



Verified Carbon Standard

PARQUE EÓLICO MALDONADO

3rd Monitoring Report

Document Prepared by NTT DATA EUROPE & LATAM GREEN ENGINEERING

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1 PROJECT DETAILS

1.1 Summary Description of the Implementation Status of the Project

The Project consists of a 50 MW wind farm, located in Maldonado, in the Southeast region of Uruguay. This wind farm consists of 25 turbines with a capacity of 2 MW each.

The Project generates renewable electricity by using wind resource and supply this energy to the Uruguayan national grid. The aim of the project is to displace energy generated by fossil fuels from the electricity system through renewable energy generation. The spatial extent of the Project boundary is the national grid and this energy generated by the project is supplied through the annexed substation “Estación Francisco Veira”.

Considering the main implementation dates, the purchase of main equipment¹ happened on 20-July-2012, when the wind turbines were bought. The wind farm got its environmental authorization² on 07-November-2012, and the construction³ started on 19-November-2012. The commissioning date⁴ was on 10-April-2014, and it has been in continued operation since its commercial operation date.

The expected operating life of the project is 20 years (until 2034), with an estimated generation of 190,500 MW-h/year, with an expected annual emission reduction of 109,818 tCO₂ for the first crediting period. The greenhouse gas (GHG) emissions of the Project activity are negligible, thus there is no need to monitor them, and this is not taken into account when calculating ERs.

During the third monitoring period (01-January-2022 to 09-April-2024), the project operated continuously and satisfactorily, except for a five-day incidence of zero generation caused by the failure of a transformer cell, which took place from 09 AM 21-April-2022 to 18 PM 26-April-2022. During the monitoring period, the total amount of emission reductions was 198,128 tCO₂e, because of displacement the electricity generated in fossil fuel fired power plants of the grid. Apart from the already described incident, no other relevant events or situations have been reported during the current monitoring period.

As a result of displacement of the electricity generated in fossil fuel power plants of the grid, the emissions reductions of the different monitoring periods of the first crediting period are collected below:

	Emission Reductions
1 st Monitoring Period	245,861 tCO ₂ e
2 nd Monitoring Period	483,557 tCO ₂ e

¹ 20120720 Contrato GAMESA aerogeneradores PE Maldonado

² 20130730 Resolución de unificación del Parque Eólico

³ 20121116 Nota DINAMA previo inicio obras

⁴ 20140414 Acta habilitación

	Emission Reductions
3 rd Monitoring Period	198,128 tCO ₂ e
TOTAL	927,546 tCO₂e

Information about the project and previous validation and verification process can be found on VCS Homepage: Home / Verified Carbon Standard / Project 1308⁵.

1.2 Audit History

Audit type	Period	Program	Validation/verification body name	Number of years
Validation	10-April-2014 -- 09-April-2024	VCS Program (VERRA)	AENOR	Ten years
Verification (1 st Monitoring Period)	10-April-2014 -- 30-September-2016	VCS Program (VERRA)	AENOR	Two years and five months
Verification (2 nd Monitoring Period)	01-October-2016 -- 31-December-2021	VCS Program (VERRA)	APPLUS+	Five years and three months
Verification (3 rd Monitoring Period)	01-January-2022 -- 09-April-2024	VCS Program (VERRA)	SustainCERT	Two years and three months

1.3 Sectoral Scope and Project Type

Sectoral scope ⁶	1. Energy (renewable/non-renewable)
Project activity type	Wind Farm

1.4 Project Proponent

Organization name	R del Sur, S.A.
Contact person	Diego Bonacchi

⁵ VCS Homepage: PARQUE EOLICO MALDONADO: <https://registry.verra.org/app/projectDetail/VCS/1308>

⁶ Projects, activities, or methodologies may be developed under any of the 16 VCS sectoral scopes: <https://verra.org/programs/verified-carbon-standard/vcs-program-details/#sectoral-scopes>

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Project Participant of Parque Eólico Maldonado project has full ownership of the carbon credits generated by the project.

1.5 Other Entities Involved in the Project

Organization name	SMARTENER
Role in the project	SMARTENER is a company specializing in the promotion, development, and operation of wind farms. The function of SMARTENER in Parque Eólico Maldonado Project is the responsibility of controlling, organizing, and monitoring the operation, maintenance, and performance results.
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Organization name	NTT DATA
Role in the project	NTT DATA is one of the world's leading IT and consulting firms, with a wide portfolio of sustainability services. Within the company, the Green Transition & Sustainability Strategy team has extensive experience in carbon markets consulting, having advised several organizations in the energy & utilities sector to develop carbon credit generating projects, and supported others in validation and/or verification processes. Additionally, NTT DATA and SMARTENER have collaborated on several occasions in the past. For these reasons,

	SMARTENER, as responsible of operation and management of Parque Eólico Maldonado, decided to hire the services of NTT DATA to carry out the third verification of this VCS Project. In this context, the role of NTT DATA was to review and analyze all the relevant information of the VCS Project in order to calculate the emissions reductions achieved during the applicable monitoring period (01-January-2022 to 09-April-2024) and develop the Monitoring Report. To this end, R del Sur and SMARTENER have provided all the necessary information and evidence in a transparent manner.
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1.6 Project Start Date

Project start date	10-April-2014
Justification	The start date of the project activity was the moment on which the project began generating GHG emission reductions supplying renewable energy to the national electricity grid (commissioning date).

1.7 Project Crediting Period

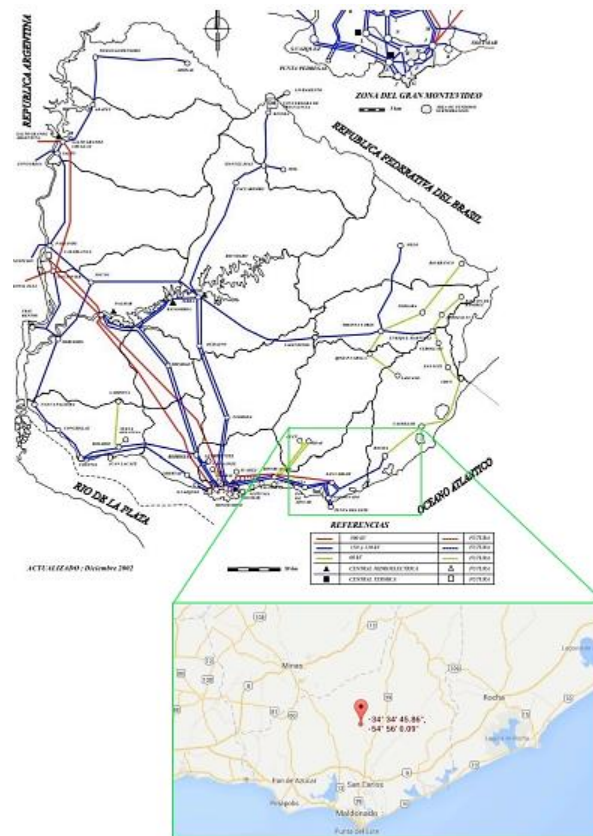
Crediting period	☐ Seven years, twice renewable ☐ Ten years, fixed ☒ Other (Ten years, twice renewable)
Justification	The crediting period is 10 years, twice renewable. By the moment it was registered, the VCS program allowed it to be extendable twice for another 10 years each time (a total duration of 30 years).

Start and end date of
first or fixed crediting
period

10-April-2014 to 09-April-2024

1.8 Project Location

The 25 wind turbines that make up the wind farm are distributed along the Sierra de los Caracoles in the municipality of San Carlos in the department of Maldonado, fitting in pages F26, F-27 and F-28 MTN 1: 50,000.



The location of the wind turbines is shown in the following table:

UTM (21h)	X	Y
CAR-03-01	689,559	6,171,657
CAR-03-02	689,726	6,171,981
CAR-03-03	689,902	6,172,301
CAR-03-04	690,052	6,172,635

CAR-03-05	690,845	6,174,762
CAR-03-06	691,010	6,175,096
CAR-03-07	691,103	6,175,453
CAR-03-08	691,234	6,175,819
CAR-03-09	691,338	6,176,167
CAR-03-10	691,444	6,176,514
CAR-03-11	691,539	6,176,866
CAR-03-12	691,601	6,177,221
CAR-03-13	691,734	6,177,584
CAR-03-14	691,844	6,177,961
CAR-03-15	691,972	6,178,319
CAR-03-16	692,413	6,179,538
CAR-03-17	692,546	6,179,922
CAR-03-18	692,676	6,180,258
CAR-03-19	692,781	6,180,602
CAR-03-20	692,907	6,181,037
CAR-03-21	693,020	6,181,567
CAR-03-22	693,097	6,181,926
CAR-03-23	693,201	6,182,342
CAR-03-24	693,286	6,182,699
CAR-03-25	693,342	6,183,054

Control towers are located at the following coordinates:

UTM (21h)	X	Y
MAL-TC01	689,559	6,179,729
MAL-TC02	689,726	6,183,256

Finally, the substation is available at the following coordinates:

UTM (21h)	X	Y
SETMAL	689,559	6,173,601

1.9 Title and Reference of Methodology

The Project uses the UNFCCC approved consolidated baseline and monitoring methodology ACM0002, and uses the following UNFCCC tools, also referred in the methodology.

Type (methodology, tool or module).	Reference ID, if applicable	Title	Version
Methodology	ACM0002	Grid-connected electricity generation from renewable sources	16.0
Tool	TOOL07	Tool to calculate the emission factor for an electricity system	5.0
Tool	TOOL01	Tool for the demonstration and assessment of additionality	7.0.0
Tool	TOOL02	Combined tool to identify the baseline scenario and demonstrate additionality	6.0.0

1.10 Double Counting and Participation under Other GHG Programs

1.10.1 No Double Issuance

Is the project receiving or seeking credit for reductions and removals from a project activity under another GHG program?

☐ Yes ☒ No

1.10.2 Registration in Other GHG Programs

Was the project registered or seeking registration under any other GHG programs?

☐ Yes ☒ No

The project is not registered under any other GHG program, which also includes not being registered under the CDM scheme.

1.11 Double Claiming, Other Forms of Credit, and Scope 3 Emissions

The project does not reduce GHG emissions from activities that are included in an emission-trading program or any other mechanism that includes GHG allowance trading. There is no national program or cap applicable to this project. The project doesn't use and will not use its GHG emission reductions and removals for compliance under any such programs or mechanisms.

Uruguay is not an Annex I country of the Kyoto protocol, so it is not participating in the Assigned Amount Unit (AAU) markets. Also, the country has not implemented a national emission rights market.

The Project is a renewable energy generation project. It discharges no emission during the operation period; thus, the project doesn't fall into categories that create GHG emissions primarily for its subsequent removal or destruction.

The Project has not created or has not sought or received another form of environmental credit, including renewable energy certificates, now or in the future. This will be verified by the DOE.

1.11.1 No Double Claiming with Emissions Trading Programs or Binding Emission Limits

Are project reductions and removals or project activities also included in an emissions trading program or binding emission limit? See the VCS Program Definitions for definitions of emissions trading program and binding emission limit.

☐ Yes ☒ No

1.11.2 No Double Claiming with Other Forms of Environmental Credit

Has the project activity sought, received, or is planning to receive credit from another GHG-related environmental credit system? See the VCS Program Definitions for definition of GHG-related environmental credit system.

☐ Yes ☒ No

1.11.3 Supply Chain (Scope 3) Emissions

Do the project activities affect the emissions footprint of any product(s) (goods or services) that are part of a supply chain?

☐ Yes ☒ No

1.12 Sustainable Development Contributions

In line with the Sustainable Development Goals (SDGs) and the 2030 Agenda, the project contributes to environmental, social, economic, and technological objectives, both directly and indirectly, as detailed in Table 1.

This project contributes to 4 of the 17 SDGs. It strengthens goals 7 and 13 with the generation of clean energy and, therefore, the reduction of GHG emissions. R del Sur is committed to education and equal opportunities (goal 4), collaborating with schools and organizing academic visits to the wind farms, thus promoting sustainability and ecosystems conservation. It also contributes to goal 15 through areas for native species conservation.

Table 1: Sustainable Development Contributions

Row number	SDG target	SDG indicator	Net impact on SDG indicator	Current project contributions	Contributions over project lifetime
1)	4.a	Internet services, infrastructure and learning materials provided to improve the conditions of the learning centers	Implemented activities to increase	During the current monitoring period, R del Sur, together with R del Este, collaborated with rural schools to favor education and access to digitization by donating a TV and mobile phones: - In May 2022 School No. 96 Cerro Pelado received the donation of a TV. - In August 2023, School No. 7 Simón Bolívar (Sarandí Grande) received the donation of mobile phones.	During the whole project lifetime, the company has collaborated with three schools: School No. 34, School No. 96 Cerro Pelado and School No. 7 Simón Bolívar (Sarandí Grande). During the previous monitoring periods, until 2022, School No. 34 received: - Economic support for guaranteeing access to internet (monthly payment of the internet connection). - Donation of an aluminum door to replace the existing one, which was damaged. - Construction of a new bathroom for the school. - Donation of learning materials, such as a printer and books for the school library. During the third monitoring period, R del Sur, together with R del Este, continued supporting School No. 96 and School No. 7 with the donation of a TV and mobile phones, respectively.

2)	4.7	Number of visitors received such as school excursions and other academic groups. Number of visits to school or academic centers.	Implemented activities to increase	During the current monitoring period the wind farm has received the visit of: 49 students of 6th grade of School No. 7 Simón Bolívar (Sarandí Grande), in October 2023. 3 postgraduate students of Technological Engineering of UTU, in June 2023. Visits are organized from different schools or academic centers around the wind farm and the different facilities, to explain its main components, the positive impact that renewable sourced energy has over the environment and how it contributes to fight climate change. Additionally, the centers School No. 7 Simón Bolívar (Sarandí Grande) and School Woodside (Punta del Este) received the visit from a technician to give a talk at their facilities in June and November 2023, respectively.	Over project's lifetime the wind farm has received the visit of: 237 students from 11 schools or academic centers between 2016 and 2021, corresponding to first and second monitoring periods. 52 students from 2 schools or academic centers between 2022 and 2024, corresponding to third monitoring period. - Informative graphic signage was included to highlight ecologically relevant environments present in the immediate surroundings of the Maldonado I wind farm and provide elements to the people who visit the wind farm.
3)	7.2	7.2. Renewable energy share in the total final energy consumption	Implemented activities to increase	The main activity of the project is based on the production of clean energy that increases the percentage of renewable energy in	The amount of renewable energy generated over the project's lifetime is 1,609,023.67MWh: 1st Monitoring Period: 426,496.34MWh

Row number	SDG target	SDG indicator	Net impact on SDG indicator	Current project contributions	Contributions over project lifetime
				the energy mix, displacing fossil fuels in the country's electrical system. During this monitoring period (01-January-2022 to 09-April-2024), the Project has injected 343,667.16 MWh of renewable energy into the country's electricity grid.	2nd Monitoring Period: 838,781.36MWh 3rd Monitoring Period: 343,667.16MWh
4)	13.2	13.2.2. Total greenhouse gas emissions per year	Implemented activities to decrease	Using renewable energy for generating electricity which otherwise would have been generated through alternate fuel (most likely - fossil fuel) based power plants, contributing to reduction in specific emissions (emissions of pollutant/unit of energy generated) including GHG emissions. During this monitoring period (01-January-2022 to 09-April-2024), the Project has reduced 198,128 tons of CO₂ emissions.	The amount of CO₂ reductions over the project's lifetime is 927,547 tCO₂e: 1st Monitoring Period: 245,861 tCO₂e 2nd Monitoring Period: 483,557 tCO₂e 3rd Monitoring Period: 198,128 tCO₂e

Row number	SDG target	SDG indicator	Net impact on SDG indicator	Current project contributions	Contributions over project lifetime
5)	15.2	15.2.2. Progress towards sustainable forest management • Evolution of the richness of decreasing herbaceous species • Evolution of the richness of herbaceous species in reproductive state 1) Evolution of the coverage of the exotic species - <i>Cynodon dactylon</i> -	Implemented activities to increase	No further changes this monitoring period.	The ARA (Assisted Regeneration Area) was a compensatory measure for the high voltage line which involves the fencing and monitoring of a 6ha area carried out until 2021 as defined in the PGAO. After this period, R del Sur voluntarily continued to maintain the 6ha area. Since May 2022, biological monitoring has been discontinued, and the area is being guarded by wind farm staff. 6 hectares of Assisted Regeneration Area in which conservation indicators have shown improvement or no change. In none of the cases there has been a decrease in the conditions of the species that are being monitored in the influence areas of the wind farm.

1.13 Commercially Sensitive Information

No commercially sensitive information has been excluded from the public version of the monitoring report. Not applicable. This project does not have any commercially sensitive information such as “trade secrets, financial, commercial, scientific, technical or other information whose disclosure could reasonably be expected to result in a material financial loss or gain, prejudice the outcome of contractual or other negotiations or otherwise damage or enrich the person or entity to which the information relates” according to VCS Program Definitions, v4.5.

2 SAFEGUARDS AND STAKEHOLDER ENGAGEMENT

2.1 Stakeholder Engagement and Consultation

2.1.1 Stakeholder Identification

Stakeholder Identification

For the identification of stakeholders (i.e. social actors affected by the Project and groups or organizations with interests that define them as “interested parties”) the area of influence of the wind farm was analyzed. Additionally, people or groups with influence on the Project were also considered.

After this analysis, the following stakeholders were identified:

- Surrounding communities: local population, neighborhood groups and communities, local producers. The closest towns are San Carlos, Aiguá and Punta del Este.
- Authorities: national, departmental and local authorities.
- Companies: local companies in the sector, contractors and suppliers of goods and services.
- Industrial organizations: Asociación Uruguaya de Generadores Privados de Energía Eléctrica and Administración del Mercado Eléctrico del Uruguay.
- Industrial bodies and institutions: Universidad Tecnológica, Universidad de la República, Ministry of Industry, Mining and Energy; Administración Nacional

	de Usinas y Transmisiones (UTE), Dirección Nacional de Calidad y Evaluación Ambiental (Dinacea) • Other institutions: National Fire Department, Spanish Embassy, Spanish Chamber of Commerce. • Media: National and local press. • Public opinion: Local NGOs, educational institutions, and cultural, social, political, or sports organizations. • Workers and trade union organizations: Contractors' workers, trade union organizations. Potential financiers: Financing banks. This stakeholder list is included in the Stakeholder Consultation Report⁷.
Legal or customary tenure/access rights	In the area of Parque Eólico Maldonado there are no native communities. The rights to the land have been negotiated directly with the owners and holders of the land. In addition, in terms of the resource (wind), there is no appropriation of it, as wind is an inexhaustible natural resource over which there is no property ownership.
Stakeholder diversity and changes over time	Stakeholders are classified into different categories, based on their characteristics: • Surrounding communities: Groups of stakeholders that coexist geographically with the wind farm, such as settlers, producers or religious communities. • Authorities: National, departmental and local authorities may have an interest in the operation of wind farms, as well as acting as articulators with other organizations operating in the territory. • Companies: This group includes different types of actors, ranging from companies located in the population centers or along the access routes to the wind farms, to the different companies in the sector that operate in the influence area, as well as suppliers of goods and services and contractors. • Industry organizations: Companies linked to energy generation.

⁷ Informe Social RdeISur RdeIEste

	• Industry organizations and institutions: Including those that contribute to the regulation, production and knowledge of wind energy. • Other institutions: National state actors and those that are linked to the company from their affiliation of origin (Spain). • Media: Media are identified as being of interest for the dissemination of information on the operation of wind farms and the importance of generating this type of energy for the country. • Public opinion: Actors that can influence public opinion and that may have strong community roots. • Workers and trade union organizations: The employees who work in the wind farm operations and the sector's trade union organizations. • Potential financiers: Those actors that can finance the execution of the project and its operation. For each specific stakeholder group, it was analyzed: 1) their influence on the Project and 2) the impact of the Project on them (both positive and negative).
Expected changes in well-being	The expected changes in wellbeing include the generation of job opportunities, the improvement of rural and public roads and the increase in video surveillance in the area, in addition to the progress that the development of a wind farm represents for the country and the importance of generating clean and renewable energy for environmental preservation. Given that the project is a wind farm, it does not generate additional ecosystem services, nor does it entail changes to existing ones.
Location of stakeholders	The stakeholder analysis determined that the groups to whom the project or its activities could have a potential direct or indirect impact are the residents, producers and communities, as they are directly influenced by the operation of the wind farm. Most of the owners of the area's land registers do not reside in the area, but in the nearest population centers: San Carlos, Aiguá or Punta del Este.

	In addition, the influence area of the project also includes five rural public schools: School N29 <i>Partido Norte</i> , School N62, School N32, Schools Number 39 and 20 <i>Sierras de Carape</i> , and School N34.
Location of resources	The 25 wind turbines that make up the wind farm are distributed along the <i>Sierra de Los Caracoles</i>, in the municipality of San Carlos, department of Maldonado. Given that the main resource of the project is wind, for the generation of wind energy, there is no precise location or appropriation of the resource.

2.1.2 Stakeholder Consultation and Ongoing Communication

Ongoing consultation	For the dissemination of information, consultation, involvement and management of stakeholder participation a Stakeholder Participation Plan⁸ was developed, which includes the following programs: • Active communication program: Focuses on disseminating relevant information through accessible and reliable means to maintain communication during the Project. Depending on the type of stakeholder, different forms of communication are considered (e.g. newsletters, explanatory materials disseminated on the web or in the wind farm's office, specific material on demand, annual sustainability report, etc.). • External complaint reception and management system: This consists of deploying mechanisms and tools for receiving inquiries, suggestions or complaints from the different local communities. These mechanism include reception boxes in the wind farm offices, telephone numbers, and forms on the company's website. Suggestions or complaints received through these means are centralized for fair, confidential, and independent resolution. • Educational centers visit program: This initiative aims to bring the work carried out at the wind farms closer to the community, through the reception of students visits from different educational centers in the area. During
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⁸ RdeISur Plan de Participacion de Actores Sociales

	these visits, aspects such as the work carried out at the wind farms, the benefits of renewable energy production, or the relevant ecosystems located on the territory are explained.
Date(s) of stakeholder consultation	- Active communication program: A total of 9 interviews were conducted with different types of social actors (neighbors from surrounding communities, educational institutions, departmental authorities and trade union organizations) between 13-December-2022 and 06-February-2023. - External complaint reception and management system: A phone call was received on 01-August-2022 to report a downed wire fence. - Educational centers visit program: during this monitoring period (01-January-2022 to 09-April-2024) 2 educational visits were received in the wind farm: School No. 7 Simón Bolívar (Sarandí Grande) visited the wind farm on 20-October-2023 and students of Technological Engineering of UTU, on 30-June-2022. In addition, a total of 2 visits to educational centers were carried out: the first one was to School No. 7 Simón Bolívar (Sarandí Grande), in June 2023, and the second one to School Woodside (Punta del Este) on 17-November-2023.
Communication of monitored results	The company prepared a Sustainability Report ⁹ for the years 2022 and 2023 which includes information on the wind farm's relationship with the community. This report explained the existence and objectives of the Stakeholder Participation Plan, provided an overview of the stakeholders' interviews procedure and conclusions, mentioned the visits of educational centers that took place and the collaboration activities with schools in the area (e.g. financial support, donations of material), and provided a list of the communication channels available (website, telephone, office address and reception boxes).
Consultation records	The process and methods used to document the outcomes of the stakeholder consultation include: For the active communication program, the Stakeholder Consultation Report, which includes information on the

⁹ R DEL SUR_R DEL ESTE Reporte de Sostenibilidad 2022_2023

	stakeholders interviewed, the specific questions asked, and the conclusions drawn from their answers. - For the reception and management of external complaints, there is a database that records information about the consultation/complaint, the actions taken and the complainant's agreement with the resolution of the issue. - For the educational centers visit program, participants carry out a survey after their visit, in which they confirm to have received certain information (e.g. the importance of renewable energies), and where they can share their thoughts regarding aspects of the visit that could be improved.
Stakeholder input	The external complaint reception and management system received a phone call on 01-August-2022 to report a downed wire fence. Within 4 days the issue was resolved by purchasing a pole and repairing the fence. The caller was satisfied, and the issue was closed on 05-August-2022. The results of the stakeholder interviews showed that, except for the people closest to the wind farm, other social actors were not aware of some of the activities that the Project carries out, and in which they showed interest (such as visits to educational centers, support to educational institutions, etc.). As a result of this observation, it was decided to be more transparent with the local population about all the actions carried out by the wind farm. To this end, information related to this type of activity was included in the company's sustainability report.

2.1.3 Free, Prior, and Informed Consent

Consent	As demonstrated in the Project Description (PD) and registered in the previous Monitoring Report (MR), prior to the start of the project activity, the population living less than 1 km away from the wind turbines was consulted about their opinion, and it was considered in the Social Impacts Assessment¹⁰ document. No major inconveniences were expressed with the development of the wind farm. Nevertheless, stakeholders can leave any comments or complaints about the project in the reception boxes in the
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¹⁰ Estudio de Impacto Social R. del Sur - Rivero 2012

	wind farm's access offices, through the telephone numbers, or by filling in the forms on the company's website. All comments are and will be considered. There have been no conflicts or incidents from the beginning of the Project until now.
Outcome of FPIC	As demonstrated in the Project Description (PD), the Social Impacts Assessment reflected that the closest neighbors were part of the Project development itself, and that all of them negotiated their participation to suit their interests. In addition, R del Sur has surface rights and lease agreements with the owners of the land on which the wind turbines are located (more detail provided in section 2.3.4. Property Rights). Furthermore, the municipal authorities consulted at the time of project's validation did not express any objections to the project, and, in order to address the possible concerns of the actors involved, workshops were held with the neighbors to discuss the installation of wind farms. In these workshops the only concerns that were exposed were regarding the noise that wind turbines could generate and the issue of migratory birds, however, with the implementation of the Project they have proved not to have a significant impact, as explained in sections 2.2.2 and 2.4.1., respectively. This all proves that the project has neither encroached on land, relocated people without consent, nor forced physical or economic displacement.

2.1.4 Grievance Redress Procedure

Grievances received	Resolution and outcome
Wire fence incidence	During the monitoring period one person called on 01-August-2022 to report a fallen wire fence. Within 4 days after the call, the incident was solved by purchasing a pole and repairing the fence. The person who called was satisfied with the resolution and the incident was closed on 05-August-2022.

	The resolution of this incident was carried out following the steps indicated in the External Complaints Management Procedure¹¹, which involves: 1. Register the complaint in the database¹². 2. Evaluate whether the complaint is justified. 3. Execute the appropriate corrective action in the case of a valid complaint. 4. Inform the complainant of the action taken. 5. Confirm whether the complainant is satisfied with the incidence resolution and formally close the complaint.
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2.1.5 Public Comments

Summary of comments received	Actions taken
Highlights from stakeholder interviews	During the interviews, stakeholders highlighted several positive aspects related to the Project, such as the generation of renewable energy, the job opportunities generated, the improvement of rural and public roads and the increase of video surveillance in the area. The negative aspects related to an increase in the number of people from outside the area. In addition, prior to the start of the project, neighbors were also concerned about the noise that the wind turbines would produce, but in these interviews, they stated that these are totally tolerable and that they blend in with the noise of nature, birds and wind. Since there are no complaints in this regard, no actions were needed. It was also highlighted the interest in the activities carried out by the company in the community, unknown to some of the actors

¹¹ Procedimiento de gestion de reclamos externos - RdelSur_vf_ref flujograma

¹² Base de datos Quejas y Reclamos - RdelSur y RdelEste 2024

	interviewed, who are pleased that they exist and would like to receive more information. As a result of this observation, it was decided to be more transparent with the local population about all the actions carried out by the wind farm. To this end, information related to this type of activity was included in the company's sustainability report. One of the actors interviewed valued positively the generation of energy from Uruguay instead of buying abroad; however, he complained that the cost of electricity has not been reduced. Although this comment was compiled in the responses, it is an aspect that does not fall within the competence of the wind farm but rather corresponds to the Uruguayan state.
Feedback of school visits through Visitors Surveys ¹³	After the 2 school visits to the wind farm, a survey was given to the participants. The survey evaluates whether the guide provided information about the importance of renewable energies and the ARA (Assisted Regeneration Area). In both surveys the answers were affirmative. Additionally, space is left for suggestions for improvement, but no comments were received. Since the general opinion of the visitors regarding the visit itself and the information received was favorable, the structure of the guided visits will be maintained.

2.2 Risks to Stakeholders and the Environment

2.2.1 Management Experience

The team responsible for the operation and management of R del Sur S.A. is made up of professionals from various specialties with more than 20 years of experience. Specifically, the management team has remained in R del Sur S.A. since its construction stage (2013- 2014) and

¹³ ANEXO VII – Encuesta a Visitantes

throughout the commercial operation stage (2014), accumulating knowledge and experience in the implementation of the various R del Sur S.A. activities and programs and in the relationship with the local community.

It is important to highlight that all the necessary knowledge on other topics such as environmental matters are contracted to specialist companies, which act as external advisors, such as SMARTENER, a company specialized in the promotion, development, and operation of wind farms and NTT DATA, the consulting firm designated for calculating the emissions reductions achieved during this monitoring period (01-January-2022 to 09-April-2024) due to its extensive experience in carbon markets consulting, as explained in section 1.5. of this Monitoring Report.

2.2.2 Risk assessment

	Risk identified	Mitigation or preventative measure(s) taken
Natural and human-induced risks to stakeholders' wellbeing	No risk identified.	There are no human-induced risks to stakeholders' wellbeing due to the Project activity. Regarding natural risks, fires in the wind farm could represent a risk; however, no fires of any kind have ever been recorded. In addition, preventive actions are carried out in accordance with the Environmental Management Plan for Operation of the wind farm ¹⁴ , which includes periodic inspections of the facilities and work areas, and training of personnel to act in the event of fires, among others.
Risks to stakeholder participation	No risk identified.	The Project has carried out a consultation process with stakeholders to ensure continuous and efficient communication, as explained in section 2.1. of this report.
Working conditions	No risk identified.	All Project activities ensure safe working conditions for employees. In addition, the Project counts with a "Health and Safety Program", aimed at identifying and managing occupational and safety risks. During the period 01-January-

¹⁴ PGA-O Rev 01 R del Sur

		2022 to 09-April-2024no safety incidents were reported.
Safety of women and girls	No risk identified.	The Project does not involve harm to women and girls in the local community.
Safety of minority and marginalized groups, including children	No risk identified.	The Project does not involve risks in the protection of children and minority and marginalized groups from harm in the local community.
Pollutants (air, noise, discharges to water, generation of waste, and release of hazardous materials and chemical pesticides and fertilizers)	Noise	Prior to the start of the Project, neighbors of the surrounding areas were concerned about the noise that the wind turbines would produce. For this reason, during the first four years of operation of the wind farm, noise monitoring was carried out in the houses closest to the wind turbines, and no noise complaints were received from any of them. In addition, these houses are no longer in use, so the monitoring was discontinued. If the houses become permanent or if there are complaints or denunciations from the inhabitants, the monitoring will be resumed. Furthermore, interviews with stakeholders also confirmed that neighbors are not bothered by the noise of the wind turbines, as they stated that it is totally tolerable and that it blends in with the noise of nature, birds and wind.

2.3 Respect for Human Rights and Equity

2.3.1 Labor and Work

Risks identified ¹⁵	Mitigation or preventative measure(s) taken
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¹⁵ The identified risks and commensurate mitigation or preventative measure(s) for forced labor, child labor, and human trafficking, must be inclusive of staff and contracted workers employed by third parties.

Discrimination	No risk identified	As detailed in the Human Resources Policy¹⁶, the company embraces a diverse work environment and is firmly committed to providing equal opportunities to existing and/or potential staff members, regardless of gender, marital status, age, race, ethnic, national origin or religion. In case of any discriminatory treatment, the company will apply disciplinary actions. As of now, there have been no complaints about discrimination cases and there is no evidence that there has been any case.
Sexual harassment	No risk identified	The company complies with Uruguayan Law No. 18.561. regarding sexual harassment. In the event of a sexual harassment case, the procedure to be followed is explained in a dedicated section of the Human Resources Policy. As of now, there have been no complaints about sexual harassment cases and there is no evidence that there has been any case.
Gender equity in labor and work	No risk identified	In terms of gender equality and non-discrimination, R del Sur complies with the provisions of Law 19.846. In this sense, male and female workers are equal in dignity and rights, and any form of gender discrimination is prohibited, and severe disciplinary measures will be applied where appropriate. In this sense, the Project provides equal opportunities in the context of gender equity and remuneration of labor and work.

¹⁶ Política de RRHH V1_septiembre 2022

Forced labor	No risk identified	R del Sur workers are declared on a way that is supervised by government authorities, using legal contracts, who ensure that there is no infringement in their labor rights. In the same way, there is no hiring or labor exploitation of minors. Additionally, all subcontracts are required to sign compliance with IFC PS2 standards (International Finance Corporation, Performance Standard 2: Labor and Working Conditions), which asks companies to treat their workers fairly, provide safe and healthy working conditions, avoid the use of child or forced labor, and identify risks.
Child labor	No risk identified	
Human trafficking	No risk identified	

2.3.2 Human Rights

Risks identified	Mitigation or preventative measure(s) taken
No risk identified.	R del Sur respects and promotes the protection of human rights. In addition, there are no Indigenous or Tribal Peoples in the project area.

2.3.3 Indigenous Peoples and Cultural Heritage

Risks identified	Mitigation(s) or preventative measure taken
No risk identified	There are no indigenous populations in the project area
Damage to archeological heritage	Within the wind farm property, there are dry stone walls of archeological interest. In order to verify that they are not affected, they are periodically inspected. As a result of these revisions, it was confirmed that they remain unaffected. As a preventive measure, in case maintenance work is needed in the area where these archaeological elements are located, an exclusion area will be created delimiting the elements to be preserved to avoid damage.

	There are also banners with information about the heritage value of these walls in the visitors' room of the win farm's control center.
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2.3.4 Property Rights

Risks identified	Mitigation or preventative measure(s) taken
No risk identified	The wind turbines are located on land over which R del Sur has surface rights and lease agreements with the owners for a term of 20 years (with the possibility of extending for another 10 more).

2.3.5 Benefit Sharing

Not applicable for this monitoring period, because the agreements, as indicated in section 2.3.4, are for 20 years, so there have been no changes or benefit sharing during this monitoring period.

2.4 Ecosystem Health

	Risk identified	Mitigation or preventative measure(s) taken during the monitoring period
Impacts on biodiversity and ecosystems	Flying birds and mammals' mortality from collisions	To determine the evolution of the biodiversity of fauna and mortalities of birds and flying mammals (<i>chiroptera</i>) due to collisions with the wind turbines, annual biodiversity studies are conducted in the influence area of the wind farms. Mortality records for the period 2022-2024 included a total of 8 mortalities (3 birds and 5 <i>chiroptera</i>). This number of individuals is not considered significant, as no species with conservation problems were involved and no wind turbines were

		observed accumulating mortality events. If this situation changes, the measures to be adopted will be evaluated.
Soil degradation and soil erosion	No risk identified.	Not applicable. The project activity does not affect the soil. However, R del Sur carried out maintenance works of service roads within the wind farm during the monitoring period.
Water consumption and stress	No risk identified.	The water supply for the wind farm's control building comes from a borehole authorized by the National Water Authority (DINAGUA-RM 520/2021).

2.4.1 Rare, Threatened, and Endangered species

As mentioned above, Maldonado I and II wind farms jointly conduct annual biodiversity monitoring in there are of influence area to determine the evolution of biodiversity, particularly of tetrapod fauna (amphibians, reptiles, birds and mammals) and to record mortalities of birds and flying mammals (chiroptera).

To date, 8 monitoring surveys have been carried out (M1, M2, M3, M4, M5, M6, M7 and M8), plus the initial monitoring that constitutes the baseline. The monitoring that took place, totally or partially, within the monitoring period covered by this report (01-January-2022 to 09-April-2024) are the monitoring M6, M7 and M8.

Species or habitat	As a result of biodiversity monitoring¹⁷, priority species for conservation in Uruguay have been identified, as well as species listed as threatened by the IUCN (International Union for Conservation of Nature), either globally or regionally. These species are listed below (considering those present in the monitoring period covered by this report, i.e. 2022-2024): Birds:
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¹⁷ Results included in document "BIODIVERSIDAD DE TETRÁPODOS. PARQUES MALDONADO I Y II. TEMPORADA CÁLIDA 2023-2024."

- Aquatic birds: None of the species sighted are on the IUCN lists, either globally or regionally. However, the species *Aramus guarauna* (common name “Carao”) is included in the list of Priority Species for Conservation in Uruguay. This species has been detected in 7 of the 8 surveys conducted (absent in M2), so it is not considered to have been affected by the Project.
- Birds of prey: 2 of the confirmed species are Priority for Conservation in Uruguay (*Coragyps atratus*, Black-headed Crow and *Geranoaetus melanoleucus*, Black-headed Eagle) and one of them is also considered Vulnerable (VU) according to IUCN criteria at regional level (*Geranoaetus melanoleucus*, Black-headed Eagle). Both species have been detected in all the monitoring carried out, so it is not considered that they have been affected by the operation of the wind farm.
- Migratory birds: None of the migratory species ever confirmed integrate IUCN threat categories, neither globally nor regionally. Neither are they included in the list of Priority Species for Conservation in Uruguay. Furthermore, the richness of migratory species has remained stable in recent monitoring.
- Other birds with conservation problems: 7 birds included in the list of Priority Species for Conservation in Uruguay were identified between 2022 and 2024: *Cariama cristata*, *Donacospiza albifrons*, *Lochmias nematura*, *Nothura maculosa*, *Paroaria coronata*, *Rhea americana* and *Rhynchotus rufescens*. None of them are included in the IUCN lists. Most of the species were detected in all the monitoring carried out, so they have not been affected by the project's activities, except for *Cariama cristata*, *Donacospiza albifrons* and *Rhynchotus rufescens*, which were absent in the M3, M2&M3, and M3 monitoring, respectively. During the monitoring period covered by this report, all species have remained stable.

Mammals:

- Chiroptera: None of the species detected are included in IUCN threat categories, either globally or regionally. Neither are they included in the list of Priority Species for Conservation in Uruguay. In addition, the species

richness detected has been maintained since the first monitoring, as well as the levels and hourly patterns of activity.

- Other mammals: During monitoring between 2022 and 2024, 8 priority species for conservation in Uruguay were identified: *Cerdocyon thous*, *Ctenomys torquatus*, *Dasypus hybridus*, *Dasypus novemcinctus*, *Hydrochoerus hydrochaeris*, *Leopardus geoffroyi*, *Lycalopex gymnocercus* and *Myocastor coypus*. None of them are included in the IUCN lists. The species *Lycalopex gymnocercus* (Gray Fox), was not observed in M6&M7, but reappeared in M8; and *Leopardus geoffroyi* (Wildcat), was confirmed until M6 but absent thereafter. The absence of this species in the latest monitoring can be due to natural variations of the fauna communities and climate conditions. The rest of the species were confirmed in all monitoring, so it is not considered that they have been affected by the operation of the wind farm.

Reptiles:

- The presence of the species *Bothrops pubescens* (Yarara) and *Tupinambis merianae* (lizard), included in the list of Priority Species for Conservation in Uruguay, was detected. Both species have been detected in all the monitoring carried out, so they have not been affected by the activity of the Project.

Amphibians:

- None of the species identified are in any of the IUCN threat categories. Only the Common Frog (*Leptodactylus latrans*) is included in the List of Priority Species for Conservation in Uruguay. Its inclusion is because these species have commercial value, not for conservation reasons. Furthermore, it is a species that has remained represented in all monitoring periods, so it has not been affected by the activity of the Project.

In general, the diversity of tetrapod's (flying and non-flying) remains stable, with the expected variations that exist within the fauna communities and the particularities that each year may present, such as the influence of the

	accumulated water deficit of several years. In addition, other environmental aspects unrelated to the operation and presence of the wind farm have an impact on the fauna, such as agriculture and livestock, or climate change.
Areas needed for habitat connectivity	There are no relevant connectivity areas that are affected by the operation of the Project.

	Risks identified	Mitigation or preventative measure(s) taken
Habitats for rare, threatened, and endangered species	Bird and chiropteran mortality	The biodiversity studies that have been carried out since the beginning of the wind farm's operation have not detected any cases of mortality of threatened or priority species for conservation. If this situation changes, the measures to be adopted will be evaluated.
Areas for habitat connectivity	No risk identified.	The operation of the wind farm does not affect the connectivity of the habitats as it does not generate physical barriers.

2.4.2 Introduction of species

N/A.

2.4.3 Ecosystem conversion

The Project doesn't involve ecosystem conversion, so this section is not required.

3 IMPLEMENTATION STATUS

3.1 Implementation Status of the Project Activity

Parque Eólico Maldonado started its commercial operations on 10-April-2014. The carbon crediting period and therefore the monitoring starts on 10-April-2014, when the plant finished the starting tests and commenced electricity generation. At the start date of commercial operations, the Project was fully operational.

From that moment, the wind farm has been operating in normal conditions and there have not been events due to scheduled or forced stoppages in which the plant was unavailable to inject electricity into the grid for a prolonged period. Evidence about the record of maintenance events or small normal stops in the operation of the wind farm has been provided. None of them was a threat to power generation and its injection into the grid and these were not developed over a long or relevant period. The continuity in the generation by the wind farm can be verified through the evidence provided “*Maldonado I DTE Monthly Generation_v1*”.

The amount of energy generated has been continuously measured through a bidirectional main meter at the connection and measurement point along with the substation “Estación Francisco Veira”, in the project land, and a backup meter, installed in parallel with the main meter.

Operational restrictions in Uruguay

During the monitoring period (01-January-2022 to 09-April-2024), the 92% of Uruguay’s electricity came from renewable sources¹⁸. 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 17/02/2015¹⁹ 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 UTE²⁰ uses to regulate power generation nationwide. In this regard, UTE can 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 facilities’ 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

¹⁸ Administración del Mercado Eléctrico – Datos de operación (available at: <https://adme.com.uy/controlpanel.php>)

¹⁹ Decreto 59/015 Regulación de los contratos de compraventa de energía de fuente eólica y solar fotovoltaica. Gobierno de Uruguay

²⁰ UTE: Administración Nacional de Usinas y Trasmisiones Eléctricas

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, there were operational restrictions almost in every month of the monitoring period, except for April to July 2022. These restrictions accounted for 18,820.18 kWh in total, which represent 5% 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 5% 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.

Changes to Project Activity

In addition to the Project Proponent, R del Sur S.A., there are two other entities involved in the project for this monitoring period, who were not included in the Project Description document, thus involving a change in project activity. These entities are SMARTENER and NTT DATA, and their roles and contributions to the Project are described in section 1.5. of this Monitoring Report.

3.2 Deviations

3.2.1 Methodology Deviations

No deviations have taken place in the project from the methodology.

3.2.2 Project Description Deviations

Section 1.4 Other Entities Involved in the Project of the registered VCS Project Description document indicates there are no other entities involved. However, there are two entities participating: SMARTENER, a company that provides technical, economic, and comprehensive investment management advisory services for electricity generation facilities, which is in charge of controlling, organizing, and monitoring the operation, maintenance, and performance results of the wind farm; and NTT DATA, an external consulting firm in charge of calculating the emissions reductions achieved during the 3rd monitoring period (01-January-2022 to 09-April-2024) and developing the correspondent Monitoring Report. Further details of these entities' roles and contribution to the Project are included in section 1.5. of this Monitoring Report

The participation of these entities does not impact on the applicability of the methodology, the project additionality, or the appropriateness of the baseline scenario, since neither of them entail changes to the project characteristics and therefore it remains as described in Project Document.

3.3 Grouped Projects

The proposed project activity is not a grouped project.

3.4 Baseline Reassessment

Did the project undergo baseline reassessment during the monitoring period?

☐ Yes

☒ No

4 DATA AND PARAMETERS

4.1 Data and Parameters Available at Validation

Data / Parameter	FC _{i,m,y} ; FC _{i,k,y}
Data unit	Mass or volume unit
Description	Amount of fossil fuel type i consumed by power plant/unit m or k in a year y
Source of data	Data provided by ADME
Value applied	See section 3.4 of Project Description ²¹
Justification of choice of data or description of measurement methods and procedures applied	As per Option A.1 of the “Tool to calculate the emissions factor for an electricity system”, version 05.0, CO₂ emission factor of power unit m or k in year y (tCO₂/MW-h) is calculated as: $EF_{EL,m,y} = \frac{\sum_i FC_{i,m,y} \times NCV_{i,y} \times EF_{CO_2,i,y}}{EG_{m,y}}$ ADME publishes the specific fuel consumption (amount of fuel per unit delivered to the grid) for each power unit as the ratio of fuel consumption (FC_{i,m,y}) and the net electricity generated (EG_{m,y}). The ratio is consistent with the equation under Option A.1.
Purpose of data	Calculation of baseline emissions
Comments	

Data / Parameter	NCV _{i,y}										
Data unit	GJ/Gg										
Description	Net calorific value (energy content) of fossil fuel type i in year y.										
Source of data	IPCC default values at the lower limit of the uncertainty at a 95% confidence interval as provided in Table 1.2 of Chapter 1 of Vol. 2 (Energy) of the 2006 IPCC Guidelines on National GHG Inventories.										
Value applied	<table> <tr> <th></th><th>Net Calorific value (GJ/Gg)</th></tr> <tr> <td>Fuel Oil</td><td>39,800.00</td></tr> <tr> <td>Gas Oil</td><td>41,400.00</td></tr> <tr> <td>Natural Gas</td><td>46,500.00</td></tr> <tr> <td>Landfill Gas</td><td>25,400.00</td></tr> </table>		Net Calorific value (GJ/Gg)	Fuel Oil	39,800.00	Gas Oil	41,400.00	Natural Gas	46,500.00	Landfill Gas	25,400.00
	Net Calorific value (GJ/Gg)										
Fuel Oil	39,800.00										
Gas Oil	41,400.00										
Natural Gas	46,500.00										
Landfill Gas	25,400.00										

²¹ VCS Homepage: PARQUE EOLICO MALDONADO: <https://registry.verra.org/app/projectDetail/VCS/1308>

Justification of choice of data or description of measurement methods and procedures applied	As per Option A.1 of the “Tool to calculate the emissions factor for an electricity system”, version 05.0, CO₂ emission factor of power unit m or k in year y (tCO₂/MW·h) is calculated as: $EF_{EL,m,y} = \frac{\sum_i FC_{i,m,y} \times NCV_{i,y} \times EF_{CO_2,i,y}}{EG_{m,y}}$ IPCC publishes the standard default values of Net Calorific Values for each fuel. This is consistent with the equation under Option A.1.
Purpose of data	Calculation of baseline emissions
Comments	Since local net calorific values per fuel type are not available, IPCC world-wide default values have been used.

Data / Parameter	EF _{CO₂,i,y}										
Data unit	tCO ₂ /GJ										
Description	CO ₂ emission factor of fossil fuel type i used year y										
Source of data	IPCC default values at the lower limit of the uncertainty at a 95% confidence interval as provided in Table 1.4 of Chapter 1 of Vol. 2 (Energy) of the 2006 IPCC Guidelines on National GHG.										
Value applied	<table border="1"> <thead> <tr> <th></th><th>Emission factor (EF) (ton CO₂/GJ)</th></tr> </thead> <tbody> <tr> <td>Fuel Oil</td><td>0.07550</td></tr> <tr> <td>Gas Oil</td><td>0.07260</td></tr> <tr> <td>Natural Gas</td><td>0.05430</td></tr> <tr> <td>Landfill Gas</td><td>0.04620</td></tr> </tbody> </table>		Emission factor (EF) (ton CO ₂ /GJ)	Fuel Oil	0.07550	Gas Oil	0.07260	Natural Gas	0.05430	Landfill Gas	0.04620
	Emission factor (EF) (ton CO ₂ /GJ)										
Fuel Oil	0.07550										
Gas Oil	0.07260										
Natural Gas	0.05430										
Landfill Gas	0.04620										
Justification of choice of data or description of measurement methods and procedures applied	As per Option A.1 of the “Tool to calculate the emissions factor for an electricity system”, version 05.0, CO₂ emission factor of power unit m or k in year y (tCO₂/MW·h) is calculated as: $EF_{EL,m,y} = \frac{\sum_i FC_{i,m,y} \times NCV_{i,y} \times EF_{CO_2,i,y}}{EG_{m,y}}$ IPCC publishes the standard default values of CO₂ emission factor of each fossil fuel type. This is consistent with the equation under Option A.1.										
Purpose of data	Calculation of baseline emissions										
Comments	According to the “Tool to calculate the emission factor for an electricity system”, if values are reliable and documented in regional or national energy statistics/energy balances, regional or national average default values can be used.										

Data / Parameter	EGm,y and EGk,y (Plant yearly generation (last 3 years))
Data unit	MW·h
Description	Net electricity generated by power plant/unit m or k in year y
Source of data	Data provided by ADME
Value applied	See section 3.4 of Project Description
Justification of choice of data or description of measurement methods and procedures applied	Data used are from Uruguayan authorities (ADME).
Purpose of data	Calculation of baseline emissions
Comments	-

Data / Parameter	EFgrid,CM,y
Data unit	tCO ₂ /MW·h
Description	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
Source of data	Administración del Mercado Eléctrico (ADME)
Value applied	0.5765 tCO ₂ /MW·h
Justification of choice of data or description of measurement methods and procedures applied	“Tool to calculate the emission factor for an electricity system” Version 05.0
Purpose of data	Calculation of baseline emissions
Comments	The Combined Margin emission factor is calculated ex ante, as described in section 3.1 of Project Description

4.2 Data and Parameters Monitored

Data / Parameter	EG _{facility,y}	
Data unit	MW·h/yr	
Description	Quantity of net electricity generation supplied by the project plant to the grid in year y	
Source of data	Electricity meter at project site (SMEC)	
Description of measurement methods and procedures to be applied	The electricity supplied by the project is measured by a SMEC meter, located in the connection and measure point, along with the substation “Estación Francisco Veira”. There is also a backup meter utilized only in case of problems with the main meter. Net energy is calculated by subtracting the incoming energy from the outgoing energy by the SMEC meter.	
Frequency of monitoring/recording	The hourly measured reading by SMEC meters is recorded monthly by plant personnel	
Value monitored	Year	Net Generation
	EG (facility, 2022)	152,277.23
	EG (facility, 2023)	155,597.04
	EG (facility, 2024) (until April 9 th)	35,802.89
Monitoring equipment	The system SMEC has two meters, the main meter, class 0.2, and back up meter, class 0.5, installed in parallel with the main meter.	
QA/QC procedures to be applied	Monthly measurement results recorded are used for cross check with records of sold electricity and/or with DTE²², and SMEC meters should be periodically calibrated at least once every two years during the verification of the system, according to Resolution 14/002²³. According to this Resolution and the evidence from ADME provided²⁴, ADME is responsible for granting the authorization of the measurement systems. The Resolution in Article 40 defines that the meters must be verified at least once every 2 years. However, UTE is the only laboratory authorized for these verifications in Uruguay, which makes it difficult to coordinate calibration dates. For this reason, ADME applies flexibility criteria in the calibration dates of the meters, and the control of the expiration of the calibration periods is carried out by observing the year and not the exact date of the last verification. The last calibration of the previous monitoring period for the main meter (type 0.2S) and the back-up meter (type 0.5S) was performed on 27-	

²² DTE: it is the Economic Transactions Document published monthly by ADME.

²³ Resolución de la UREE N° 14/002, de 27 de noviembre de 2002.

²⁴ Nota puestos de medición SMEC octubre 2022.

August-2020. Considering this date as a reference, the first calibration for these meters in the current monitoring period should have taken place before 27-August-2022. However, they finally took place on 09-November-2022 due to UTE Laboratory's availability, as mentioned before, which was also affected by schedule delays resulting from the COVID-19 pandemic.

In any case, the analysis carried out by the UTE Laboratory on the meters on 09-November-2022 showed that they were calibrated and functioning as expected (i.e. they were not out of calibration, it was only a delay in the analysis due to scheduling reasons, unrelated to the Project Proponent). For this reason, it is considered that this delay should not have affected the reliability of the measurement. However, to be conservative, a 0.2% correction factor has been applied in the period that does not present a valid calibration, according to the meters' accuracy class (0.2S). This correction has been applied for the period 27-August-2022 – 8-November-2022.

In January 2023, a fault was identified in the operation of the back-up meter, so it was replaced by a new one (serial number 24777).

Below are the details and characteristics of the different electricity meters as well as their calibration dates:

Meter M1:

- Manufacturer: Itron
- Type: SL7000
- Accuracy class: 0.2S
- Serial number: 30023003
- Calibration frequency: At least once every two years
- Calibration date:
 - 09-November-2022
 - 30-October-2024

Meter M2 – Back up (Replaced):

- Manufacturer: EMH
- Type: LZQJ-XC
- Accuracy class: 0.5S
- Serial number: 3970853
- Calibration frequency: At least once every two years
- Calibration date: 09-November-22

Meter M2 – Back up (New):

- Manufacturer: ITRON
- Type: ACE6000
- Accuracy class: 0.5S
- Serial number: 24777
- Calibration frequency: At least once every two years

	- Calibration date: 17-January-2023 30-October-2024 The generation records of the monitoring period were made with the main meter M1 (S/N 30023003). The back-up meter M2 was not used during the monitoring period.
Purpose of the data	Calculation of baseline emissions
Calculation method	N/A. This parameter is monitored continuously.
Comments	These data are used to directly calculate emission reductions.

4.3 Monitoring Plan

The Monitoring Plan is developed in accordance with the approved consolidated baselines and monitoring methodology for grid-connected electricity generation from renewable sources – ACM0002. The monitoring plan will specify the monitoring tasks to be implemented in order to ensure that the real, measurable and long-term greenhouse gas (GHG) emission reduction for the proposed project is monitored and reported.

Monitoring Management Structure

To ensure organization in the project in terms of reliable data collection and gathering during the full crediting period, the project owner has established the organization of the monitoring team with clear roles and responsibilities assigned to all staff involved in the VCS project.

In accordance with the methodology, monitoring consists of metering the electricity generated by renewable technology. The operation and maintenance are carried out by Gamesa, which has personnel specifically qualified for this task.

The project owner has archived electronically all data collected as part of monitoring and has kept it at least 2 years after the end of the last crediting period. The project owner has implemented a monitoring plan to guarantee accurate and transparent determination of avoided emissions.

In summary, the project owner has executed the monitoring plan of the project, in accordance with the requirements of the applicable methodology and the EB (Executive Board) on monitoring and verification to ensure that the emission reductions are monitored, recorded, and reported accurately.

Monitoring equipment and installation

Given that, the emission factor is calculated ex-ante, and referring to the Monitoring Methodology ACM0002, the only monitored data is the quantity of net electricity supplied to the grid by the wind project in every year.

Project owner has installed an electricity meter at the connection and measurement point along with the substation “Estación Francisco Veira”, in the project land. The grid connection diagram indicates the positioning of metering instruments used in the monitoring of emission reductions, in the figure below:

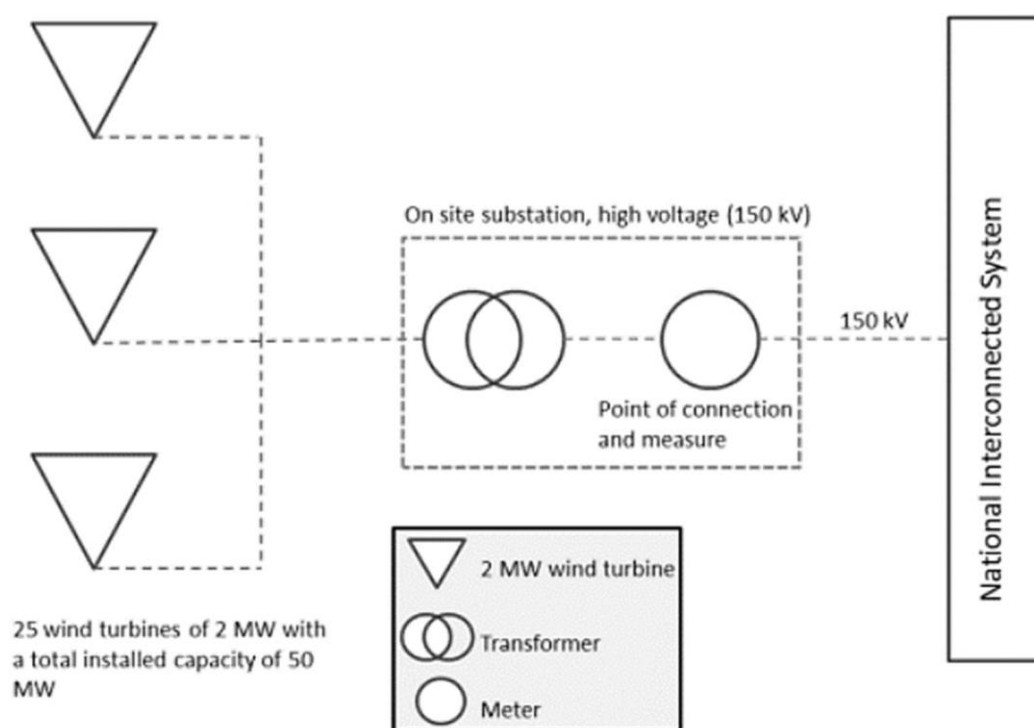


Figure 1. Positioning of metering instruments

Certified entities have provided the equipment used to monitor the electricity production and conducted calibration per the Resolution 14/002 and the standards IEC 62052-119 and IEC 62053-2210²⁵ for static active meters of classes 0.2 and 0.5.

Table 2. Calibration data

Meter	Manufacturer	Type	Serial number	Accuracy	Calibration date	Calibration frequency
M1 Main Meter	ITRON	SL7000	30023003	0.2S	09-November-2022	Biannual
M2 (Replaced)	EMH	LZQJ-XC	3970853	0.5S	09-November-2022	Biannual

²⁵ Resolución de la UREE N° 14/002, de 27 de noviembre de 2002. UNE-EN IEC 62052-119 and UNE-EN IEC 62053 standards for electrical energy measurement equipment. Available at <https://www.une.org/>

Meter	Manufacturer	Type	Serial number	Accuracy	Calibration date	Calibration frequency
M2	ITRON	ACE6000	24777	0.5S	17-January-2023	Biannual

Data recording and archiving:

- A. Project owner has monitored the electricity supplied by the project to the grid using a calibrated electricity meter and taking monthly records.
- B. Measurements have been crosschecked with sale receipts for electricity and/or with the information published in DTE, using conservative values for calculation of emission reductions.
- C. The project participants have archived all data collected as part of monitoring during the monitoring period plus two years.
- D. Quality assurance and Quality control have been applied:
 - An overarching monitoring system maintains the quality of data generated by this project. This system includes procedures used to double-check data, for staff training, meter calibration, accreditation of the facility completing calibration and adherence to the relevant standards.
 - Measuring equipment has been calibrated according to Resolution 14/002, at least once every two years during the verification period.
- E. Procedures on how to deal with erroneous measurements: In the event of a problem with the measurements system, the information is obtained through one of the following sources of measurement in this order:
 - Data from the main meter of SMEC
 - Data from the back-up meter of SMEC
 - Data from SCADA system
 - Data provided by user to the control center of DNC via telephone.

Monitoring personnel prepare the monitoring report, containing the data report and the results of the energy generation and emission reductions of the project for the defined verification period.

Management structure to monitor emission reductions

The General Manager holds overall responsibility for the monitoring process, but as indicated below, some tasks of the process are delegated. The first step is the measurement of the electrical energy supplied to the grid and reporting of daily operations by the plant operation staff. The project owner appoints a:

- Plant operation staff, who are responsible for the electrical energy measurements and review the daily operation of the wind farm station.
- Monitoring officer, who is responsible for verification of the measurement, collection of sales receipts, collection of billing receipts of the power supplied by the grid to the wind farm and the calculation of the emissions reductions. In addition, is responsible for preparing operational reports of the project activity, reviewing the daily operation of the wind farm station including operating periods, power delivered to the grid, equipment defects, etc.
- Finally, the General Manager has reviewed the monitoring results.

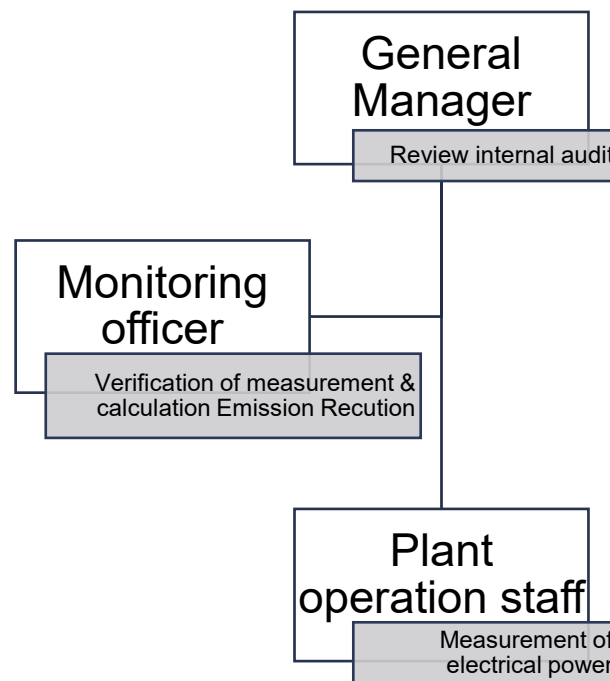


Figure 2. General management structure

5 QUANTIFICATION OF GHG EMISSION REDUCTIONS AND REMOVALS

5.1 Baseline Emissions

Baseline emissions include only CO₂ emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity. The baseline emission is calculated as the product of electrical energy baseline EG(PJ,y) expressed in MW·h, produced by the renewable generating unit and multiplied by the grid emission factor:

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

Where:

BE_y : Baseline Emission in year y (tCO_2).

$EG_{PJ,y}$: Quantity of net electricity generation that is produced and fed into the grid because of the implementation of the VCS project activity in year y (MW-h/yr.).

$EF_{grid,CM,y}$: Combined margin CO_2 emission factor for grid connected power generation in year y calculated using the latest version of the Tool to calculate the emission factor for an electricity system ($tCO_2/MW\cdot h$)

Calculation of $EG(PJ,y)$

The calculation of $EG_{PJ,y}$ is different for (a) Greenfield plants, (b) retrofits and replacements, and (c) capacity additions. Since the project involves the installation of a new grid-connected renewable power plant/unit at a site where no renewable power plant was operated prior to the implementation of the project activity (Case (a) Greenfield plant), then:

$$EG_{PJ,y} = EF_{PJ,facility,y}$$

Where:

$EG_{PJ,y}$: Quantity of net electricity generation that is produced and fed into the grid because of the implementation of the VCS project activity in year y (MW-h/yr.).

$EG_{facility,y}$: Quantity of net electricity generation supplied by the project plant/unit to the grid in year y (MW-h/yr.).

The electricity supplied by the project is measured by a SMEC meter, located in the connection and measure point, along with the substation “Estación Francisco Veira” in project land. There is also a back-up meter that is only utilized should there be any problem with the main meter.

This measurement is cross-checked with invoices from ADME. The value collected in the invoices corresponds to the total energy generated that is injected into the national grid by the wind farm. Performing the crosscheck, it is possible to observe that the resulting energy supply matches the values from the invoices.

On the other hand, the wind farm has energy consumption that is billed separately. Therefore, the net electricity used for the emission reduction calculation is the result of the energy that is produced and supply to the grid minus the energy that is consumed. These energy consumption values are also obtained from the DTE records, where the amount of energy consumed hourly for each month is collected.

The definitive results of net electricity used for the emission reduction calculation are presented in the following table:

Year	Month	Net electricity generation (MWh)
2022	January	14,367.45
	February	11,247.29
	March	14,936.57
	April	6,427.88
	May	8,753.61
	June	12,300.88
	July	15,528.74
	August	12,521.57
	September	11,530.38
	October	16,584.33
	November	14,186.03
	December	13,961.31
2023	January	13,918.30
	February	14,446.97
	March	13,167.12
	April	9,400.35
	May	12,962.04
	June	11,138.92
	July	15,377.78
	August	15,709.44
	September	12,801.33
	October	12,972.53
	November	12,490.05
	December	11,212.21
2024	January	12,316.73
	February	11,742.40
	March	9,973.76

Year	Month	Net electricity generation (MWh)
	April (until day 9)	1,770.00

The total electricity supplied by the project during the monitoring period is 343,677.16 MWh

$$EG(PJ,2022) = EG_{\text{facility},2022} = 152,277.23 \text{ MWh}$$

$$EG(PJ,2023) = EG_{\text{facility},2023} = 155,597.04 \text{ MWh}$$

$$EG(PJ,2024) = EG_{\text{facility},2024} = 35,802.89 \text{ MWh}$$

Calculation of EF_{grid,CM,y}

The emission factor was calculated ex-ante in the registered PD according to the “Tool to calculate the emission factor for an electricity system” Version 05.0. The values for the crediting period are the following:

	EF _{grid,OM-adj,y} (tCO ₂ /MWh)	EF _{grid,BM,y} (tCO ₂ /MWh)	EF _{grid,CM,y*} (tCO ₂ /MWh)
2011	0.7524	0.2417	0.5765
2012	0.7359		
2013	0.5805		

$$*wOM = 0.75, wBM = 0.25$$

Net generation and Emission Factor data is available in the attached Spreadsheet *GEN Maldonado I Monitoring Period 2_v3*, and there have been used to calculate the Baseline Emissions calculation.

Calculation of Baseline Emissions

As it has been explained above, Baseline Emissions are calculated according to the following formula:

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

Where:

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

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 (MWh/y).

$EF_{grid,CM,y}$ = Combined margin CO₂ emission factor for grid connected power generation in year y calculated using version 05.0 of the “Tool to calculate the emissions factor for an electricity system” (tCO₂/MWh).

The baseline emissions are the product of the electricity generated and supplied by the project power plant to the grid in the period year ($EGPJ,y$) and the grid emission factor ($EF_{grid,CM,y}$).

Therefore, as said before, the combined margin CO₂ emission factor of 0.5765 tCO₂/MWh was calculated ex-ante for the duration of the first crediting period as per “Tool to calculate the emission factor for an electricity system, (version 05.0)” and the energy generation is measured through the monitoring period in accordance with “ACM0002 version 16.0”. Then, baseline emissions of the project are:

Period	Net Generation (MWh)	EF _y (tCO ₂ /MWh)	BE _y (tCO ₂ e)
2022	152,277.23	0.5765	87,787
2023	155,597.04		89,701
2024 (until April 9 th)	35,802.89		20,640
TOTAL	343,667.16		198,128

Emission factor calculation is detailed in the Project Description Document and meters data is compiled in the attached spreadsheet “*GEN Maldonado I Monitoring Period 2_v3*”. The monthly generation data is available in the attached spreadsheet “*Maldonado I DTE Monthly Generation_v1*”.

5.2 Project Emissions

For most renewable energy project activities, the project emissions are neglected. Following the methodology, as the project is a wind farm project, it does not lead to any GHG emissions and therefore project emissions are considered equal to zero.

$PE_y = 0$ tCO₂e / year

5.3 Leakage Emissions

Following the applied methodology, no leakage emissions are considered. The main emissions potentially giving rise to leakage in the context of electric sector projects are emissions arising due to activities such as power plant construction and upstream emissions from fossil fuel use (e.g. extraction, processing, and transportation). These emissions sources are neglected.

5.4 GHG Emission Reductions and Carbon Dioxide Removals

The net GHG emission reduction is calculated following the guidance of the methodology ACM0002, as follows:

$$ER_y = BE_y - PE_y$$

Where:

ER_y: Emission reduction in year y (tCO₂)

BE_y: Baseline Emission in year y (tCO₂)

PE_y: Project emission in year y (tCO₂)

According to methodology, ER_y = BE_y – 0, so the emission reductions are equal to the baseline emissions, as it can be seen in the table below.

The Emission Reduction results can be found on the attached spreadsheet *GEN Maldonado I Monitoring Period 3_v3*.

Vintage period	Baseline emissions (tCO ₂ e)	Project emissions (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Reduction VCUs (tCO ₂ e)	Removal VCUs (tCO ₂ e)	Total VCUs (tCO ₂ e)
01-Jan-2022 to 31-Dec-2022	87,787	0	0	87,787	0	87,787
01-Jan-2023 to 31-Dec-2023	89,701	0	0	89,701	0	89,701
01-Jan-2024 to 09-Apr-2024	20,640	0	0	20,640	0	20,640
Total	198,128	0	0	198,128	0	198,128

At the time of project registration, an ex-ante emission reduction of 109,818 tCO₂e per year was estimated, which is equivalent to 249,640 tCO₂e for this monitoring period. After the verification of the data, in this monitoring period Parque Eólico Maldonado has been finally reduced 198,169 tCO₂e, which is 79% of the ex-ante estimation. The data and the justification for the difference are shown in the following table.

Vintage period	Ex-ante estimated reductions/removals	Achieved reductions/removals	Percent difference	Explanation for the difference
01-Jan-2022 to 31-Dec-2022	109,818	87,787	-20%	The ex-ante estimate of reduced emissions assumes ideal power generation conditions and maximum efficiency. However, power generation needs wind, a variable phenomenon that is
01-Jan-2023 to 31-Dec-2023	109,818	89,701	-18%	
01-Jan-2024 to 09-Apr-2024	30,005	20,640	-31%	

Total	249,640	198,128	-21%	never stable at its maximum level.
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APPENDIX 1: COMMERCIALY SENSITIVE INFORMATION

N/A