expert	GS4GG: Gold Standard For Global Goals
TL:	Team Leader	SCS: SocialCarbon Standard
FIN-EXP:	Financial Expert	JI: Joint Implementation
DET:	Determiner	

RINA Services S.p.A. è accreditato da UNFCCC, quale Entità Operativa Designata (DOE), per condurre la Validazione e la Verifica di Progetti CDM, da VCSA per condurre la Validazione e la Verifica di Progetti VCS, da GS Foundation, per condurre la Validazione e la Verifica di Progetti GS, da Ecologica Institute per condurre la Validazione e la Verifica di rapporti SCS

RINA Services S.p.A. is accredited by the UNFCCC, as Designated Operational Entity (DOE), to carry out Validation and Verification of CDM Projects, by the VCSA, to carry out Validation and Verification of VCS Projects, by the GS Foundation, to carry out Validation and Verification of GS4GG Projects and by the Ecologica Institute, to carry out Validation and Verification of SCS Reports

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RINA SERVICES
classification, certification, inspection & testing

CERTIFICATO DI QUALIFICA PER GLI SCHEMI VOLONTARI*
*QUALIFICATION CERTIFICATE FOR VOLUNTARY SCHEMES**

Si attesta che il sig./sig.ra:
We declare that Mr/Mrs/Ms:

Geisa Maria Principe Branco Saettoni

è qualificato come:
is qualified as:

TEC, VAL, VER, TL, ITRP

per le seguenti aree tecniche:
for the following technical areas:

AREE TECNICHE *TECHNICAL AREAS*	DESCRIZIONE DELL'AREA TECNICA *TECHNICAL AREA DESCRIPTION*	SCOPO SETTORIALE *SECTORAL SCOPE*
1.1	Thermal energy generation	1
1.2	Renewables	1
13.1	Solid waste and wastewater	13

REVISIONE *REVISION*	DATA *DATE*	MOTIVAZIONI PER LA REVISIONE *REASON FOR THE REVISION*
0	19/07/2016	First issue with new template (this certificate is linked to CDM qualification)

Responsabile di schema
Scheme Leader
Rita Valoroso

*SCHEMI VOLONTARI/ VOLUNTARY SCHEMES: ACR American Carbon Registry, CCB The Climate, Community & Biodiversity Alliance, GS Gold Standard, JI Joint Implementation, SCS Social Carbon Standard, VCS Verified Carbon Standard.

TEC: Technical expert; VAL: Validator; VER: Verifier; TL: Team leader; FIN EXP: Financial Expert; ITRP: Independent technical reviewer

RINA Services S.p.A. è accreditato/riconosciuto da
RINA Services S.p.A. Is accredited /recognized by

UNFCCC	quale Entità Operativa Designata (DOE), per condurre la Validazione e la Verifica di Progetti CDM *as Designated Operational Entity (DOE), to carry out Validation and Verification of CDM Projects*
VCSA	per condurre la Validazione e la Verifica di Progetti VCS *to carry out Validation and Verification of VCS Projects*
GS Foundation	per condurre la Validazione e la Verifica di Progetti GS *to carry out Validation and Verification of GS Projects*
Ecologica Institute	per condurre la Validazione e la Verifica di rapporti SCS *to carry out Validation and Verification of SCS Reports*
American Carbon Registry ACR	per condurre la Validazione e la Verifica di Progetti ACR *to carry out Validation and Verification of ACR projects*
The Climate, Community & Biodiversity Alliance CCB	per condurre la Validazione e la Verifica di Progetti co-benefit CCB *to carry out Validation and Verification of co-benefit CCB projects*

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