



## JOINT VALIDATION & VERIFICATION REPORT

**Helios Santa Rosa**

*BCR-AR-211-1-001*

**ASOCIACIÓN DE NORMALIZACIÓN  
Y CERTIFICACIÓN |**




**A BUREAU VERITAS  
COMPANY**

*BCR Joint validation and verification report template  
Version 1.3*

*April 2024*

<b>Validation &amp; Verification Report</b>	
<b>Project Title</b>	Helios Santa Rosa Solar PV plant
<b>Project ID</b>	BCR-AR-211-1-001
<b>Project holder</b>	Tassaroli S.A.
<b>Project Type/Project activity</b>	Grid-connected electricity generation from renewable sources
<b>Grouped project</b>	Not a grouped Project
<b>Version number of the Project Document to which this report applies</b>	Versión 02
<b>Applied methodology</b>	CDM - AMS-I.D._Grid connected renewable electricity generation
<b>Project location</b>	Santa Rosa, Mendoza, Argentina
<b>Project starting date</b>	2022-04-01
<b>Quantification period of GHG emissions reductions/removals</b>	2022-04-01 To 2029-03-31
<b>Estimated total and mean annual amount of GHG emission reductions/removals</b>	Total amount of GHG emissions reductions (first crediting period): 65,723 tCO <sub>2</sub> e Indicate the estimated average annual amount of GHG emission reductions: 9,389 tCO <sub>2</sub> e
<b>Monitoring period</b>	01-April-2022 to 31-August-2024

<b>Total amount of GHG emission reductions/removals</b>	<i>Total amount of GHG emissions reductions/removals (during the monitoring period): 10,016 tCO<sub>2</sub>e</i> <i>Average annual amount of GHG emission reductions/removals: 3,339 tCO<sub>2</sub>e/y (account for two full year of project's operation)</i>
<b>Contribution to Sustainable Development Goals</b>	<i>ODS 4, ODS 5, ODS 7, ODS 9, ODS 13,</i>
<b>Special category, related to co-benefits</b>	<i>No special category</i>
<b>Version and date of issue</b>	<i>Version 2.1.22/07/2025</i>
<b>Work carried out by</b>	 <i>Excalibur Ernesto Acosta</i>
<b>Approved by</b>	<i>Joel Miguel Ramirez.</i>

Eliminado: 01

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## **1 Executive summary**

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*The project activity, a unique endeavor in the department of Santa Rosa, province of Mendoza, Argentina, consists of generating renewable electricity connected to the grid based on Solar Photovoltaic technology that displaces thermal generation connected to the national electricity grid. Before the project activity, grapes crops, no forests, or similar economic activity existed on the property. The participation of the installed photovoltaic capacity in the Argentine Interconnection System (SADI) is incipient, barely reaching 2%. The project activity is small-scale (<15MWp) and has two implementation stages 2 years apart: 5 MW + 5,2 MW. The state-owned electricity utility CAMMESA connects both stages to the Argentinian electricity grid at 13,2 kV, and each stage has an interconnection point.*

*The first stage of the project activity (Helios Santa Rosa I, 5 MW) has been supplying electricity to the grid since 04/01/2022. Its commercial authorization dates back to 29/03/2022. The second stage (Helios Santa Rosa II, 5.2 MW) began delivering electricity to the grid in May 2024. To date (31/08/2024), 32.667,00 MWh have been added to the grid, equivalent to a significant reduction of 11.135,00 tCO<sub>2</sub>e, Tassaroli's commitment to environmental responsibility.*

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## **2 Objective, scope and criteria**

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*Tassaroli S.A. appointed ANCE to perform the joint validation and verification of the Helios Santa Rosa I & II 10.2 Photovoltaic electricity generation facility in Mendoza (Argentina) through a service agreement dated on 24/10/2024. The objective of this joint validation and verification activity is to have an independent third-party assessment of the project design and to ensure a thorough assessment of the proposed project activity against the applicable BCR and CDM requirements.*

*the following general objectives were initially set:*

- *Evaluate the conditions of eligibility, additionality, baseline, monitoring protocol, and the calculation of reduced emissions from the point of view of the validation and verification of the Helios Santa Rosa I and Helios Santa Rosa II projects developed by Tassaroli S.A.*
- *Corroborate the controls associated with the information system and the data corresponding to the calculation of GHG emissions reductions reported by Tassaroli S.A. in the Helios Santa Rosa Solar PV plant Project, taking as reference the input information during the validation and documentary verification activities and on-site.*

*In particular:*

- the project's baseline was assessed against AMS-I.D.: Grid connected renewable electricity generation, Version 18.0”;
- the project's monitoring plan was assessed against AMS-I.D.: Grid connected renewable electricity generation, Version 18.0”;
- the project's additionality justification was assessed against Tool 01: Tool for the demonstration and assessment of additionality v. 7.0 and “Tool 21: Demonstration of additionality of small-scale project activities, version 13.1”
- the project's compliance with the requirements of Article 12 of the Kyoto Protocol, the CDM Modalities and Procedures, as agreed in the Marrakech Accords under decision 3/CMP.1, the annexes to this decision, subsequent decisions and guidance made by COP/MOP & CDM Executive Board and other relevant rules, including the Host Country's legislation and sustainability criteria.
- CDM Validation and Verification Standard for project activities version 3.0
- CDM Project Standard for Project Activities version 3.0
- BCR Standard Version 3.4

Validation is a requirement for all BCR projects. It is seen as necessary to assure stakeholders of the quality of the project and its intended generation of voluntary carbon credits (VCCs). The validation scope is the independent and objective review of the Project Document Template (PD). The purpose of the validation is its usage during the registration process as part of the BCR project cycle. Therefore, ANCE cannot be held liable by any party for decisions made or not made based on the validation opinion that go beyond that purpose.

The verification procedure is performed as Tassarolli wished to account for emission reductions following the VVS guide.

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### **3 Validation and verification planning**

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#### **3.1 Validation and verification plan**

The Validation and Verification Plan for the "Helios Santa Rosa Solar PV plant" project was executed in accordance with the BCR Version 3.4, June 28, 2024, and the provisions of ISO 14064 part 3. This covers the limits of the project that focuses on the generation of electric power through a solar photovoltaic plant Helios Santa Rosa I connected to the grid, with an installed capacity of 10.2 MW and the Helios Santa Rosa Solar Photovoltaic Plant has 2 stages of implementation with 2 years of difference: 5 MW + 5.2 MW and is connected to the Argentinean electric grid in two interconnection points at 13.2 kV.; as well as the physical infrastructure, activities, technologies and processes, Greenhouse Gas Emission Sources, types of Greenhouse Gases (GHG), see Table 1, and the reporting period, the Evidence Collection Plan (sampling), risk analysis, audit team, level of assurance, materiality, validation and verification criteria and activities.

The validation and verification plan were sent before of the on-site visit, this document include the assignment competent personnel to carry out the activities and preparation of

validation or verification plan, including objectives and scope, validation or verification team (roles and responsibilities), duration of validation or verification activities, specific requirements, and the level of assurance and materiality, see **Annex 5**.

Table 1. Helios Santa Rosa boundary

PROJECT BOUNDARY								
GHG sources, sinks and reservoirs (SSRs) or project technologies	Project scenario	Baseline scenario	Baseline scenario fuel	Project period (first)				
Helios Santa Rosa Solar PV plant	Generation of grid-connected renewable electricity based on Solar Photovoltaic technology.	Electricity generation in fossil fuel-fired power plants Natural	Natural Gas (NG) Fuel Oil (FO) Gas oil (GO) CMi (Mineral Coal) Domestic CMi (Mineral Coal) Imported	7 years				
Types of GHGs included in the GHG statement:		CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFC	PFC	NF <sub>3</sub>	SF <sub>6</sub>
Data provenance for baseline scenario and GHG project baseline:	Historical data for one year ( X ) Historical data for an average of several years ( )							

Regarding the duration of the Validation and Verification activities, ANCE provided a schedule of activities with the duration of the activities, see Table 2.

Table 2. Validation and Verification activities.

Activity	Responsible	Duration (days)
Elaboration of internal No COI Matrix	ANCE	2
Request for GHG declaration and supporting information.	ANCE	1
Submission of supporting information	Tassaroli	4
Documentary verification	ANCE	7
Development of Risk Analysis/Evidence Gathering Plan (sampling)	ANCE	2
Preparation and Submission of Verification/Verification/Validation Plan	ANCE	2
On-site Verification/Validation and Submission of Findings Report	ANCE – Tassaroli	2
Delivery of Findings Report	ANCE	2
Client's attention to findings	Tassaroli	20
Analysis of findings attention by CAB	ANCE	20
Preparation and submission of Consolidated Findings Report	ANCE	2
Validation/Verification of Findings Report	Tassaroli	4
Elaboration and sending of draft Statement/Opinion and V/V Report	ANCE	2
Approval of the draft by the Client	Tassaroli	2
BioCarbon Registry technical review	BCR	N.D.
Signature and delivery of Verification Statement/Opinion and Verification Report (digital)	ANCE	N.D.

### 3.2 Audit team

Table 3. ANCE Validation / verification team

Validation / verification team		Professional profile	Activities
<b>Lead Validator/ Verifier</b>	Juan Carlos Caycedo	Chemical engineer specialized in the areas of economics, administration and environmental policy. Specific experience in the areas of environmental impact studies, economic evaluation of environmental policies and implementation and follow-up of economic instruments for sustainable development, monitoring, reporting and verification of environmental indicators. Specialist in the area of climate change, flexible carbon pricing mechanisms with emphasis on the Clean Development Mechanism (CDM). Twenty years developing industrial emissions mitigation projects, forestry and reforestation and climate change adaptation measures, pollution charges (retributive rates), environmental liabilities and contingent valuation.	Documentary information review  Site visit  Preparation of Validation and Verification Report  Documentary information review
<b>Validator/ verifier:</b>	Excalibur Ernesto Acosta Miranda	Environmental engineer, Graduated of National Polytechnic Institute, Professional License Number: 9409081.  Verifier/Validator In the follow scopes: He has carried out 110 verifications to various companies, mostly in the Industrial and Energy sector; 4 validations and verifications of GHG mitigation projects, 2 in the energy sector and 2 in the waste sector, accredited in the following sectors Power Generation and Electric Power Transactions, General Manufacturing (physical or chemical transformation of materials or substances into new products), Oil and Gas Exploration, Extraction, Production and Refining, and pipeline distribution, including Petrochemicals, Metals Production, Mining and Mineral Production, Chemical Production; Transportation and waste handling and disposal.	Documentary information review  Interviews
<b>Independent Reviewer</b>			
<b>Independent Reviewer</b>	Nancy Adriana Barrera Gómez	Environmental engineer, graduated of National Polytechnic Institute, Professional License Number: 13289456  Lead Verifier (GHG Inventories) in sectors associated with IAF MD 14, covering General Manufacturing, Mining and Mineral Production, Metal Production, Chemical Production, and Pulp, Paper, and Printing. I have executed a total of 21 services in accordance with the criteria of ISO 14064-1:2018 and other protocols	Independent technical review
<b>Approver</b>	Joel Miguel Ramirez	Electric engineer, graduated of National Polytechnic Institute, Professional License Number: 2731971.  Conformity Quality Manager in Association for Standardization and Certification (ANCE), with more than 25 years of experience in evaluation of norms and standards related to industry, commerce and services, occupying different positions in the areas of product certification,	Final approval

Validation / verification team	Professional profile	Activities
	quality assurance, management systems, infrastructure, management systems certification, inspection units and GHG validation / verification body. Currently serves as manager of the Systems Certification Body and Validating / Verifying Body of ANCE.	

ANCE is committed to compliance with the BCR Anti-Corruption Policy described in section 8.2. 4 of the BCR Standard Validation and Verification Manual, with the intention of strengthening compliance with this policy ANCE performed the corresponding risk analysis through the Risk Identification and Mitigation Matrix identified as Internal COI Analysis\_Tassaroli (see Annex 6), with the intention of determining that there are no conflict of interest, impartiality and operational risks that prevent the execution of the verification process in an impartial manner. As a conclusion of the analysis ANCE has applied the following mitigation measures:

- c) The CAB confirms with each member of the verification team before assigning him/her to a verification activity whether he/she is free of conflict of interest.
- d) The CAB notifies the prospective client of the details of the designated verification team members and requests the refusal of any team member or independent reviewer if there is COI of interest.
- e) The CAB shall designate a verification team that has no relationship/family relationship with the prospective client.
- f) The designated verification team shall adhere to ANCE's policies and shall not accept personal benefits during the performance of verification services.
- j) The CAB shall designate a verification team that does not have any kinship, consanguinity or extra-employment relationship with the potential client.

### 3.3 Level of assurance and materiality

The activities corresponding to the GHG Project Declaration Validation/Verification Body focused on the validation and verification of the Document Project Helios Santa Rosa Solar PV plant project developed by Tassaroli S.A., under a reasonable assurance level ( $\geq 95\%$ ) and a materiality of 5%, complying with the requirements of ISO 14064-3:2019 and standards and the provisions of the BCR Standard Project Validation and Verification Manual version 2.4, point 10.2.5 Assurance level and materiality:

(a) The sampling plan was designed to ensure completeness, traceability, and reliability of all information supporting the GHG assertion. Given the limited volume and complexity of data generated by the project, and in line with the Validation and Verification Manual (VVM), a full-scope assessment (100% sampling) was applied to all relevant data sources. This included:

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- All monitoring records submitted by the Project Holder;
- Monthly electricity generation data provided by CAMMESA;
- Documentation used for the estimation of baseline emissions, including emission factors and grid displacement calculations;
- Project design documents and spreadsheets used to quantify GHG reductions;
- Site-specific evidence of operational parameters and energy dispatch.

The geographic and operational scope of the project was also confirmed. The Helios Santa Rosa Solar PV Plant comprises two components: Santa Rosa I (12.91 ha) and Santa Rosa II (13.2 ha), with a combined area of 26.12 ha. The coordinates are precisely defined in the Project Design Document (PDD), and no spatial overlaps with other mitigation activities were detected. Commercial operation was independently confirmed through CAMMESA authorizations No. B-160165-1 (Santa Rosa I) and No. B-173489-1 FV (Santa Rosa II).

#### Examples of Errors or Omissions Evaluated

During the verification audit, the team reviewed all relevant records and calculations. Minor discrepancies were noted in formatting differences across internal spreadsheets and some cross-referencing of emission factors. However, none of these affected the numerical outcomes. The team also verified that CAMMESA's aggregated generation data matched the internal project monitoring logs, confirming alignment in energy output records.

These assessments allowed the audit team to conclude that the identified issues were not material and did not affect the accuracy or transparency of the reported emission reductions.

#### (b) Verification of CAMMESA Records

The reliability of the CAMMESA data was assessed through:

- Cross-referencing monthly energy generation values with CAMMESA's public platform (<https://cammesaweb.cammesa.com/>);
- Review of the spreadsheet prepared by the Project Holder, where data were transferred for quantification;
- On-site inspection of plant logbooks and monitoring system output;
- Review of calibration certificates and meter class accuracy (Class 0.2S).

No inconsistencies were found between CAMMESA data and the internal plant data. The verification confirms that the source is reliable, consistent, and adequate for use in emission reduction calculations.

The documents reviewed was:

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- The GHG emissions estimation from project holder (2. Emission Reductions. Solar PV Plant Santa Rosa.xlsx)
- Sustainable Development Safeguards (SDSs) (BCR\_Herramienta-ODS proyecto Santa Rosa.xlsx)
- Monitoring report (2. BioCarbon\_Monitoring-Report-Helios Santa Rosa Solar PV Plant3. REPORTE DE MONITORE – BCR.pdf)
- Document project (1. BioCarbon\_Template- PDD - Helios Santa Rosa Solar PV Plant V1.pdf)

Following ISO 14064-3:2019 Annex A, the overall reasonable assurance achieved is 95.00 %, calculated as the complement of the aggregated risk of undetected material misstatement. Evidence lines include:

- Re-calculation of the “2. Emission Reductions. Solar PV Plant Santa Rosa.xlsx” workbook (100 % of formulas checked).
- Traceability test of all electricity generation from “Emission Reductions. Solar PV plant Santa Rosa I & II. Tab: Energy to the grid.xlsx”.
- On-site observation of solar plants.
- Interviews with the plant manager, environmental officer, and the operator.

Based on the evidence gathered, ANCE team conclude that the GHG emission reductions of 65,724 tCO<sub>2</sub>e are fairly stated and comply with ISO 14064-3:2019 and the BCR Standard.

- (c) the material discrepancy of the data supporting the project baseline and the estimated GHG emission reductions is ± 5%, according to GHG PROJECT VALIDATION AND VERIFICATION MANUAL, V.2.4 and was assessed via an error-equation model:

$$\left| \frac{(\text{Reduction emissions}_{\text{Reported}} - \text{Reduction emission}_{\text{Verified}})}{\text{Reduction emissions}_{\text{Reported}}} \right| \times 100$$

The materiality threshold was determined based on the evidence submitted by the project proponent.

A total of electricity generation were reviewed, and the values were cross-checked against the ANCE team’s recalculation analysis (2. Emission Reductions. Solar PV Plant Santa Rosa.xlsx. No systematic omissions were identified. Consequently, these discrepancies do not materially misstate the GHG assertion nor affect the verification conclusion.

The primary sources of information included the spreadsheet, the electricity generation database, and the inspection of the equipment during the site visit. Based on the recalculation analysis performed by the ANCE team, the resulting materiality was 0.00%, which is well below the 5% threshold established by the applicable verification criteria. Therefore, the materiality requirement is considered to be met.

The audit was conducted with a 95% assurance level and a materiality threshold of 5%, as established by ISO 14064-3:2019 and the BCR Standard. Based on the data reviewed and the results of the sampling strategy, the verification team confirms:

- The absence of material misstatements in the reported GHG emission reductions;
- The adequacy and transparency of the sampling and data verification approach;

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3.4 Compliance with the methodological requirements and evidence-based verification principles. **Sampling plan**

Based on the Validation/Verification Plan, a Sampling Plan was established for the years to be verified (01/04/2019 to 31/12/2022) and for the Project's accreditation period (01/04/2022 to 31/03/2029). This plan identifies the project's emission sources, the type of fuel used and the activity that generates greenhouse gas (GHG) emission reductions, including the amount generated and its respective percentage of significance, which must be equal to or greater than 95%, see Table 4. Those identified with blue color are the ones that should be compared mainly, considering a percentage of emissions covered at the site of 100%.

As part of the Validation and Verification activities for the compilation of evidence, the following techniques to be applied are contemplated:

- Observation: it is the ocular evaluation performed to make sure how the operations are executed;
- Recalculation: analysis based on the calculation tools applied;
- Interview;
- Sample.

Table 4. Helios Santa Rosa sampling plan

Period	Project scenario	Line base scenario	Baseline scenario fuel	Activity to be performed: Validation / Verification	Project scenario		Line base scenario	
					Emissions t CO <sub>2</sub> e	%	Reductions t CO <sub>2</sub>	%
01/04/2022 al 31/03/2023	Generation of grid-connected renewable electricity based on Solar	Electricity generation in fossil fuel-fired power plants Natural	Natural Gas (NG)	Validation / Verification	4,385	8.43	0.00	100.00
01/04/2023 al 31/03/2024			Fuel Oil (FO) Gas oil (GO) CMI (Mineral Coal) Domestic	Validation / Verification	3773	6.06	0.00	100.00

Period	Project scenario	Line base scenario	Baseline scenario fuel	Activity to be performed: Validation / Verification	Project scenario		Line base scenario	
					Emissions t CO <sub>2</sub> e	%	Reductions t CO <sub>2</sub>	%
01/04/2024 al 31/03/2025	Photovoltaic technology.		CMi (Mineral Coal) Imported	Validation / Verification	2858	2.80	0.00	100.00
01/04/2025 al 31/03/2026				Validation	12,174.50	16.72	0.00	100.00
01/04/2026 al 31/03/2027				Validation	12,118.32	16.65	0.00	100.00
01/04/2027 al 31/03/2028				Validation	12,062.13	16.57	0.00	100.00
01/04/2028 al 31/03/2029				Validation	12,211.62	16.77	0.00	100.00

## 4 Validation and verification procedures and means

### 4.1 Preliminary assessment

The validation and verification team of ANCE requested the necessary information to carry out the preliminary analysis of the Helios Santa Rosa Solar PV plant project in the following order:

- It was verified that the project was registered on the BCR platform, where it was observed that the Project ID is BCR-AR-211-1-001.
- It was confirmed that the Project activity aligns with the Energy industries (renewable sources/energy efficiency) sector, specifically under the category of Grid-connected electricity generation from renewable sources. This aligns with the objective of Tassaroli S.A. to produce renewable electricity through its two photovoltaic plants, Helio Santa Rosa 1 and Helio Santa Rosa 2, to be supplied to the Argentine Electrical System (<https://tassaroli.com.ar/en/renewable-energy/>).
- The emission reductions were estimated in accordance with the methodology AMS-I.D Small-scale Methodology: Grid-connected renewable electricity generation,

Version 18.0, as the renewable energy project involves the displacement of electricity that would otherwise be supplied to the grid by more GHG-intensive means.

The information requested from the project owner prior to the site visit was used to develop the evidence collection plan and verification plan described in the following sections. Additionally, the ANCE team conducted an analysis and cross-check of the calculation variables, emission factors, global warming potentials, and values used for the estimation of emission reductions.

## 4.2 Document review

Table 5. Documents reviewed during validation and verification of the project

Document title	Version (if applicable)	Author(s)/ organization name/ reference (if applicable)	Document provider	Cross-checking applied	
Project Document Template , HELIOS SANTA ROSA I & II SOLAR PV PLANT	01	Tassaroli S.A. , consultant: Leonel Mingo	Julieta Zanona	I	Main document containing the entire project description in accordance with the BSR Standard, which the ANCE team reviewed for the complete project analysis.
2. Emission Reductions. Solar PV Plant Santa Rosa	01	Tassaroli S.A. , consultant: Leonel Mingo	Julieta Zanona	II	First review of the project's emission reduction estimation calculation
2. BioCarbon_Monitoring-Report-Helios Santa Rosa Solar PV Plant.pdf-	02	Tassaroli S.A. , consultant: Leonel Mingo	Julieta Zanona	III	The project's monitoring activities carried out during the accreditation period were reviewed.
Helio Santa Rosa Photovoltaic Project Plan, Earthworks and Leveling Adjustment	01	ICSA	Paula Piastrillini	IV	Document where the measurements of the Photovoltaic Project (ex-ante) were observed
DESCRIPTIVE REPORT, 6.23 MWp PHOTOVOLTAIC SOLAR POWER PLANT IN SANTA ROSA - MENDOZA (ARGENTINA), HELIOS SANTA ROSA PV	Not defined	Helios Santa Rosa Solar PV plant	Paula Piastrillini	V	Document describing the characteristics of the Project, including photographs of the site before the installation of the photovoltaic panels, technical data on construction and operation, and climatic conditions. It contains the technical and economic justification for carrying out the project, such as the climatic advantages of the area (maximum of 8 kWh/m <sup>2</sup> ) and the increase in the cost of fossil energy sources.

Document title	Version (if applicable)	Author(s)/ organization name/ reference (if applicable)	Document provider	Cross-checking applied	
PVsyst – Simulation report	Not defi	INGETEC (Argentina)	Paula Piastrillini	VI	The performance of the Helios Santa Rosa Solar Park was observed through simulations. This document specifies that the aging parameter is 20 years.
Resolution No. 19, EX 2019-00949239-GDMZA-SAYOT. Environmental study	N.A.	Mendoza Goberment	Paula Piastrillini	VII	We reviewed the resoulution in which the government of Mendoza approved the Helio Santa Rosa Project, according to the Environmental Study.
COMMERCIAL AUTHORIZATION CAMMESA No. B-160165-1 Helios Santa Rosa I	N.A.	CAMMESA	Paula Piastrillini	VIII	The start-up date and the activity of the project, authorized by CAMMESA, were reviewed.
COMMERCIAL AUTHORIZATION CAMMESA HSR II - B-173489-1_FV” Helios Santa Rosa II	N.A.	CAMMESA	Paula Piastrillini	IX	The start-up date and the activity of the project, authorized by CAMMESA, were reviewed.
ENRE Resolution No. RESOL-2022-98-APN-ENRE#MEC	N.A.	ENRE	Paula Piastrillini	X	Document issued by ENTE NACIONAL REGULADOR DE LA ELECTRICIDAD for the rules of operation in the generation of electric energy.
Note NO-2024-40979978-APN-ENRE#MEC	N.A.	ENRE	Paula Piastrillini	XI	Document issued by ENTE NACIONAL REGULADOR DE LA ELECTRICIDAD for the rules of operation in the generation of electric energy.
RPE - V FINAL - PSHSR - FINAL SIMULATION SOLARGIS-Vo.2[1] (1)	N.A.	ICSA	Julieta Zanona	XII	which includes the file ‘Memoria Descriptiva del Proyecto rev 04’ and ‘LAY OUT SRI’ which is the general

Document title	Version (if applicable)	Author(s)/ organization name/ reference (if applicable)	Document provider	Cross-checking applied	
					plan referenced in the annex of the last report.
"RPE - V FINAL- PSFV HSR II - SOLARGIS.VC1- Report (1)"	N.A.	ICSA	Julieta Zanona	XIII	which includes the file '01a- Memoria Descriptiva_Helios Santa Rosa II' and 'LAY OUT SR II' which is the general plan referenced in the annex of the last report.
Memoria Descriptiva del Proyecto rev 04	N.A.	Tassaroli	Julieta Zanona	XIV	In this document the technical design data were observed.
01a- Memoria Descriptiva_Helios Santa Rosa II	N.A.	Tassaroli	Julieta Zanona	XV	In this document the technical design data were observed.
201002 SFV HELIOS - Informes Consolidados EMESA	N.A.	EMESA	Julieta Zanona	XVI	The feasibility of the project was reviewed, both financially and technically.
Planilla análisis de proyectos EERR - HSR II (30 años) - Con ICSA-REV 202309.xlsx	N.A.	EMESA	Julieta Zanona	XVII	The feasibility of the project was reviewed, both financially and technically.
Planilla análisis de proyectos TT - v2.xlsx	N.A.	Tassaroli	Julieta Zanona	XVIII	The feasibility of the project was reviewed, both financially and technically.
Planilla analisis economico proyecto solar con creditos de carbono.xlsx	N.A.	Tassaroli	Julieta Zanona	IXX	The economic feasibility of the project was reviewed.
2024-01 Cred 0051-00094257	N.A.	Tassaroli	Julieta Zanona	XX	the invoicing generated for CAMMESA was observed.

<b>Document title</b>	<b>Version (if applicable)</b>	<b>Author(s)/ organization name/ reference (if applicable)</b>	<b>Document provider</b>	<b>Cross-checking applied</b>	
2024-02 Cred 0051-00094817	N.A.	Tassaroli	Julieta Zanona	XXI	the invoicing generated for CAMMESA was observed.
2024-03 Cred 0051-00095374	N.A.	Tassaroli	Julieta Zanona	XXII	the invoicing generated for CAMMESA was observed.
2024-04 Cred 0051-00095934	N.A.	Tassaroli	Julieta Zanona	XXIII	the invoicing generated for CAMMESA was observed.
HSR1-Cred A-0051-00096487	N.A.	Tassaroli	Julieta Zanona	XXIV	the invoicing generated for CAMMESA was observed.
HSR1-Cred A-0051-00097093	N.A.	Tassaroli	Julieta Zanona	XXV	the invoicing generated for CAMMESA was observed.
HSR1-Cred A-0051-00097690	N.A.	Tassaroli	Julieta Zanona	XXVI	the invoicing generated for CAMMESA was observed.
HSR1-Cred A-0051-00098263	N.A.	Tassaroli	Julieta Zanona	XXVII	the invoicing generated for CAMMESA was observed.
HSR1-Cred A-0051-00098844	N.A.	Tassaroli	Julieta Zanona	XXVIII	the invoicing generated for CAMMESA was observed.
MATRIZ LEGAL Energías renovables.xlsx	N.A.	Tassaroli	Paula Piastrillini	XXIX	Legal compliance was validated
INFORME EV DE CUMPLIMIENTO LEGAL 2024 (pdf)	N.A.	Tassaroli	Paula Piastrillini	XXX	Legal compliance was validated
MATRIZ LEGAL Energías renovables (xlsx)	N.A.	Tassaroli	Paula Piastrillini	XXXI	Legal compliance was validated

Document title	Version (if applicable)	Author(s)/ organization name/ reference (if applicable)	Document provider	Cross-checking applied		
Estatuto Tassaroli S.A. Legalizado a 08.2024 (pdf)	N.A.	Tassaroli	Paula Piastrillini	XXXII	Tassaroli's ownership was validated.	
Balance 2023_Tassaroli (xlsx)	N.A.	Tassaroli	Paula Piastrillini	XXXIII	The financial analysis and the financial health of the project were observed.	
Asistencia consulta publica (xlsx)	N.A.	Tassaroli	Julieta Zanona	XXXIX	The activity was observed with stakeholders	
Nomina Helios (pdf)	N.A.	Tassaroli	Paula Piastrillini	XL	The participation of women in the project was validated.	
Manual de conducta TSA	N.A.	Tassaroli	Paula Piastrillini	XLI	The participation of women in the project was validated.	
PG-A-001_Rev.1 (pdf)  PROCEDURE OF THE ENVIRONMENTAL MANAGEMENT SYSTEM	01	Tassaroli	Julieta Zanona	XLII	The project's emission reduction management procedures were reviewed.	
certificado libre de PCB (pdf)	N.A.	Tassaroli	Julieta Zanona	XLIII	The environmental impacts of the project were validated	
Código de ética TSA (pdf)	N.A.	Tassaroli	Julieta Zanona	XLIV	Compliance with the SDGs was observed	
CONVENIO MARCO DE ASISTENCIA Y COOPERACIÓN RECÍPROCA firmado (pdf)	N.A.	Tassaroli	Julieta Zanona	XLVI	Compliance with the SDGs was observed	
RESOL-3-00849-2023-2022-2023-2023-04-13-14-29-09 1 (pdf)	N.A.	Tassaroli	Julieta Zanona	XLVII	Compliance with the SDGs was observed	

Document title	Version (if applicable)	Author(s)/ organization name/ reference (if applicable)	Document provider	Cross-checking applied		
InformeHC-ISO-Tassaroli2022_V3 (6) (pdf)  InformeHC-ISO-Tassaroli2023_V1 (pdf)	N.A.	HINS	Julieta Zanona	XLVIII	Compliance with the SDGs was observed	
Estrategia de mitigación - Tassaroli_REVo2 (pdf)	N.A.	HINS	Julieta Zanona	XLIX	Compliance with the SDGs was observed	
BCR_Herramienta-ODS proyecto Santa Rosa.xls	01	Tassaroli	Julieta Zanona	L	SDG review	
2. Emission Reductions. Helios Santa Rosa Solar PV Plant VALIDACION.xlsx	02	Tassaroli	Julieta Zanona	LI	final review of the project's emission reduction estimation calculation	
3. Emission Reductions. Helios Santa Rosa Solar PV Plant VERIFICACIÓN.xlsx	02	Tassaroli	Julieta Zanona	LII		
“Boleto de compra-venta del incumebre”, number serie 000496331	N.A.	Notarial actuation San Rafael Mendoza	Paula Piastrillini	LIII	The ownership of the Project area is reviewed.	
REG-026 PFV Helios Santa Rosa 2 - Programa de Mantenimiento_ Rev.1 (al 24-10-24).xlsx	N.A.	N.A.	Paula Piastrillini	LIV	Review of operation and maintenance	
TRO Parque STa Rosa Endoso 1.pdf	N.A.	Mercantil Andina	Paula Piastrillini	LV	Assurance	

Document title	Version (if applicable)	Author(s)/ organization name/ reference (if applicable)	Document provider	Cross-checking applied	
Asistencia de consulta publica. xlsx	N.A.	N.A.	Julieta Zanona	LVI	The attendance of stakeholders and the information that was shared with them were reviewed.
RV_ Mediciones del SMEC.msg	N.A.	CAMMESA	Julieta Zanona	LVII	Statement provided through responses from CAMMESA (Guillermo Tusman, guillermotusman@cammesa.com.ar) to clarify the calibrations performed on the energy injection metering equipment.
Balance 2023_Tassaroli.pdf	N.A.	Consejo Profesional de Ciencias Económicas, PROVINCIA DE MENDOZA	Paula Piastrillini	LVIII	Within the document, the "Investments: Facts and Perspectives" section addresses the investment for the construction of the solar power generation plants and the operation of the Helios Santa Rosa I and II plants.
TRO Parque STa Rosa Endoso 1.pdf	N.A.	Mercantil Andina	Paula Piastrillini	LIX	Policy 0019455415

### 4.3 Interviews

Table 6. Interviews carried out during the on-site visit to the project

Name	In charge of	Associated process	Activity/source/sink/reservoir
Leonel Mongui	Developer, writing the Project Description Document	Additionality	<p>Review of the documentation submitted concerning compliance with the additionality criterion.</p> <p>The text presented in the PDD was discussed. The attached databases, which argue the financial barriers and the barriers to investment, were reviewed.</p> <p>The data sources were verified, and the suggested web pages were reviewed to support the information.</p>

Name	In charge of	Associated process	Activity/source/sink/reservoir
			We reviewed the bases for demonstrating the additionality criterion following the regulations related to the AMS-I.D methodology and the criteria to justify the financial additionality and the additionality due to investment barriers.
Leonel Mongui	Developer, writing the Project Description Document	Baseline	<p>The project baseline corresponds to each generation unit included in the Argentina Interconnection System (Sistema Argentino de Interconexión - SADI, as per its acronym in spanish) under the AMS-I.D. methodology.</p> <p>The proponents explained the operation of the system, the composition of the system, the regulations for injecting electricity into the grid, the companies that control access to the Wholesale Electricity Market (Mercado Electrico Mayorista - MEM) and the emissions of the system through government websites that calculate the operating margins and the construction margin.</p> <p>The combined margin was verified by considering the weights accepted by the methodology for 2022 and 2023, the years for which information is available from SADI.</p>
Germán Brega	Operation & Maintenance Leader.	Monitoring plan, calibration plan and data storage	<p>The maintenance engineer presented the elements that make up the monitoring and control equipment of the photovoltaic plant.</p> <p>Emphasis was placed on the monitoring elements of the electricity injected into the grid. There are two pieces of equipment, one owned by Tessaroli and another owned by CAMMESA, the state company in charge of electricity transmission in the Argentine Interconnection System (SADI). It was clarified that Tessaroli has no control over the CAMMESA meter, although it is located within the Helios Santa Rosa I and II photovoltaic site. This instrument determines the amount of electricity the solar park delivers to the SADI. Furthermore, given that the solar park is 5 km away from the electricity substation, the meter automatically makes a discount for the losses due to transport to the delivery point.</p>

<b>Name</b>	<b>In charge of</b>	<b>Associated process</b>	<b>Activity/source/sink/reservoir</b>
			On the other hand, he also spoke about the control systems and information storage on the company's servers.
Julieta Zanona	Renewable Energy and Energy Efficiency Engineer	Calculation of emissions reduced in the period 2022-2024	<p>A review of the Monitoring Report was carried out.</p> <p>It was determined that the Ministry of Energy is the source of information on the operating and construction margins.</p> <p>It was determined that CAMMESA's monthly billing reports are the source of information related to generation. (For this specific case, CAMMESA sets the amount of kWh that will be billed and paid to Tassaroli S.A.)</p> <p>The weighting factor for the first accreditation period was shown to be correct.</p> <p>It was shown that the calculation of reduced emissions is incorrect because the emissions factor for 2023 and 2024 was not considered.</p> <p>The monitoring report calculates an emission reduction of 11,999 tCO<sub>2</sub>e in the accreditation period, while an on-site exercise estimated a total emission reduction of 8,049 tCO<sub>2</sub>e. The materiality is 72%, well below the level required for this report.</p>
Paula Piastrellini	Head of Legal Department	SDGs	<p>She explained the SDG indicators;</p> <p>SDG 4 presented the attendance list of participants to the courses offered by Tassaroli to the population and photos as evidence.</p> <p>SDG 5 explained the gender equality indicators that Tassaroli implements, currently reaching a workforce with 66.6% of women working.</p> <p>SDG 7 the main activity of the project is the generation of electric energy by photovoltaic cells, the indicator is demonstrated with the verified generation.</p>

Name	In charge of	Associated process	Activity/source/sink/reservoir
			<p>SDG 9 explained that Tassarolli encourages workers to carry out projects to improve efficiency in processes and activities, with the Helios Santa Rosa Solar PV plant Project being part of this initiative.</p> <p>She presented an explanation of social risks. In this case, it was validated that there are no communities living around the project, so the identification of the risk was evaluated with the main stakeholders and the workers. The working conditions that apply in Tassaroli and the code of ethics that is communicated and accepted by the workers were explained.</p> <p>She explained the financial risk, which, as a result of an internal evaluation, has been determined to be low and, as a mitigation measure, they have presented policy 001945415.</p>
Julieta Zanona	Renewable Energy at Energy Efficiency Engineer	FSRs	<p>She explained how the identification of environmental risks and mitigation measures were carried out, the Environmental Impact Statement and the resolutions of the Government of Mendoza, Secretary of Environment and Territorial Planning (RS-2020-00395426-GDEMZA-SAYOT) were reviewed and as a mitigation measure, the insurance for operational risks was shown.</p>

#### 4.4 On-site visit

Activities performed during the onsite inspection included:

- The comprehensive on-site review within the project boundaries.
- Interviewing the personnel involved in the different processes of Tassaroli's Helios Team, data generation, and management, as well as keeping a detailed record of both the FSR reviews and the interviews.
- Considerations of GHG SFRs.
- V/V the operational and control procedures that the responsible party will implement to ensure the quality, integrity and security of the GHG information;
- V/V the processes of the GHG information management system used to collect, consolidate, transfer, process, analyse, correct or adjust, aggregate (or disaggregate) and store the responsible party's GHG information;
- V/V the processes used to collect and review any documentation supporting the GHG information provided;

- V/V the application of assumptions and considerations;
- Corroborate the availability of evidence for the responsible party's GHG reporting and declaration;
- Reports containing statements on GHG emissions, removals, emission reductions or removal increases related to the responsible party's GHG declaration.

The timing for the Onsite visit was as follows:

Table 7. Site visit agenda

<b>AGENDA (10/17/2024)</b>		
<b>Schedule</b>	<b>DEVELOPMENT OF THE VALIDATION/VERIFICATION</b>	<b>TEAM MEMBER INVOLVED</b>
09:00 a 09:40 h	<b>Kick-off meeting.</b>	*JCC / **EEAM
	• Give an introduction of the validation and verification service.	
	• Discuss the availability of resources needed to carry out the validation and verification.	
	• Read out the validation and verification plan.	
	• Inform the client of the principles governing the activity of the CAB-ANCE.	
9:40 a 11:30 h	• Report the results of the validation and documentary verification.	JCC
	<b>Development of on-site validation/verification.</b>	
	• Request an introduction to the processes and activities involved in the Project.	
	• Request a tour of the project's geographic location site.	
11:30 a 12:15 h	• Evaluate data and information on GHG sources.	JCC
12:15 a 13:00 h	• Review of additionality arguments	EEAM
	• Review of baseline arguments	
13:00 a 14:00 h		
<b>PROPOSED LUNCHTIME</b>		
14:00 a 18:00 h	• Evaluation of risk assessment. • Evaluation of the assessment of the SDGs • Review of Monitoring Plan	JCC y EEAM
<b>AGENDA (10/18/2024)</b>		

Schedule	DEVELOPMENT OF THE VALIDATION/VERIFICATION	TEAM MEMBER INVOLVED
9:30 a 11:30 h	<b>Development of on-site validation/verification.</b> <ul style="list-style-type: none"> <li>Review of operating margin, construction margin and combined margin calculations.</li> </ul>	JCC
11:30 a 12:15 h	<ul style="list-style-type: none"> <li>Review of generation data</li> </ul>	JCC
12:15 a 13:00 h	<ul style="list-style-type: none"> <li>Determination of the calibration status of each monitoring element.</li> </ul>	JCC
13:00 a 14:00 h	<b>PROPOSED LUNCHTIME</b>	
14:00 a 17:00 h	<ul style="list-style-type: none"> <li>Continued validation/verification and ratification of information associated with reported FSRs and emission reductions and/or increases in GHG removals.</li> </ul>	JCC y EEAM
17:00 a 17:30 h	<ul style="list-style-type: none"> <li>Preparation of the report of findings.</li> </ul>	JCC y EEAM
17:30 a 18:00 h	<b>Closing meeting.</b> <ul style="list-style-type: none"> <li>Communicate the findings of the site visit.</li> <li>Inform about the next steps for the conclusion of the service. .</li> </ul>	JCC y EEAM

\*JCC: Juan Carlos Caycedo

\*\*EEAM: Excalibur Ernesto Acosta Miranda

#### 4.5 Clarification, corrective and forward actions request

During the documentary review and on-site inspection carried out by ANCE, the information supporting the statements in the Helios Santa Rosa Solar PV plant project was reviewed, considering the Methodological tool and the BCR Standard.

No FARs were identified as a validation/verification process; all findings were closed.

The validation and verification of the proposed BCR project activity include the following phases:

1. Assessment of the design of the proposed project and its compliance with the relevant BCR requirements, through a desk review of the project document, carried out between 08/10/2024 and 16/10/2024.
2. Assessment of stakeholders' comments via the Global Carbon Trace website and the project document.
3. Evaluation of the applicability of the methodology "AMS I.D. Grid connected renewable electricity generation Version 18.0" and its correct application, including the selection of the baseline and the monitoring plan.
4. Evaluation of the project's additionality argument against the rules and guidance established in "Tool 01: Tool for the demonstration and assessment of additionality, Version 07.0."

5. A site visit was conducted from 17/10/2024 to 18/10/2024 in order to assess the implementation process of the project activity.
6. An evaluation of data and calculation of GHG reductions was carried out.
7. Issuance of a findings report.
8. Issuance of the combined validation and verification report.
9. Independent review.
10. Approval of the validation report and registration request.

During the validation and verification process, a Findings Report (using “Annex 2. Clarification requests, corrective action requests and forward action requests” of this combined report) was employed to submit the findings to the project participants.

In accordance with the terminology of the BCR Standard Version 3.4, the team reports non-conformities in the form of Corrective Action Requests (CARs), Clarification Requests (CLs) and Forward Action Requests (FARs). Below is an explanation of when and for which types of non-conformities CARs, CLs and FARs are issued.

#### **4.5.1 Clarification requests (CLs)**

As a result of this evaluation, five (5) Clarification Requests (CL) were identified in the validation process. The CLs were closed based on adequate responses from the project owner, which comply with the applicable requirements; the findings were re-evaluated before formal acceptance and closure. All required changes can be observed in the PD and MR.

Findings established during validation may be considered as a non-compliance with the validation criteria or as an identified risk to achieving the project objectives. A Corrective Action Request (CAR) should be issued if any of the following occurs:

- A non-compliance with program requirements or the applied methodology is found in the project description and/or has not been sufficiently documented by the project participants, or if the evidence provided to demonstrate compliance is insufficient.
- Errors have been made in applying assumptions, data, or emission-reduction calculations that will affect the amount of emission reductions.

#### **4.5.2 Corrective actions request (CARs)**

As a result of this evaluation, seven (6) Corrective Action Requests (CARs) were identified in the validation process. The CARs were closed based on adequate responses from the project owner, which comply with the applicable requirements; the findings were re-evaluated before formal acceptance and closure. All required changes can be observed in the PD and in the relevant annexes.

#### 4.5.3 Forward action request (FARs)

Not applicable, during the validation and verification process there was no request for corrective actions.

Upon resolution of the findings, the ANCE auditor concluded that the PD, the MR, and the spreadsheets are correct and complete, and provide an understanding of the nature of the project and its climate benefits. In addition, the project owner demonstrates how GHG emission reductions are achieved and monitored.

In Annex 2, below, provide a summary of any CLs, CARs and FARs raised, including the response provided by the project holder, any resulting changes to the project documents and, the final conclusion.

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## 5 Validation findings

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### 5.1 Project description

During the validation of the Project, it was understood that it is being registered ex-post. The project was built in the department of Santa Rosa, Mendoza province, Argentina, and involves electricity generation through two photovoltaic parks (Helio Santa Rosa I and II) with a capacity of 5.618 KWP and a nominal power of 5 MWac (with an expansion to 10 MWac). The company Tassaroli S.A. has met the operational requirements of the Project in compliance with /VII/.

The Project is categorized as small-scale (with a capacity of less than 15 MW), which was verified through the declarations of the Wholesale Electricity Market Administration Company (CAMMESA by its acronym in Spanish). For the Helio Santa Rosa I park, the capacity is 5 MW /VIII/, and for Helio Santa Rosa II, it is 5.2 MW /IX/.

The Commercial Authorization for the Helios Santa Rosa PV Photovoltaic Solar Park, owned by the generator agent Tassaroli S.A., was reviewed. For the Helio Santa Rosa I photovoltaic park, this authorization was issued by CAMMESA, validating that the minimum operational requirements were met, enabling Commercial Operation in the Wholesale Electricity Market (MEM by its acronym in Spanish) of Buenos Aires, Argentina, on March 29, 2022 /VIII/. Similarly, the Commercial Operation Authorization for the MEM of the Helio Santa Rosa II Photovoltaic Solar Park was granted on May 4, 2024 /IX/. Both documents were requested and reviewed during the validation and verification of the Project. The accuracy of the information contained in these documents was confirmed through signature verification and cross-checking with the CAMMESA website (<http://www.cammesa.com>).

The Helios Santa Rosa Solar PV plant project was implemented with the intention of reducing electricity consumption derived from fossil fuels, as mentioned in the project document. It was observed that in Argentina, there is a significant proportion of energy generation from fossil fuels (<https://www.argentina.gob.ar/sistema-unificado-de->

[informacion-energetica](#)). Therefore, this project meets the criteria to be considered under the BCR requirements for emission reductions. Using the Clean Development Mechanism (CDM) methodology AMS-I.D, the baseline and project scenario were calculated. The application of this analysis and compliance with the BCR criteria will be described throughout this document.

## 5.2 Project type and eligibility

The validation/verification team assessed the information presented by the GHG project holder taking account the following steps:

### Step 1.

During the validation of the project, the CDM methodology (which is permitted by the BCR) AMS-I.D Small-scale Methodology: Grid-connected renewable electricity generation, Version 18.0, Sectoral scope(s): 01, was reviewed. Its scope was analyzed as follows:

“2. This methodology comprises renewable energy generation units, such as photovoltaic, hydro, tidal/wave, wind, geothermal and renewable biomass:

- (a) Supplying electricity to a national or a regional grid; or
- (b) Supplying electricity to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling.”

This condition was reviewed through the Commercial Authorization document issued by CAMMESA /VIII, IX/, which establishes that the project owner will generate renewable electricity through two photovoltaic parks, Helios Santa Rosa Solar PV plant. Additionally, during the site visit, the generation equipment of the parks was observed.

Option (a) was also validated, as Tassaroli S.A. supplies energy to the grid through the Argentine Interconnection System (SADI by its acronym in Spanish), and this operation is authorized by the National Electricity Regulatory Entity (ENRE by its acronym in Spanish), under the following resolutions:

- Helios Santa Rosa I - ENRE Resolution No. RESOL-2022-98-APN-ENRE#MEC<sup>1</sup>
- Helios Santa Rosa II - Note NO-2024-40979978-APN-ENRE#MEC\*\*

Option (b), this scenario its not applicable.

In the documentary analysis conducted on the Helios Santa Rosa Solar PV plant Project, the following was validated:

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<sup>1</sup> [RESOL-2022-698-APN-ENRE-MEC.pdf](#)

Con formato: Español (México)

Con formato: Español (México)

Código de campo cambiado

- a) CO<sub>2</sub> was considered as the greenhouse gas (GHG) reduction, which is covered under the Kyoto Protocol.
- b) The project is not subject to any regulation on emission reductions required by any law, regulation, or legally binding mandate issued by the government of Buenos Aires, Argentina (this is addressed in the Additionality section).
- c), d) Due to the nature of the Helios Santa Rosa Solar PV plant Project (renewable electricity generation), no activity related to the AFOLU sector is applicable.
- e), f) The project holder applied the CDM methodology \*AMS-I.D Small-scale Methodology: Grid-connected renewable electricity generation, Version 18.0, Sectoral scope(s): 01, which, according to point 10 of the BCR Standard, is permitted: "Project holders in the energy, transportation, and waste sector shall use methodologies approved by the Executive Board of the Clean Development Mechanism (CDM – UNFCCC)."

## Step 2.

The ANCE team observed that the way the project holder generates electricity is through two photovoltaic parks, Helios Santa Rosa I and II. According to the descriptive report,

### Helios Santa Rosa I /XIV/

The photovoltaic plant consists of monofacial and bifacial panels. The monofacial subfield includes 7,920 TRINA SOLAR TSM-DE19 modules, distributed as follows:

- 4,760 panels with a nominal power of 540 Wp and 20.7% efficiency under Standard Test Conditions (STC).
- 3,160 panels with a nominal power of 545 Wp and 20.9% efficiency (STC).

The bifacial subfield consists of 3,600 TRINA SOLAR TSM-DEG19C.20 panels, distributed as follows:

- 920 panels with a nominal power of 535 Wp and 20.5% efficiency (STC).
- 2,680 panels with a nominal power of 540 Wp and 20.7% efficiency (STC).

### Helios Santa Rosa II /XV/

The Helios Santa Rosa II Photovoltaic Plant replicates the technology and construction conditions of the Helios Santa Rosa I solar park. It is located on the same site as the previous project, immediately to the north.

The photovoltaic solar plant consists of 9,600 modules of 655 Wp under Standard Test Conditions (STC), resulting in a total peak power of 6.28 MWp. The maximum power at the Point of Interconnection (PDI), located in the Santa Rosa Substation, is 5.2 MW. Therefore, the DC/AC ratio considered in the design is 1.2.

The total peak power is 6.232 kWp.  
However, the maximum power at the Point of Interconnection (PDI), as determined by the electrical studies conducted, is 5 MW, which limits the project to 5 MW.

It was validated that the energy generation qualifies as Non-Conventional and Renewable Energy Sources (NCRE), corresponding to the energy sector and solar type.

### Step 3.

As evaluated in the previous step, the project generates renewable electricity through photovoltaic cells, which is considered a Non-Conventional and Renewable Energy Source (NCRE). Therefore, ANCE validates the activity in solar energy generation.

### Step 4.

The project owner has classified the project as small-scale since the park has an installed capacity of 10.2 MW. This was validated with the documents issued by CAMMESA. For Helios Santa Rosa I, operation was authorized for a net power of 5 MW, and for Helios Santa Rosa II, for 5.2 MW /VIII y IX/.

The steps described above are summarized in Table 7 below.

Table 8. Project type and eligibility

Eligibility criteria	Evaluation by validation body
<b>Scope of the BCR Standard</b>	<p>It was validated that the Project complies with the scope described in the AMS-I.D methodology, as it generates renewable electricity from a Non-Conventional Source. Furthermore, the energy generation is supplied to the SADI;</p> <p>The declared GHG reduction is CO<sub>2</sub>;</p> <p>The Project is applying an approved methodology: “AMS-I.D Small-scale Methodology: Grid-connected renewable electricity generation, Version 18.0, Sectoral scope(s): 01.”</p>
<b>Project type</b>	The project belong to Energy sector and is qualified as NCRE.
<b>Project activity(es)</b>	The activity is solar energy generation.

Eligibility criteria	Evaluation by validation body
<b>Project scale (if applicable)</b>	Is a small-scale, the operation was authorized for a net power of 10.2 MW (both).

### 5.3 Grouped project (if applicable)

The project owner did not consider expanding the project area to include new areas; therefore, the project document does not define criteria for the addition of new cases. As a result, this point is not applicable.

### 5.4 Other GHG program

Confirm During the documentary review and on-site inspection interviews, it was validated that the Project has not been registered in any other program.

BCR ([Global CarbonTrace](#)): The project classify as BCR-AR-211-1-001 is the unique in the Registry and it has not tried to register before.

Cercarbono ([EcoRegistry](#)): the project has not been register in this Registry.

CDM ([CDM: Project Activities](#)): the project has not been register in this Registry.

Verra ([Verra Search Page](#)): the project has not been register in this Registry.

Gold Standard ([Projects – Tagged "Renewable Energy"– Gold Standard Marketplace](#)): the project has not been register in this Registry.

CSA ([Clean Projects Registry Listing |GHG Clean Projects](#)): the project has not been register in this Registry.

The evaluation across various GHG project registration platforms confirms that the Helios Santa Rosa Solar PV plant project is not registered in any other system. Therefore, it complies with the requirement that the project must not be part of another registered project in BIOCARBON or other GHG programs, meeting condition of the BCR eligibility criteria.

### 5.5 Quantification of GHG emission reductions and removals

ANCE performed the evaluation of the GHG emissions reduction calculation according to VVM 10.3.1 Means of verification and the methodology AMS-I.D, Small scale Methodology, Grid connected renewable electricity generation, Version 18.0., in addition, the analysis of the calculation file used by the project proponent (Emission Reductions. Solar PV Plant Santa Rosa I & II.xlsx) was performed. The analysis begins by considering the following equation:

$$ER_y = BE_y - (PE_y + LE_y)$$

Where:

$ER_y$ : Emission reductions in the year  $y$  ( $tCO_2$ )

$BE_y$ : Baseline emissions in year  $y$  ( $tCO_2$ )

$PE_y$ : Project emissions in the year  $y$  ( $tCO_2$ )

$LE_y$ : Leakage emissions in the year  $y$  ( $tCO_2$ )

The following steps were carried out to evaluate the above equation and calculate the estimated emissions in the Project:

### Step 1. Identification of baseline variables

For the determination of the baseline, the project proponent used the equation described in the AMS-I.D methodology (5.5):

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

Where:

Table 9. Baseline variables

Variable	Concept	Assessment
$BE_y$	Baseline emissions in year $y$ ( $tCO_2e$ )	The Tassaroli - Helios Santa Rosa Solar PV plant project period was defined in compliance with the AMS-I.D methodology and the BCR Standard, considering that the electricity generated by the project displaces the energy produced by natural gas thermal plants in the grid managed by CAMMESA <sup>2</sup> . By demonstrating that renewable generation replaces electricity with high $CO_2$ intensity, the project ensures that emission reductions are verifiable and measurable. The duration of the project was established based on its operational and regulatory feasibility /VIII y IX/, ensuring that its contribution to climate change mitigation.
$BE_{PJ,y}$	Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year $y$ (MWh).	The project owner Tassaroli - Helios Santa Rosa Solar PV plant has complied with the baseline requirements established in paragraph 24 of the BCR Standard, ensuring that emission reduction calculations are based on official and publicly available data. To determine the quantity of net electricity generation produced and fed

<sup>2</sup> <https://cammesaweb.cammesa.com/operacion/#opreportesactehist>

		into the grid as a result of the project (MWh), official sources were used, specifically data published on the websites of the Secretariat of Energy of the Nation and CAMMESA (Dispatch Center). During validation, the ANCE team verified the traceability and reliability of these sources, confirming that the data used in the PDD is appropriate for calculating the OM (Operating Margin) and BM (Build Margin). This ensures that the estimation of avoided emissions is accurate, transparent, and verifiable, in accordance with the baseline methodology of the BCR Standard.
$EF_{grid,y}$	Combined margin CO <sub>2</sub> 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" (t CO <sub>2</sub> /MWh).	The project owner utilized the official Emission Factor data (December 15, 2021), expressed in t CO <sub>2</sub> /t CO <sub>2</sub> , as published on the CAMMESA website. This ensures that the baseline emissions calculation aligns with verified and publicly available sources, maintaining accuracy and compliance with the AMS-I.D requirements.

#### Sept 2. Identification of project emissions

"The ANCE team validated the condition of point 5.6, Project Emissions, of AMS-I.D. During the document review and on-site visit, no emission sources were found. Therefore, for most renewable energy project activities,  $PE_y = 0$ .

#### Step 3. Identification of lake emissions.

The project does not apply to the condition of leakage in biomass project activities, as it does not involve the use of biomass residues, in the commercial and environmental habilitations the activities of the Project is well define. Therefore, no leakage quantification is required under this criterion.

Table 10. of GHG emission reductions

Period	BE	PE	L	ER
1	5,548.69	0.00	0.00	5,549.0
2	5,312.81	0.00	0.00	5,313.0
3	11,077.28	0.00	0.00	11,077.0
4	11,026.39	0.00	0.00	11,026.0
5	10,975.51	0.00	0.00	10,976.0
6	10924.62	0.00	0.00	10,925.0
7	10858.55	0.00	0.00	10,859.0

Total	65723.85	0.00	0.00	65,723.0
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#### 5.5.1 Start date and quantification period

The start date of the project (01/04/2022) coincides with the start of operations of the Helios Santa Rosa I plant /VIII/. Two years after the project accreditation period began, operation of the Santa Rosa II plant began. The expected period of quantification of emissions reductions for the Helios Santa Rosa Solar PV plant project is 7 years renewable twice; Therefore, the life of the project is expected to be 21 years in accordance with the regulations of the AMS-I.D methodology and the standards of the climate change framework convention.

#### 5.5.2 Application of the selected methodology and tools

##### 5.5.2.1 Title and Reference

The methodology on which this project is built is the AMS-I.D Small-scale Methodology Grid connected renewable electricity generation Version 18.0 Sectoral scope(s): 01.

The AMS-I.D methodology used is applied to the calculation of photovoltaic electricity generation connected to the national electrical grid. Each of the arguments required in the methodology for calculating emissions were evaluated, especially the calculation of emissions of the Argentine national electrical network provided by the State network operator CAMMESA and the amount of electricity injected into the network by the parks. solar helios Santa Rosa I and helio Santa Rosa II during the period 2022 2024 that correspond to the start of operations of Santa Rosa 1 and the date of the ANCE audit visit for this validation/verification. During the visit to the site, it was possible to verify the operation of the solar panels, the amount of electricity injected into the network through the payment invoices issued by CAMMESA, the security elements for the development of the project activity during the accreditation period. of the project and the technical maintenance elements such as information and organizational elements that show the vision of maintaining the business during the medium and long term. The review of all documents submitted as demonstration of compliance were analyzed and the doubts that arose were developed as findings and answered by Tassaroli.

The methodology refers to the following "Tools" to develop the calculation of reduced emissions from the project activity:

1. TOOL 03, Tool to calculate project or leakage CO<sub>2</sub> emissions from fossil fuel combustion v.7; only used in the event that the system that reduces emissions contains electricity generation engines that run on fossil fuels in the baseline. This is not the case for this project activity;
2. TOOL 7, Tool to calculate the emission factor for an electricity system v.7; It is the tool that CAMMESA uses to calculate the emissions factor of the Argentine interconnected network. The values resulting from the calculation of the emissions factor of all the generation units that participate in the SATI are taken

from the CAMMESA website. The methodology used by CAMMESA is Simple Operating Margin. The results are published annually between October and December of the year following the year in which the information is published. CAMMESA is the state operator of the “Argentine Transmission and Interconnection System” (SATI);

3. TOOL 10, Tool to determine the remaining lifetime of equipment v.1; The useful life of the project activity is greater than the 21-year credit period of the project activity. Tassaroli has created commitments with CAMMESA to inject energy into the electrical grid as long as there are economic conditions to maintain the activity. This Tool was not used;
4. TOOL 16, Project and leakage emissions from biomass v.5; Since the project activity does not include the use of biomass, this Tool was not used;

The following Tools were used for the evaluation of additionality either because they have been referenced in the AMS-I.D.v18 methodology or because in the application of some of the Tools it was necessary to expand the approach:

1. TOOL 19, Demonstration of additionality of small-scale project activities v.10; When using this tool, references were found to the use of the Tool for the demonstration and assessment of additionality;
2. TOOL 01, Tool for the demonstration and assessment of additionality v.7
3. TOOL 27, Investment analysis v.14;
4. EB 50 Report Annex 13 Page 1. Annex 13. GUIDELINES FOR OBJECTIVE DEMONSTRATION AND ASSESSMENT OF BARRIERS. (Version 01)
5. TOOL24 Methodological tool Common practice Version 03.1; The tool was referenced but not used given that the central argument for demonstrating additionality is Barrier Analyzes.

Project holders applied methodology AMS-I.D v.18 eligible under BCR Standard. The methodology used included full implementation of the tools or parameters/data referenced.

#### 5.5.2.2 Applicability

The ANCE team evaluated the project’s compliance with all the applicability conditions of the methodology AMS-I.D Grid connected renewable electricity generation Version 18.0, 2.2. Applicability:

- “4. This methodology is applicable to project activities that:
- (a) Install a Greenfield plant;
  - (b) Involve a capacity addition in (an) existing plant(s);
  - (c) Involve a retrofit of (an) existing plant(s);
  - (d) Involve a rehabilitation of (an) existing plant(s)/unit(s); or
  - (e) Involve a replacement of (an) existing plant(s).”

ANCE analysis:

*The Helios Santa Rosa I & II power plant is a pure photovoltaic system, with no fossil fuel-based generation components. This condition has been verified through the supporting documentation, including the commercial operation permit /VIII/, /IX/, which states that the facility holds a “Renewable Electricity Supply Contract signed with CAMMESA”; and the environmental license, which includes an Environmental Impact Assessment /VII/ explicitly confirming that no fossil fuel use is foreseen during the operational phase.*

*The total installed capacity of 10.2 MW (5 MW for Santa Rosa I and 5.2 MW for Santa Rosa II) has been verified through interconnection permits issued by CAMMESA (/VII/, /X/), and is supported by RESOL-2024-210-APN-ENRE#MEC, which states in Report IF-2023-119832407-APN-DAM#ENRE that “the Helios Santa Rosa II Solar Park, with a capacity of 5.2 MW, will be installed on land adjacent to the existing Helios Santa Rosa I Solar Park, with a nominal capacity of 5 MW.”*

*Since the total installed capacity remains below the 15 MW threshold for small-scale projects, and the energy source is entirely renewable, it is concluded that the project fully meets the eligibility criteria set forth under AMS-I.D version 18.0 and the Small-scale CDM scheme for exclusively renewable units.*

*“5. Hydro power plants with reservoirs that satisfy at least one of the following conditions are eligible to apply this methodology:*

- (a) The project activity is implemented in an existing reservoir with no change in the volume of reservoir;*
- (b) The project activity is implemented in an existing reservoir, where the volume of reservoir is increased and the power density of the project activity, as per definitions given in the project emissions section, is greater than 4 W/m<sup>2</sup> ;*
- (c) The project activity results in new reservoirs and the power density of the power plant, as per definitions given in the project emissions section, is greater than 4 W/m<sup>2</sup>.”*

ANCE analysis:

*The project activity involves the generation of electricity through solar panels, as stated in the commercial operation permit /VIII/, /IX/ for the Helios Santa Rosa I & II facilities.*

*6. If the new unit has both renewable and non-renewable components (e.g. a wind/diesel unit), the eligibility limit of 15 MW for a small-scale CDM project activity applies only to the renewable component. If the new unit co-fires fossil fuel, the capacity of the entire unit shall not exceed the limit of 15 MW.*

ANCE analysis:

*According to the technical documentation reviewed, the Helios Santa Rosa Solar PV plant project consists of a 100% photovoltaic installation, with no fossil fuel-based generation components. This condition was verified through the analysis of the commercial operation permit, which states that the facility holds a “Renewable Electricity Supply Contract signed with CAMMESA”, as well as through the review of the Environmental Impact Assessment, which confirms that no use of fossil fuels is foreseen during any phase of operation.*

*Additionally, it was verified that the total installed capacity is 10.2 MW, distributed as 5 MW for Santa Rosa I and 5.2 MW for Santa Rosa II, in accordance with the interconnection permits issued by CAMMESA and as established in RESOL-2024-210-APN-ENRE#MEC. This capacity is below the 15 MW threshold set by the small-scale CDM scheme for exclusively renewable units.*

*“7. Combined heat and power (co-generation) systems are not eligible under this category.”*

*ANCE analysis:*

*The project activity involves the generation of electricity through solar panels, as stated in the commercial operation permit /VIII/, /IX/ for the Helios Santa Rosa I & II facilities.*

*“8. In the case of project activities that involve the capacity addition of renewable energy generation units at an existing renewable power generation facility, the added capacity of the units added by the project should be lower than 15 MW and should be physically distinct from the existing units.”*

*ANCE analysis:*

*The ANCE audit team reviewed the technical configuration of the Helios Santa Rosa Solar PV plant project to assess whether the activity qualifies as a capacity addition to an existing renewable power generation facility. Based on the technical and regulatory documents reviewed, it was determined that the project consists of two independent photovoltaic units: Santa Rosa I, with an installed capacity of 5 MW, and Santa Rosa II, with an installed capacity of 5.2 MW.*

*Both units were developed under separate interconnection permits and environmental approvals, and although they are located on adjacent plots of land, it was verified that Santa Rosa II is physically distinct and independent from Santa Rosa I in terms of infrastructure, electrical connection, and operation. This condition is supported by the RESOL-2024-210-APN-ENRE#MEC, which explicitly states that “Santa Rosa II will be installed on land adjacent to the existing Helios Santa Rosa I Solar Park”. This confirms that the project is not an integrated expansion of a single plant, but rather a technically separate additional unit.*

Furthermore, it was verified that the capacity of the added unit (Santa Rosa II) is 5.2 MW, and therefore remains below the 15 MW threshold established by the methodology for capacity additions.

*“9. In the case of retrofit, rehabilitation or replacement, to qualify as a small-scale project, the total output of the retrofitted, rehabilitated or replacement power plant/unit shall not exceed the limit of 15 MW.”*

ANCE analysis:

The ANCE audit team reviewed the technical nature of the Helios Santa Rosa Solar PV plant project and confirms that it does not involve a retrofit, rehabilitation, or replacement of an existing unit. The project consists of a new photovoltaic power plant, built from the ground up on a site that was previously unoccupied by any power generation infrastructure. This condition was verified through the review of the commercial operation permits, the environmental documentation, and the interconnection records, none of which reference any pre-existing equipment, facilities, or systems that were modified, rehabilitated, or replaced.

Since no conditions of retrofit, rehabilitation, or replacement apply, the 15 MW threshold for modified existing units is not applicable. Accordingly, the eligibility assessment is based solely on the installed capacity of the new unit, which, as previously verified, is 10.2 MW in total, remaining within the limit established under the small-scale CDM project scheme.

*“10. In the case of landfill gas, waste gas, wastewater treatment and agro-industries projects, recovered methane emissions are eligible under a relevant Type III category. If the recovered methane is used for electricity generation for supply to a grid then the baseline for the electricity component shall be in accordance with procedure prescribed under this methodology. If the recovered methane is used for heat generation or cogeneration other applicable Type-I methodologies such as “AMS-I.C.: Thermal energy production with or without electricity” shall be explored.”*

ANCE analysis:

This applicability condition does not apply to the project, and the absence of methane emissions was validated. The project activity involves the generation of electricity through solar panels, as stated in the commercial operation permit /VIII/, /IX/ for the Helios Santa Rosa I & II facilities.

*“11. In case biomass is sourced from dedicated plantations, the applicability criteria in the tool “Project emissions from cultivation of biomass” shall apply.”*

ANCE analysis:

*This applicability condition does not apply to the project, as biomass is not used in the project. The project activity involves the generation of electricity through solar panels, as stated in the commercial operation permit /VIII/, /IX/ for the Helios Santa Rosa I & II facilities.*

*The steps taken to evaluate the project's compliance with all the applicability conditions of the methodology and tools used to quantify the GHG emissions reductions/removals, were as follows:*

- 1. A desk review of the project design documents*
- 2. On site inspection and Follow up interviews with project stakeholders*
- 3. Resolution of outstanding issues and the issuance of a final validation report and opinion.*

*ANCE carries out validation, verification and certification audits of BCR project activities (which, in turn, are based on the BCR standard) focused on the identification of significant risks for GHG emissions reduction generation and the verification of the contribution to climate change mitigation.*

*Findings established during the validation can be seen as:*

- A non-fulfillment of validation protocol criteria, or*
- An identified risk to the fulfillment of the project objectives*

*The findings could take the form of a Corrective Action Request (CAR), Forward Action Request (FAR) or a Clarifications Request (CL). Corrective Action Requests (CAR) are issued where:*

- 1. The project participants have made mistakes which directly influence the ability of the project activity to achieve real, measurable and additional emission reductions;*
- 2. The BCR requirements have not been met; or*
- 3. There is a risk that emission reductions cannot be monitored or calculated*

*After a detailed analysis of documents, site visit, resolution of findings, and review of changes to the PD document, ANCE concludes that methodology AMS-I.D Versión 18 and all of the Tools required to demonstrate additionality, baseline, monitoring of relevant parameters conducting a calculation of emission reductions were fully applied by project participant revised and demonstrated to be true.*

#### **5.5.2.3 Methodology deviations (if applicable)**

*No deviations were considered when assessing this project.*

### 5.5.3 Project boundary, sources and GHGs

In accordance with paragraph 20 of the methodology AMS-I.D v.18./UN1/, “The spatial extent of the project boundary includes the project power plant and all power plants connected physically to the electricity system that the Photovoltaic project power plant is connected to.” This statement was verified by ANCE by means of onsite inspection and documental review of technical description /XII/XIII/ for Helios Santa Rosa I & II and the Argentinean Interconnected electrical grid map and the Authorization of connection issued by CAMMESA /X/ regarding to the connection of this solar power plant to Argentinean Interconnected Electrical System (SADI). The sources of greenhouse gas identified in the BCR PDD are deemed to be appropriate, see Table 11.

Table 11. GHG involved

Stage	GHG involved	Means of Validation
Baseline emissions	CO <sub>2</sub>	Emissions from the generation of electrical power by fossil power plants in Argentinean National Power Grid. (according to emissions factor calculation performed by CAAMMESA on its web page [...])
Project emissions	N.A.	Considered to be neglected as per section 5.6 §39 of AMS-I.D
Leakage	N.A.	Considered to be neglected as per section 5.6 §42 of AMS-I.D

In accordance with the project activity nature and the applied methodology /UN1/, the emission sources are properly described in PDD. The applied methodologies address the greenhouse gas emissions occurring within the project boundary as a result of its implementation. Therefore, there are no greenhouse gas emissions within the project boundary caused by the implementation of the project activity, which contribute to more than 1% of the expected annual emission reductions and are not addressed by the applied methodology. ANCE verified this through the documental review of the project’s works and their nature /X/XII/XIII/.

As per the former statements, ANCE concludes the project boundary, emission sources of the project activity were correctly addressed by project holder.

#### 5.5.3.1 Eligible areas in the GHG project boundaries (for AFOLU projects)

The Helios Santa Rosa Solar PV plant not belong to AFOLU activities.

### 5.5.4 Baseline or reference scenario

The baseline scenario identified by the project proponent is fully consistent with the requirements of AMS-I.D version 18.0, “Grid-connected renewable electricity generation.”

Under this methodology, baseline emissions are limited to CO<sub>2</sub> emissions from grid-connected power plants that are displaced by the project activity and are calculated as:

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

Where:  $BE_y$  = Baseline emissions in year  $y$  (t CO<sub>2</sub>)

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

$EF_{grid,y}$  = Combined margin CO<sub>2</sub> emission factor for grid connected power generation in year  $y$ ;

The project documentation explicitly references paragraph 22 of the methodology to demonstrate this alignment. The proponent has provided a thorough contextualization of the Argentine grid operated by CAMMESA, noting that approximately 58 % of generation was fossil-fuel-based as of 2023, thereby justifying the baseline assumptions.

Step 1. During the project review, no additional assumptions were applied beyond those prescribed by AMS-I.D v18.0. The values used for  $BE_y$  calculation were correct, matched the methodology's requirements, and were sourced from reliable data:

- $EF_{grid,y}$  was taken from CAMMESA's monthly reports, which officially record the national generation mix<sup>3</sup>.
- $EG_{PJ,y}$  was obtained directly from the SMEC commercial meter installed at the solar plant and managed exclusively by CAMMESA.

The SMEC meter ensures secure, traceable, and standardized measurement under national regulations and international standards (IRAM 2421 and IEC 60687). All parameters and data were applied transparently, with clear citations to CAMMESA reports and SMEC measurement records supporting their accuracy and appropriateness.

Step 2. During validation, it was confirmed that electricity injections were continuously metered by both a SMEC class 0.2s meter and a backup class 0.5s meter, each installed in a sealed, tamper-proof enclosure. According to CAMMESA, calibration is triggered only when readings fall outside the "in class" tolerances defined by IRAM 2421 and IEC 60687. Although the project proponent does not perform meter calibrations directly, CAMMESA's regulated

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<sup>3</sup> [Datos Energía - Cálculo del Factor de Emisión de CO<sub>2</sub> de la Red Argentina de Energía Eléctrica](#)

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Código de campo cambiado

process ensures control over generation and supply values, which are also the basis for invoicing between Tassaroli and CAMMESA.

Step 3. The ANCE team reviewed all declared national and sectoral policies in the Project Document (Section 4) and examined supporting compliance evidence, including the “Environmental Legal Requirements Matrix (REG-009).” This policy review is further detailed in Section 5.7 of this report.

Step 4. In accordance with methodology requirements, the ANCE audit team verified that baseline-setting procedures remain consistent with the chosen emission factors, activity data, GHG projection variables, and other parameters. The team examined Section 3.7 (“Mitigation Results”) of the Project Document and performed an independent recalculation of estimated emission reductions using the project’s calculation tool. The recalculated values matched those originally reported, confirming the internal coherence and reliability of the baseline procedures.

Step 5. It was observed that the project proponent implemented data-quality procedures in line with ISO 14064-2 and the applied methodology’s requirements.

Where applicable, the baseline scenario was reassessed by cross-checking all emission factors, decay rates, and model parameters from AMS I.D v18.0 against IPCC default values and the project’s own calculation model. Input activity data (EGPJ,y ) were validated by reviewing the SMEC-recorded electricity generation. National and sectoral policy requirements were confirmed via the “Environmental Legal Requirements Matrix (REG-009).” An independent recalculation of the estimated emission reductions, as presented in Section 3.7 of the Project Document, further reinforced the integrity of the baseline-setting procedures. In all cases, the documentation and data sources underpinning the baseline scenario were found to be directly relevant, methodologically consistent, and fully justified.

#### 5.5.5 Additionality

To demonstrate the additionality of the Project, the PDD has correctly applied “TOOL 19, Demonstration of additionality of small-scale project activities” v.10; “Tool for the demonstration and assessment of additionality” v.7 y “EB 35 Report. Annex 34: Non-binding best practice examples to demonstrate additionality for SSC project activities” v.7 /UN3/. PP used barrier analysis to determine that the project is additional. The details of ANCE’s assessment of the project additionality are described below:

Step 0: During the review of the project documentation, it was observed that the project does not meet the criteria established in Annex 7 – Guidelines on Additionality of First-of-its-Kind Project Activities (Version 02.0). This was validated through the website [¿Cuántos parques solares hay en Argentina?](#) where another solar park was identified in the province of Mendoza, located approximately 20 km from the Helios Santa Rosa Solar PV plant project, with similar technical characteristics..

*Step 1: Identification of alternatives to the project activity consistent with current laws and regulations*

*Sub-step 1a: Define alternatives to the project activity*

*The validation team reviewed the technical, institutional, and contextual information provided by the project proponent to assess compliance with Sub-step 1a of the Tool for the Demonstration and Assessment of Additionality (Version 07.0.0), which requires the identification of realistic and credible alternatives available to project developers that provide services comparable to those of the proposed project activity.*

*Based on the reviewed documentation, the following alternatives were identified:*

- Scenario 1: Modernization of the heat treatment furnaces at Tassaroli's industrial plant.*
- Scenario 2: Implementation of the photovoltaic project connected to the Argentine electricity grid without the revenue from carbon credit sales.*
- Scenario 3: Not undertaking either of the two alternatives mentioned above.*

*In relation to the requirements of the Tool:*

- a) Proposed project activity undertaken without being registered as a CDM project activity:  
It was validated that Scenario 2 meets the criterion by considering the proposed project activity without revenue from the CDM mechanism. This alternative represents the same power generation technology, without the additional financial incentive, and is therefore relevant.*
- b) Other realistic and credible alternative scenarios that provide comparable services:  
The modernization of furnaces (Scenario 1) was presented as an internal investment alternative, competing for financial resources with the photovoltaic project. This approach is acceptable, as the Tool allows for the inclusion of alternative strategic investment scenarios if they are economically relevant.*
- c) Continuation of the current situation:  
Scenario 3, in which neither alternative is pursued, is a valid option and was appropriately justified based on the company's history (over 70 years without undertaking energy generation projects or furnace modernization).*
- d) Identification of technological combinations (paragraph 21):  
Not applicable. The proposed project does not involve multiple technologies or combinable services; therefore, this criterion is not relevant.*
- e) Inclusion of relevant technologies or practices in the country/region (paragraph 22):  
It was validated that the alternatives analysis included practices implemented or available in Argentina, such as the construction of grid-connected solar parks and industrial modernization. The alternatives considered reflect realistic options within the national technological and economic context.*

#### *Sub-step 1b: Consistency with Mandatory Laws and Regulations*

*The validation team assessed the consistency of each identified alternative with mandatory legal and regulatory requirements, in accordance with paragraphs 24 to 26 of the Tool.*

*The project proponent stated that all alternatives identified in Sub-step 1a (i.e., furnace modernization, implementation of the photovoltaic project without carbon credit revenues, and the no-project scenario) comply with all applicable national, provincial, and local laws and regulations. This statement was cross-verified during the site visit and through the review of relevant documentation.*

*Specifically, the validation team reviewed Section 4 of the Project Design Document, titled "Compliance with Laws, Statutes and Other Regulatory Frameworks", where legal compliance for all alternatives is described. During the on-site verification, the project proponent provided a detailed explanation of legal obligations and demonstrated active compliance management.*

*To support this, the project proponent presented the "MATRIZ LEGAL Energías Renovables.xlsx" /XXIX/, which is a comprehensive legal compliance matrix specific to renewable energy regulations. No evidence of non-compliance was identified within this matrix.*

*Additionally, an external legal audit was conducted by the law firm Estudio Jurídico GRP, who issued a Legal Compliance Evaluation /XXX/. This independent assessment was reviewed and found satisfactory by the validation team.*

*Based on the documentation reviewed and the findings of the site visit, it is concluded that:*

- *Scenario 1 (furnace modernization) complies with all mandatory applicable regulations.*
- *Scenario 2 (implementation of the photovoltaic project without carbon credit revenues) also complies with all applicable legal requirements.*
- *Scenario 3 (no action) is by definition legally permissible.*

*There is no indication that any of the alternatives fail to comply with relevant legislation, nor is there evidence of systematic non-enforcement of applicable laws in the jurisdiction of the project.*

#### *Step 2: Investment Analysis*

*The project holder used investment comparison analysis as a way to demonstrate how two of the alternatives relate to each other, making the implementation of the expansion of the steel furnaces ideally better in financial terms than raising photovoltaic capacity, having in mind that Tassaroli has not proved experience in managing an electricity generation*

business. The file “201002 SFV HELIOS - Informes Consolidados EMESA” /XVI/ presents figures of the Santa Rosa I business plan. Document named “Planilla análisis de proyectos EERR - HSR II (30 años) - Con ICESA-REV 202309.xlsx” /XVII/ calculates revenues and costs of the raising capacity of Helios Santa Rosa II /XVII/. Document named “Planilla análisis de proyectos TT - v2.xlsx” /XVIII/ backs up the furnace’s expansion project. ANCE revised assumptions in both two spreadsheets and presentation and they are found reasonable and conservative for the raising capacity Helios Santa Rosa Solar PV plant alternative as well as for the furnace’s expansion alternative. A summary is found in section 3.4 of PDD. The furnace expansion alternative accounts for a lesser NPV but a greater IRR. On the other hand, raising solar capacity without selling VCCs accounts for a higher NPV but a lesser IRR. Both alternatives are considered low feasibility because whatever alternative is implemented will face the same barriers to investment due to the high instability of the Argentina currency. In contrast, the raising of solar capacity with the selling of VCCs accounts for a higher NPV (the higher of all three alternatives) and a higher IRR than the alternative of raising capacity without selling of VCCs but less than the alternative of expanding steel furnaces.

The inflation in Argentina has had a very particular behavior during the last years, as the audit team validated using documental review<sup>4</sup>; hence, the impact of the inflation in the cash flow used for investment analysis could lead to misinterpretations of the outcomes. So, the audit team considered appropriate the decision of the project holder to perform the cash flow in American dollars as the exchange rate to the Argentinean peso could reflect the inflation rates. The audit team reviewed the files/XVI/, /XVII/ and /XVIII/ and confirmed they included the relevant costs and revenues. The assessment period was 30 years; the operation stage took 30 years, and the construction stage (12 months). The audit team deemed it appropriate to undertake the investment analysis for 21 years.

The input values used in all investment analyses are those final values, considering that most expenses have already been executed. In addition, the project holder PP has assumed the investment of this GHG mitigation project with its equity.

### Step 3: Barrier Analysis

Sub-step 3a: Identify barriers that would prevent the implementation of the proposed CDM project activity

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<sup>4</sup><https://www.datosmundial.com/america/argentina/inflacion.php#:~:text=En%20conjunto%2C%20el%20aumento%20de,fue%20del%20108%2C8%25.>

*The validation team assessed the economic, institutional, and financial context of Argentina as presented by the project participant, with a focus on factors that may act as barriers to the implementation of the proposed project in the absence of revenue from carbon credits.*

*Investment barriers were identified and are deemed credible and substantiated, based on:*

*Argentina's high and persistent inflation rates, devaluation of the national currency, and elevated country risk index as reflected in JP Morgan's EMBI+ index.*

*Documentation reviewed (e.g., TradingView graphs, INDEC reports, and Doing Business Index by the World Bank) confirms restricted access to credit markets and severe limitations to obtain financing through both domestic and international channels.*

*Regulatory constraints for foreign currency operations, particularly the Central Bank Communication A7030, which limits capital repatriation and purchase of foreign exchange for equipment imports. Institutional barriers were also found to be credible: SMEs like Tassaroli face additional institutional challenges due to limited access to favorable credit lines and restrictive collateral requirements.*

*Although national programs such as RenovAr and MATER exist, they do not provide sufficient support to ensure the long-term viability of solar PV projects, particularly when payments are made in local currency under high inflation conditions.*

*The project participant presented written and statistical evidence (e.g., legal matrices, market reports, historical project data) that demonstrate these barriers are real, significant, and currently unresolved.*

*Sub-step 3b: Show that the identified barriers would not prevent the implementation of at least one of the alternatives*

*The alternative of not undertaking any of the proposed scenarios (Scenario 3) is not affected by the identified investment or institutional barriers. However:*

- *Scenario 1 (modernization of industrial furnaces) is heavily affected by both investment and institutional barriers, including high capital costs and unfavorable credit access.*
- *Scenario 2 (solar PV project without carbon credit revenue) is also constrained by the same economic barriers and shows a lower financial return, rendering it unviable without CDM support.*

*Therefore, it is demonstrated that the identified barriers prevent the proposed CDM project activity from being implemented in the absence of revenue from carbon credits, while not affecting at least one other alternative (Scenario 3), in accordance with the requirements of Sub-steps 3a and 3b.*

*Step 4: Common Practice Analysis*

The validation team conducted an assessment of the extent to which the proposed project activity aligns with common practice in the applicable geographical area, as required under Step 4 of the “Tool for the demonstration and assessment of additionality” (Version 07.0.0). The purpose of this step is to determine whether similar technologies have been widely adopted in the region prior to the implementation of the project.

#### Definition of Output Range

The proposed project, *Helios Santa Rosa I & II*, has a total installed capacity of 10.2 MW. Following the methodology, the applicable output range is  $\pm 50\%$ , i.e., between 5.1 MW and 15.3 MW.

#### Identification of Comparable Plants (Nall)

Within the province of Mendoza, the validation team identified three grid-connected power plants that:

- Deliver comparable output (electricity),
- Were in commercial operation prior to the start date of the proposed project (April 2022), and
- Fall within the defined capacity range.

These are:

Table 12. Common Practice analysis

Origin	Technology	project name	Installed capacity (MW)	Province	Range
RENOVAR RONDA 1	PAH	P.A.H. CANAL CACIQUE GUAYMALLÉN - SALTO 8	1.20	MENDOZA	Out
RENOVAR RONDA 1	PAH	P.A.H. CANAL CACIQUE GUAYMALLÉN - SALTO 6	1.20	MENDOZA	Out
RENOVAR RONDA 1	PAH	P.A.H. DIQUE TIBURCIO BENEGAS	1.70	MENDOZA	Out
RENOVAR RONDA 1	PAH	P.A.H. TRIPLE SALTO UNIFICADO	0.51	MENDOZA	Out
RENOVAR RONDA 1.5	SOLAR	P.S. PASIP	1.15	MENDOZA	Out
RENOVAR RONDA 2	PAH	P.A.H. SALTO 7	1.20	MENDOZA	Out
RENOVAR RONDA 2	PAH	P.A.H. LUNLUNTA	6.34	MENDOZA	In
RENOVAR RONDA 2	PAH	P.A.H. SALTO 11	0.52	MENDOZA	Out
GENREN	PAH	P.A.H. LUJAN DE CUYO	1.00	MENDOZA	Out
GENREN	PAH	P.A.H. LA LUJANITA	1.70	MENDOZA	Out
RESOLUCIÓN 137/2011	PAH	P.A.H. NIHUIL IV	30.00	MENDOZA	Out

SPOT	PAH	P.A.H. CARRIZAL	17.00	MENDOZA	Out
SPOT	PAH	P.A.H. LOS CORONELES	6.64	MENDOZA	In
SPOT	PAH	P.A.H. EL TIGRE	14.00	MENDOZA	In
SPOT	PAH	P.A.H. SAN MARTIN	6.48	MENDOZA	In
SPOT	PAH	P.A.H. CACHEUTA VI	9.00	MENDOZA	In
MATER-cPDD	SOLAR	P.S. SOLAR DE LOS ANDES	5.00	MENDOZA	Out

PAH: hydroelectric power plant.

Each meets the applicable criteria; therefore,

$$N_{all} = 5$$

Determination of Different Technology (Ndiff)

All three identified plants (El Tigre, Los Coroneles, General San Martín, Lunlunta and Cacheuta VI) utilize hydropower, which differs from the solar photovoltaic technology of the proposed project. Consequently, all comparable plants use a different technology:

$$N_{diff} = 5$$

Calculation of the Common Practice Factor

$$F = 1 - \frac{N_{all}}{N_{diff}} = 1 - \frac{5}{5} = 0$$

$$N_{all} - N_{diff} = 5 - 5 = 0$$

As per the criteria defined in the additionality tool, the project activity is considered a “common practice” only if:

- $F > 0.2$ , and
- $N_{all} - N_{diff} > 3$

Since both conditions are not met, the project activity is not considered common practice in the region.

**Additionality Conclusion**

The validation team concludes that the proposed project activity is not a widely adopted practice in the applicable geographical area. No comparable grid-connected photovoltaic plants of similar scale were in operation prior to the project’s start date. This confirms that the proposed project complies with Step 4 of the additionality assessment tool and further supports the demonstration of additionality.

#### 5.5.6 Conservative approach and uncertainty management

The validation team evaluated the uncertainty management applied in the quantification of the baseline and mitigation outcomes, in accordance with clauses 7.1.4.13 and 7.1.4.14 of ISO 14064-3, as well as the provisions of the BCR Standard and its guidelines for uncertainty management.

The measurement of electricity delivered to the grid, a key parameter in the quantification of GHG emission reductions, is carried out using the SMEC commercial meter, which is exclusively managed and controlled by CAMMESA (the administrator of Argentina's electricity market). This device complies with accuracy class 0.2s, is sealed to prevent tampering, and is subject to precision verification procedures in accordance with IRAM 2421 and IEC 60687 standards, using equipment certified by INTI /LVII/.

Additionally, a secondary backup meter (EDESTA), with accuracy class 0.5s, is available and used only in case of failure of the SMEC meter, following the same control procedures. Both meters are physically secured and sealed, preventing any manipulation by the project proponent, thus ensuring the fidelity and independence of the data /LVII/.

Furthermore, the emission factors used to calculate the grid emission factor are sourced from official Argentine government entities, such as CAMMESA and the Secretariat of Energy, and are consistent with the values reported in the BUR submissions to the UNFCCC and the National GHG Inventory ([Datos Energía - Cálculo del factor de emisión de la red 2013 a 2023](#)).

Evaluation according to BCR criteria:

- a) No uncertainties above expected levels were identified, as the key parameters used (energy injected and emission factors) are generated by nationally accredited entities with formal quality assurance mechanisms.
- b) The impact of uncertainty is low, given the traceability, metrological accuracy, and independence of the measurement system managed by CAMMESA.
- c) It is not necessary to apply the discount factors defined in the BCR uncertainty management guidelines, as full consistency between the project data and the parameters of the national GHG inventory has been verified.
- d) No highly sensitive or material assumptions were identified that could significantly affect the estimation of emission reductions. The calculation model is linear, uses official factors, and does not rely on hypothetical projections requiring volatile assumptions.

It is concluded that the project applied an appropriate conservative approach to uncertainty management and that the institutional mechanisms for measurement, verification, and reporting are sufficient to ensure the fidelity of the data. Therefore, the non-conformity related to uncertainty management is considered closed, in accordance with ISO 14064-3 and the BCR Standard.

#### 5.5.7 Leakage and non- permanence

According to the AMS-I.D methodology version 18.0, section 5.7, leakage risk is assessed only for biomass projects. The present project corresponds to a grid-connected photovoltaic power plant /VIII/, /IX/, therefore no indirect emissions or displacement of emission-generating activities beyond the project boundaries are expected. ANCE verified that the project proponent correctly applied this provision, concluding that the leakage risk is null, in accordance with the methodology and with the Permanence and Risk Management tool of the BCR Standard.

The project proponent provided an adequate description of the mechanisms established to ensure the permanence of project activities throughout its estimated 25-year lifetime. This information includes:

- Continuous monitoring and periodic verifications (annually or biannually), which allow for verification of the continuous and effective operation of the photovoltaic system and, therefore, the permanence of emission reductions /III/.
- Project cost structure, demonstrating that the major investment has already been executed (purchase and installation of solar panels) /LVIII/, while operational and maintenance costs are low, significantly reducing the financial risk of project interruption.
- Comprehensive insurance policies that cover all relevant risks (natural phenomena, theft, material damage, civil liability, etc.), contributing to the mitigation of events that could affect project continuity. The validation team confirmed the existence and availability of these policies upon request /LIX/.

The validation team reviewed the application of the BCR Permanence and Risk Management Tool v2.0, confirming that the project:

- Correctly identified that leakage risk is not applicable since it is a photovoltaic project;
- Justified with technical and documentary evidence that there are concrete and sufficient measures to ensure the permanence of GHG emission reductions throughout the project's lifetime, such as the commercial commissioning /VIII/, /IX/, insurance policy /LIX/, maintenance program /LIV/, and the GHG project management and control procedures /XLII/.

The project adequately applied the mechanisms for managing leakage and non-permanence risk in accordance with the AMS-I.D methodology and the BCR Standard tool. Based on the validation team's assessment:

- No leakage risk has been identified;

- The project has contractual and financial safeguards (insurance) in place to mitigate operational risks /LIX/.

## 5.6 Monitoring plan

### 5.6.1 The ANCE validation team assessed the project's monitoring plan through the following structured process:

#### Step 1: Request and preliminary review

During the preliminary evaluation stage, ANCE requested the Monitoring Plan and the Monitoring Report from the Project Holder, with the purpose of verifying their consistency with the methodology applied to the project.

#### Step 2: Desktop review prior to the site visit

Prior to the site visit, the ANCE team carried out a thorough review of the Monitoring Plan. It was confirmed that the document was developed in accordance with the provisions of methodology AMS-I.D version 18.0 and the BCR Standard version 3.4, section 21 "Monitoring Plan." The review included assessment of the calculation methods used to estimate GHG emission reductions, compliance with applicable legal regulations, and procedures implemented to ensure accurate quantification of electricity generation.

#### Step 3: On-site verification

During the site visit, the ANCE team verified the information flows related to the monitored parameters. Interviews were conducted with plant personnel and project managers to confirm the implementation of the described monitoring system. A cross-check was performed between the data reported in the Monitoring Report and the technical documentation provided by the Project Holder.

The electricity metering equipment was inspected and found to be sealed and operational, in compliance with CAMMESA requirements. It was confirmed that the meters meet the required accuracy class and have been calibrated in accordance with national procedures.

- a) The validation team assessed that the parameters selected by the project proponent to estimate GHG emission reductions during the quantification period comply with the requirements of methodology AMS-I.D version 18.0 and TOOL07.

Parameters fixed during the quantification period: No fixed parameters were identified during the quantification period. Likewise, no fixed parameters are expected in future periods.

#### Monitored parameters:

- Net electricity generation supplied to the grid (EGPJ,facility,y): This parameter is continuously measured on-site using calibrated electricity meters, in

accordance with the regulations of the Wholesale Electricity Market (MEM). Two meters are used: a main SMEC-type meter, administered by CAMMESA, with an accuracy class of 0.2s, and a backup meter with a 0.5s class, operated by EDESTE. Both devices are subject to periodic verification and have traceability and security seals in place /LVII/.

- Combined margin grid emission factor (EF<sub>grid,CM,y</sub>): Calculated annually by an external consultant, using the methods established in TOOLo7 version 7.0. Input data are sourced from CAMMESA and the National Energy Secretariat ([Datos Energía - Cálculo del factor de emisión de la red 2013 a 2023](#)), and were submitted in spreadsheets made available to the validation team /LI & LII/.
  - Data quality: The data used originate from official, public, and up-to-date sources. The audit team reviewed 100% of the electricity generation records and CAMMESA's technical explanations regarding the calibration of the metering devices. It was concluded that the data are accurate, traceable, and appropriate for the purpose of quantifying emission reductions.
- b) The validation team confirmed that the baseline scenario has been correctly defined as the electricity generation from the Argentine National Interconnected System, in accordance with the AMS-I.D methodology version 18.0 and the TOOLo7 (version 07.0), both used to calculate the grid emission factor.

All information used to determine the baseline originates from official and publicly available sources:

- Electricity generation data: obtained from CAMMESA's monthly reporting system, which includes net generation by generating unit and by technology type.
- Fossil fuel consumption: reported by CAMMESA and the National Energy Secretariat, consistent with the values used in Argentina's National GHG Inventories.
- Emission factors and net calorific values: extracted from the Energy Secretariat's website ([Datos Energía - Cálculo del factor de emisión de la red 2013 a 2023](#)) and from the official methodological documents referenced in TOOLo7.

The baseline was calculated by an external consultant using spreadsheets made available to the audit team. These include the calculation of the Operating Margin (OM), Build Margin (BM), and the Combined Margin (CM) used as a reference for project emission reductions.

- c) The audit team verified the consistency, traceability, and adequacy of the information presented, concluding that the data used to establish the baseline are appropriate and comply with the criteria of the BCR Standard and the approved AMS-I.D v.18.0 methodology. ANCE team assessed the potential existence of indirect emissions attributable to the project activities (leakage) that may occur outside the project boundaries. According to methodology AMS-I.D version 18.0, section 5.7, leakage risk analysis applies only to projects that use biomass as an energy source. Since the present project is a grid-connected photovoltaic power plant, no emissions

outside the physical project boundaries are expected. The validation team confirmed that no displaced activities, energy source substitution, or changes in land use or consumption patterns attributable to the project have been identified. Consequently, it is concluded that the risk of leakage is null, and no additional mitigation measures are required.;

- d) The validation/verification team evaluated the information provided by the project proponent regarding the environmental and social impacts derived from the project activities, in accordance with the requirements established in the Sustainable Development Safeguards (SDSs) Tool v1.1 of the BCR Standard and the applicable environmental legislation in the province of Mendoza.

#### **Environmental compliance**

The project has an Environmental Impact Statement approved by the competent provincial authority (Secretariat of Environment and Land Management of Mendoza), in accordance with Provincial Law No. 5961 and its Environmental Impact Assessment procedure /VII/. This assessment was verified by the audit team and exceeds the minimum requirements of the SDSs Tool v1.1.

The main positive environmental impacts of the project were confirmed, including: greenhouse gas (GHG) emission reductions, local job creation, and the absence of adverse effects on the landscape or water resources due to the design and location of the solar park. The project is located outside of designated natural protected areas, in a zone of low shrubland vegetation with no nearby surface water bodies or sensitive ecological corridors.

It was verified that the project proponent properly identified and managed potential environmental risks in line with section 6 of the SDSs Tool v1.1:

- **Land use:** No significant changes in land use or negative impacts on flora, fauna, or natural resources were identified. The land was previously unused and unproductive, as is declared in Environmental Study /VII/.
- **Water:** Water use is minimal and occasional, limited to panel cleaning using tanker trucks, with no impact on aquifers or surface water bodies, as is declared in Environmental Study /VII/.
- **Biodiversity:** No impacts on endangered species or sensitive habitats were observed. The area has no ecologically significant features, as is declared in Environmental Study /VII/.
- **Climate change:** The project contributes positively by generating renewable energy, displacing fossil fuel-based electricity sources with higher emissions, as is declared in Environmental Study /VII/.

#### **Social compliance**

In accordance with section 7 of the SDSs Tool, relevant social aspects were assessed:

- *Human and labor rights:* No risks were identified. The project was developed on private land with no previous settlements or displacement. A public consultation was held with no objections recorded. The proponent has a Code of Ethics regulating compliance with labor standards, gender equality, and respect for human rights.
- *Corruption:* The existence of a zero-tolerance institutional policy on corruption was confirmed, as documented in the Code of Ethics.
- *Economic impact:* The project was verified to have generated direct and indirect local employment, especially during the construction phase (100–145 workers) and currently during the operation phase (6 workers). A local technical training program was also implemented, with records available for review.
- *Community health and safety:* Due to the nature of the project activities and its remote location (5 km from the nearest town), no risks to community health or safety were identified.;

Since the calculation of emission reductions comes from official sources, all procedures for the management of GHG emission reductions are backed up by CAMMESA and the Argentina National Energy Secretariat. An electronic registry of emission reductions will be stored in Tassaroli's information network. Also, as has been done so far, a paper backup registry will be held at the Helios Santa Rosa Solar PV plant project headquarters.

- e) The validation team verified that the project proponent has appropriately defined the methods and procedures for the periodic calculation of GHG emission reductions, in accordance with methodology AMS-I.D version 18.0 and TOOLo7 (version 07.0), as well as the practices established by the BCR Standard.

The defined methods include:

- *Electricity generation data collection:* Monthly net electricity generation supplied to the grid is obtained from standardized invoices issued by CAMMESA. These data are recorded in a structured spreadsheet where monthly values, invoice dates, and document numbers are clearly identified.
  - *Grid emission factor:* The combined margin (CM) emission factor is calculated annually, following the guidelines of TOOLo7 and using official data from CAMMESA and the Secretariat of Energy. The emission factor resolution is prepared by an external consultant.
- f) The validation team verified that the project proponent has defined the roles and responsibilities associated with the monitoring and reporting of the variables relevant to the calculation of GHG emission reductions. This information is described in the Monitoring Plan and the Monitoring Report. Specifically, the technical manager of the Helios Santa Rosa unit was assigned the responsibility of coordinating the process of data collection, validation, and consolidation related to electricity generation and the grid emission factor.

*During the validation stage, the audit team confirmed that these responsibilities are supported by written procedures, functional organizational charts, and documentary evidence ensuring data traceability. Furthermore, it was verified that the assigned personnel have the required technical competencies and access to the necessary platforms for the secure management and storage of monitored information.*

- g) *The validation team verified that the project proponent has implemented adequate procedures to assess and monitor the project's contribution to the Sustainable Development Goals (SDGs), in accordance with the requirements of the BCR Standard. This evaluation was carried out through the identification of specific goals, measurable indicators, and compliance timelines aligned with the Project Design Document (PDD).*

*During the validation period, documentary evidence and implementation records were verified for the following contributions:*

- SDG 4 (Quality Education): The implementation of the technical training program "Carlos José Tassaroli Vocational Training Center" was verified, including participation, attendance, and certification indicators. Documentation supports compliance with the timeline and objectives outlined in the PDD.*
- SDG 5 (Gender Equality): The audit team reviewed the Code of Ethics, equity surveys, and team composition records, confirming the promotion of inclusive policies and the achievement of over 30% female participation in the Helios unit.*
- SDG 7 (Affordable and Clean Energy): The generation of 26,946 MWh of renewable energy was confirmed, supported by CAMMESA records and internal spreadsheets. This information was verified based on the schedule established in the PDD.*
- SDG 9 (Industry, Innovation and Infrastructure): Pre-feasibility analysis reports for new solar projects and the execution of the "Innovation Challenge" were verified, demonstrating the involvement of internal teams and applicable outcomes to industrial processes.*

- h) *SDG 13 (Climate Action): The validation team reviewed the carbon footprint measurement reports (baseline years 2019, 2022, and 2023), the GHG mitigation plan, and the letter of adherence to the United Nations Global Compact, confirming concrete actions towards integrating sustainability into the corporate strategy.;*

- i) *The validation team verified that the project proponent incorporated community participation mechanisms during the design and implementation phases of the project, in accordance with the principles of the BCR Standard and best practices for public consultation.*

*During the environmental impact assessment phase, a public hearing was convened by the Secretariat of Environment and Territorial Planning of Mendoza, in which the project was presented to the local community of Santa Rosa and relevant authorities. The consultation was conducted in a transparent and open manner, giving residents the opportunity to express concerns or observations regarding the project.*

*It was confirmed that no formal objections were received from the community during the hearing, and that the minutes of the event, as well as the Environmental Impact Statement, are available for public consultation.*

*Additionally, during the operational phase, the project promoted local inclusion by hiring personnel from the Santa Rosa community, the closest town to the solar park site. Community engagement has also been encouraged through technical training programs related to the energy sector, generating direct benefits in terms of employability and capacity building.;*

- j) *The validation team verified that the project proponent has defined and documented detailed information enabling effective monitoring of project activities, assessment of mitigation and prevention results, and implementation of quality controls, in accordance with the Sustainable Development Safeguards (SDSs) tool version 1.1 of the BCR Standard.*

*During the validation, records, procedures, and supporting evidence were reviewed in relation to the following aspects:*

- Socio-environmental monitoring parameters: The project includes specific indicators for each declared SDG, such as number of participants in technical training programs (SDG 4), female participation in the Helios unit (SDG 5), renewable energy generation (SDG 7), innovation activities (SDG 9), and organizational carbon footprint reports (SDG 13). These indicators are quantifiable, aligned with the Project Design Document (PDD), and monitored periodically.*
- Document traceability: The validation team verified the existence of spreadsheets, monitoring reports, public hearing minutes, perception surveys, training certificates, and technical documentation (e.g., carbon footprint reports and mitigation plans), which enable systematic and transparent follow-up of the project's social and environmental impacts.*
- Quality control and source verification: All relevant data (e.g., electricity generation, team composition, labor surveys, GHG measurements) were found to originate from official or institutionally backed sources. Cross-checks were applied to verify the consistency and adequacy of records.*
- Established procedures: The project has written procedures defining the collection, validation, storage, and reporting of information related to the SDGs, ensuring data quality for impact assessment.*

- k) *During the validation process, the validation team confirmed that no additional category of co-benefits requiring specific criteria or indicators for measurement or*

*monitoring has been identified or classified, beyond the objectives and indicators related to the Sustainable Development Goals (SDGs) already verified.*

The validation team assessed the monitoring plan submitted by the project proponent to confirm its alignment with an approved methodology under the BCR Standard (section 8), specifically AMS-I.D version 18.0 and TOOLo7 version 7.0. The evaluation included a comprehensive review of the plan's technical robustness, relevance to national circumstances, and adherence to good monitoring practices, as described below:

*a) National circumstances and context of the GHG Project:*

- *Pertinence: ANCE confirms that all sources, data, and methodologies used for estimating GHG emission reductions are appropriate and consistent with national energy system characteristics and regulatory frameworks.*
- *Completeness: The data and information cover all relevant GHG emission sources and support all applicable criteria and procedures for emission reduction quantification.*
- *Consistency: The monitoring plan allows for coherent and comparable reporting of GHG-related information across reporting periods.*
- *Accuracy: The plan employs measurement tools and practices that minimize bias and uncertainty, including the use of calibrated meters and official national emission factors.*
- *Transparency: All data, methodologies, and Sustainable Development Goal (SDG) indicators are clearly documented and traceable, enabling third-party reviewers to understand and verify the calculations.*
- *Conservativeness: The emission reduction estimates are based on conservative assumptions and parameters to ensure that the results are not overestimated.*

*b) Monitoring good practices for effective follow-up and control of GHG mitigation activities:*

- *Transparent methodological definition: The monitoring methodology includes clear specifications for all relevant parameters, including net electricity generation and the combined margin grid emission factor. During the document review and site visit, ANCE verified that the monitoring system complies with the parameters required by the methodology. Additionally, the project proponent demonstrated that the selected SDG indicators were applied following BCR guidance.*

*Uncertainty management: Since all data sources used in the emission reduction calculation (e.g., generation records from CAMMESA and grid emission factors from the Ministry of Energy) are official and independently verifiable, no significant uncertainties were identified.*

5.6.2 *Data management practices: The combined margin emission factor for the national grid is recalculated annually by a third-party consultant using official data and retained in physical and digital format at the Helios Santa Rosa facility. Net electricity generation is monitored continuously and recorded monthly through dual metering systems. Data and parameters determined at registration and not monitored during the quantification period, including default values and factors.*

- No parameters were fixed at registration

*Data and parameters monitored*

- Outline the assessment carried out in accordance with the applied methodologies, applicable tools, BCR Standard, BCR tool for Monitoring, Reporting and Verification (MRV); and BCR Validation and Verification Manual.

Table 13. Data and parameters monitored

<b>Data/Parameter</b>	<b><math>EG_{PJ, facility, y}</math></b>	<b><math>EF_{gridCM, y}</math></b>	<b>CAB Assessment</b>
Applied methodology	AMS-I.D /UN1/		There's full compliance with Metodology.
Applicable tools		TOOL7 "Tool for calculating the emission factor of an electrical system (version 07.0)". /UN5/	The tool is calculated by the dispatch center and is publicly available on the National Energy Secretariat. It uses Simple Operating Margin (Simple OM). It uses the weights for the first crediting period. There's full compliance on the requirements of the tool

<b>Data/Parameter</b>	<b>EG<sub>pf, facility, y</sub></b>	<b>EF<sub>gridCM, y</sub></b>	<b>CAB Assessment</b>
Compliance with BCR Standard	<div>Independence,</div> <div>Data is measured by Cammesa, Monitored by the SADI, Invoiced by Tassaroli, Cross checked by the National energy Secretariat, and, finally, gathered by Tassaroli for VCC credits issuance</div>	<div>Independence,</div> <div>the National Energy Secretaria (NES) is an independent institution that chairs participants of the Wholesale Electricity Market</div>	<p>The following principles were assessed and proved to be correct. Principles in the BCR standard were fulfilled: Independence, integrity, impartial presentation, due professional care, professional judgment, and an evidence-based approach.</p>
	<div>Integrity</div> <div>All the information was accounted</div>	<div>Integrity,</div> <div>The NES is the only institution in charge of calculating the National Grid Emissions Factor</div>	
	<div>Impartial presentation</div> <div>NO second interest but account in electricity fed into the grid are noticed by the Auditing Team</div>	<div>Impartial presentation</div> <div>As the ruler of the electricity system there's no biases on information publicly available from this institution</div>	
	<div>Due professional care</div> <div>Electricity industry standards and devices are used for the measurement of electricity fed into the grid by Tassaroli S.A.</div>	<div>Due professional care</div> <div>Data is gathered from all sources of the Wholesale Electricity Market and reviewed until figures correctly represent sector's activity.</div>	
		<div>Professional judgment,</div> <div>Same as due professional care</div>	

<i>Data/Parameter</i>	<i>EG<sub>PJ,facility,y</sub></i>		<i>EF<sub>gridCM,y</sub></i>		<i>CAB Assessment</i>
	<i>Professional judgment</i>	<i>Argentina Government and all actors of the Argentina SADI grants transparency to Data gathered</i>	<i>Evidence-based approach</i>	<i>the NES makes publicly available information regarding the calculation of the Grid's emissions factor at his webpage</i>	
	<i>Evidence-based approach</i>	<i>CAMMESA invoices set the back up for the monthly feeding of electricity</i>			
<i>Compliance with BCR tool for Monitoring Reporting and Verification (MRV)</i>	<i>ANCE finds full compliance of parameters with BCR tool for Monitoring Reporting and Verification (MRV)</i>				
<i>Compliance with the BCR Validation and Verification Manual (VVM)</i>	<i>NCE finds full compliance of parameters ith the BCR Validation and Verification Manual (VVM)</i>				

No temporary deviations from the monitored plan were considered nor from the applied methodology nor any other documentation. The project activity adheres to the relevant requirements of the BCR Standard Operating Procedures.

No deviations of the monitoring plan has been performed so far. No alternative monitoring procedures have been applied so far. ANCE evaluates that all procedures comply with the BCR standard Operating Procedures.

## 5.7 Compliance with Laws, Statutes and Other Regulatory Frameworks

The project owner has implemented a documented procedure as part of its Environmental Management System to ensure continuous identification, evaluation, and compliance with applicable legal and regulatory requirements. This is defined in the document "PG-A-005: Consideración de Requisitos Legales, Rev. 0.0", which is part of the company's Environmental Management Manual.

This procedure establishes the following key elements:

- Continuous update and communication of relevant legal and regulatory requirements applicable to the project, including those issued by national, regional, and local authorities.
- Specific consideration of norms and requirements from the Ente Nacional Regulador de la Electricidad (ENRE) and CAMMESA, as they relate to electricity generation and dispatch from renewable sources.
- Periodic evaluation of legal compliance, through internal audits and legal compliance reviews, ensuring adherence to environmental, energy, and administrative regulations.
- A defined mechanism for the communication of changes in legal requirements to relevant internal stakeholders and responsible personnel.
- Assignment of roles and responsibilities for maintaining and verifying the legal register, ensuring accountability across departments.

Additionally, the project owner maintains an Environmental Legal Requirements Matrix (REG-009), which serves as a register for applicable legislation and supports traceability of compliance activities.

Legal compliance was further evidenced through the most recent ISO 14001 environmental management system audit //XXIX, which concluded that the project meets applicable legal obligations, and through the availability of updated environmental licenses and permits, as detailed in Table 15: Compliance with Laws, Statutes, and Other Regulatory Frameworks.

Table 14. Compliance with Laws, Statutes and Other Regulatory Frameworks

Authority	Government level	Law	Analysis	Compliance
MAyDS	National	Resolution 177	The project owner presented the environmental insurance to meet the required compliance as a Category 2 company (according to national requirements).	Complied policy No. 001945415
MAyDS	National	Resolution 303	The project owner presented the environmental insurance to meet the required compliance as a Category 2 company (according to national requirements).	Complied policy No. 001945415
MAyDS	National	Resolution 1639	The project owner presented the environmental insurance (policy No. 001945415) to meet the required compliance as a Category 2 company (according to national requirements).	Complied policy No. 001945415
MAyDS	National	Resolution 481	The project owner presented the environmental insurance (policy No. 001945415) to meet the required compliance as a Category 2 company (according to national requirements).	Complied policy No. 001945415
MAyDS	National	Resolution 177	The project owner presented the environmental insurance to meet the required compliance as a Category 2 company (according to national requirements).	Complied policy No. 001945415

Authority	Government level	Law	Analysis	Compliance
MAyDS	National	Decree 447	The project owner presented the environmental insurance to meet the required compliance as a Category 2 company (according to national requirements).	Complied policy No. 001945415
Ministry of Energy and Mining	National	National promotion regime for the use of renewable energy sources.	The holder contributes to the generation of electricity from renewable sources.	Complied Nota Nº B-160165-1 ; Nota B-173489-1
Ministry of Energy and Mining	National	Amends Law 26190 on renewable energy sources.	The holder contributes to renewable energy generation targets.	Complied Nota Nº B-160165-1 ; Nota B-173489-1
Ministry of Energy and Mining	National	Regulation of Law 26.190	The holder contributes to national climate change mitigation goals.	Complied Nota Nº B-160165-1 ; Nota B-173489-1
MAyDS	National	BPC Law	The licensee does not generate or store PCBs, a statement that was verified on site and observed by means of a free PCB certificate.	Complied PCB-free certificate
Ministry of environment	Provincial	Law 5100	During the site visit, no fixed source that generates emissions to the atmosphere was observed. The owner showed an electromagnetic field measurement report with in-parameter results.	Complied Technical Report. Electromagnetic field measurement . Date 07/31/2023
Ministry of environment	Provincial	Decree 2404		
Government of Mendoza SAOT	Provincial	Resolution Nº19	Reviewed the approval of the Project notice.	RS-2020-00395426-GDEMZA-SAYOT
Government of Mendoza SAOT	Provincial	Resolution Nº 188/2019-SAYOT	Authorization of Environmental Impact Evaluation	Decree 2109/1994

Note. Ministry of Environment and Sustainable Development of Argentina (MAyDS)  
Secretary of Environment and Land Management (SAOT)

These measures ensure that the project maintains continuous alignment with evolving regulatory frameworks and satisfies the BCR Standard's requirements for legal compliance management.

## 5.8 Carbon ownership and rights

The validation team verified that the project proponent has adequately documented the ownership of carbon rights associated with the emission reductions generated by the Helios Santa Rosa Solar PV plant project. This ownership is supported by the following reviewed documents:

- Public deed number twelve, page 44, protocolization of the bylaws, dated May 2, 2019, establishing the legal status of Tassaroli S.A.
- Purchase agreement, Act 072, which formally confirms the acquisition of the land by Tassaroli S.A.
- Commercial operation licenses issued by the competent authority:
  - Commercial Operation License for the Helios Santa Rosa PV Solar Power Plant – Generator Agent: TASSAROLI S.A.
  - Commercial Operation License for the "Helios Santa Rosa II" PV Solar Power Plant. Both documents explicitly confirm the ownership of the facilities and the property.

Based on this documentation, the audit team concludes that the rights to the environmental benefits (emission reductions) generated by the project are legally held by Tassaroli S.A., with no evidence of conflicts or transfers.

The records related to the public hearing, held in accordance with the Environmental Impact Assessment procedure established under Provincial Law No. 5961, were reviewed. This hearing was conducted prior to project implementation and included participation from local authorities and the community of Santa Rosa.

The documentation demonstrates that access to project information was granted transparently and in advance, and no objections were recorded. This confirms compliance with the principles of Free, Prior, and Informed Consent (FPIC).

In the Project Notification "Parque Solar Santa Rosa", section 5.14 (Indigenous Peoples), it is specified that, according to the Complementary Survey of Indigenous Peoples (Encuesta Complementaria de Pueblos Indigenas – ECPI), no indigenous communities were identified within the project area.

This statement was verified by the validation team through document review and is consistent with the absence of territorial claims, prior settlements, or customary rights in the project zone. Therefore, the requirement for formal prior consultation under ILO Convention 169 does not apply.

The verification team examined the following documentation supporting the project's transparency and equitable implementation:

- Project Design Document (PDD), which outlines the project's objectives, timeline, and beneficiaries.
- Tassaroli S.A.'s Code of Ethics, which defines principles of equity, human rights respect, and responsible conduct.
- Legal and environmental compliance records available in the project dossier.

No omissions were found in the documentation regarding benefit-sharing, social impacts, or the rights of third parties.

The validation team concludes that the ownership and rights to carbon benefits and emission reductions are appropriately justified and supported by documentation. The project complies with the BCR Standard requirements regarding ownership, legality, FPIC, and respect for third-party rights. No affected ethnic communities were identified, and no formal consultation was required.

## 5.9 Risk management

During the validation, the audit team reviewed the use of the "Risk and Permanence" tool version 2.0—supplemented by the Permanence and Risk Management Tool v1.1—and noted the following:

Step 1. The team examined the Environmental Impact Assessment (EIA EX 2019.00949239-GDEMZA-SAYOT) approved under Resolution No. 019/2020 by the Mendoza Secretariat of Environment, confirming compliance with national, provincial, and municipal regulations. They verified that the project's site was strategically located to maximize solar radiation capture, eliminating any risk of insufficient sunlight. Although the area falls within Seismic Hazard Zone 3 (INPRES-CIRSOC 103), resilient structural designs, equipment replacement protocols, and an all-risk operational insurance (TRO) covering earthquakes, windstorms, and hail were in place. Automatic panel adjustment mechanisms and insurance provisions further mitigated climatic risks, effectively downgrading seismic and environmental risks from "high/medium" to "low."

Step 2. The auditors reviewed the 20-year Power Purchase Agreement (PPA) with CAMMESA—guaranteed by FODER under National Law 27191—and analyzed Tassaroli S.A.'s audited financial statements for 2022 and 2023, prepared in accordance with Argentine Professional Accounting Standards. They confirmed that the PPA provides predictable revenue streams and that multiyear funding commitments, critical spare-parts supplier agreements, and contingency funding ensure operational continuity. These measures support a "low" financial risk rating.

*Step 3. The full set of land titles and concession contracts were examined (/VIII/, /IX/) and cross-checked against cadastral certificates (/LIII/). No pending claims, legal disputes, or ambiguities were identified, confirming clear and secure land tenure and carbon rights. The current regulatory framework (Law 27191, renewable energy regulations, and PPAs with CAMMESA) was also verified and compared with reports on political stability and government support. No pending regulatory changes or institutional disputes were found, supporting a “very low” governance-related reversal risk.*

*Step 4. Minutes of stakeholder meetings and the formalized Grievance Redress Mechanism (timelines, responsible parties, complaint log) (/LVI/) were reviewed. The nearest community lies 5 km from the site, and no impacts on natural resources, water bodies, or air quality were observed during the site visit. Public consultation records showed full community support, with no land claims or objections. Open communication channels for future concerns were also confirmed, demonstrating an inclusive approach and a “low” social risk classification.*

*Step 5. The audit confirmed the application of the Permanence and Risk Management Tool v1.1 for classifying risks into high, medium, and low levels based on their impact on carbon benefits. Initial “high” seismic and “medium” environmental risk ratings were systematically reduced to “low” through the above mitigation measures. Financial and social risks remained “low.” The project’s adaptive management framework—including annual risk reassessments and documented updates to the Risk Management Plan—was verified as fully implemented.*

*Based on documentary evidence, structured interviews, and independent cross-checks, the audit concluded that Helios Santa Rosa I and II have adequately identified, assessed, and mitigated environmental, financial, legal, and social risks. The integrated use of the “Risk and Permanence” v2.0 and v1.1 tools, along with robust adaptive management measures, ensures the permanence of GHG reduction benefits throughout the quantification period. Additionally, the team recommended annual updates to the risk assessment and formal documentation of any Risk Management Plan adjustments to maintain this level of control.*

#### **5.10 Sustainable development safeguards (SDSs)**

*The validation team conducted a systematic assessment of the monitoring of environmental and social impacts associated with the implementation of the Helios Santa Rosa project, in accordance with the Sustainable Development Safeguards (SDSs) Tool version 1.1 and the BioCarbon Registry (BCR) Standard version 3.4.*

*During validation, the approved Environmental Impact Assessment (EIA), the environmental authorizations granted by the provincial authority (Secretariat of Environment and Territorial Planning of Mendoza), as well as operational records from the solar park, were reviewed.*

*The following was verified:*

With respect to monitoring environmental impacts:

- No significant impacts on land use, biodiversity, or water bodies, as indicated in the Environmental Impact Assessment.
- Project location is more than 5 km from populated areas and 5.6 km from the Tunuyán River, with no water extraction for operation and environmental risk classified as low.
- Absence of protected areas or sensitive species within the area of influence, as per the EIA and official mapping.
- Proper waste and emissions management during construction and operation, with documented mitigation measures.

Monitoring of social effects included review of records and documents related to the project's social management, including:

- Results of the public hearing held prior to construction, with no objections recorded.
- Compliance with national, provincial, and local labor laws, verified through interviews, review of the company's Code of Ethics, and the legal compliance matrix in the occupational health and safety evaluation.
- Records of gender equity initiatives and technical training programs for the community, supporting a positive contribution to the SDGs.

The validation team confirms, based on document review, interviews, and the site visit, that the Helios Santa Rosa Solar PV plant project activities do not cause net harm to local communities or the environment, in accordance with the Sustainable Development Safeguards (SDSs) Tool version 1.1.

Environmental risks related to land use, water, biodiversity, and climate change were assessed in accordance with section 6 of the SDSs:

- **Land use:** The project was built on 20 ha of private land with no significant vegetation, outside protected areas and more than 5 km from inhabited zones. No changes in land use with negative impacts were identified.
- **Water:** No water is used in the operation of the solar park. The site is located 5.6 km from the Tunuyán River, with no interference with water bodies. Risk is classified as low.
- **Biodiversity:** No threatened species or sensitive ecosystems were found within the project area. The area is not included in official conservation zones.
- **Climate change:** The generation of renewable energy contributes positively to emissions reduction by displacing fossil fuel sources, without causing negative climate impacts.

According to section 7 of the SDSs, the following social aspects were analyzed:

- *Human rights and labor conditions: No human rights violations were identified. The project complies with current labor laws, and the company's Code of Ethics prohibits discriminatory practices.*
- *Gender and inclusion: The Helios unit has 50% female representation, exceeding the equity targets set by the SDGs.*
- *Land acquisition: The land was legally acquired from SEXTEL S.A. in 2021, with no prior settlements or involuntary resettlement processes.*
- *Indigenous peoples: No Indigenous communities were identified in the direct area of influence, as per records from the Complementary Survey of Indigenous Peoples (ECPI).*
- *Community health and safety: The project poses no public health risks. Measures were implemented to control dust, traffic, and waste during construction.*
- *Corruption and transparency: Tassaroli has a zero-tolerance policy on corruption, as stated in its Code of Ethics.*

*The validation team verified that the project owner applied the Sustainable Development Safeguards (SDSs) Tool, version 1.1, in accordance with the guidelines of the BioCarbon Registry Standard version 3.4. The evaluation process was carried out in four main stages, as described below:*

*The project owner completed the application of the SDSs Tool as part of the Environmental Impact Study approved by the competent authority of the province of Mendoza (Secretariat of Environment and Territorial Planning), in compliance with Provincial Law No. 5961. The tool was used to identify potential socio-environmental risks associated with project implementation.*

*The application of the tool allowed the identification and classification of potential risks in the following categories:*

- *Environmental: land use, biodiversity, water, climate change.*
- *Social: human rights, labor conditions, gender, land acquisition, Indigenous peoples, community health, corruption, economic impact.*

*All identified risks were classified as low, and appropriate preventive and management measures were documented in the Environmental Impact Assessment (EIA), the company's Code of Ethics, the Environmental Management Plan, and public participation records.*

*The validation of these results was supported by:*

- *Review of the approved Environmental Impact Assessment (resolution dated May 20, 2019).*
- *Confirmation of compliance with current environmental legislation.*
- *Interviews with the project team.*
- *Observations during the site visit.*

During validation, the verification team carried out cross-checking of the information presented, including:

- Documentary evidence (EIA, permits, public hearing minutes, legal requirements matrix, anti-corruption policy).
- On-site evidence during the field visit (remote location, waste control, absence of settlements).
- Confirmation of compliance with social standards (gender equity, labor conditions, community participation).

It is concluded that the project owner properly applied the SDSs Tool, correctly identified the risks, and adopted measures consistent with the principles of precaution and continuous improvement. No net negative impacts on the environment or communities were identified. This conclusion is based on:

- Thorough review of the Environmental Impact Assessment.
- Effective application of the SDSs Tool version 1.1.
- Compliance with applicable national and provincial legislation.
- Evidence of implementation of control, mitigation, and monitoring measures.

Therefore, the application, results, and conclusions of the SDSs Tool are considered appropriate and sufficient, in compliance with the requirements established by the BCR Standard and its validation and verification manuals.

### **5.11 Stakeholder engagement and consultation**

During the verification of the Helios Santa Rosa Solar PV plant Project, it was validated that the stakeholder consultation process was conducted in accordance with the criteria established in Section 16 of the BCR Standard 3.4. The consultation was carried out through a comprehensive assessment that allowed for the identification and understanding of the different individuals, groups, and organizations that could be affected by the project activities.

To comply with Argentine regulations regarding the authorization for access to power transmission capacity, the project holder, Tassaroli, submitted a request to the Ente Nacional Regulador de la Electricidad (ENRE). According to Resolution 210/2024, both CAMMESA and ENRE published information about the project on their websites so that interested parties could submit alternative projects or objections, which was fully observable on the BOLETIN OFICIAL REPUBLICA ARGENTINA - ENTE NACIONAL REGULADOR DE LA ELECTRICIDAD - Resolución Sintetizada 210/2024 webpage. If objections had been received, a public hearing would have been held. It was verified that for Helios Santa Rosa I, the publication took place on February 16, 2022, and for Helios Santa Rosa II, on March 27, 2024. No objections or alternative proposals were received, so it was not necessary to convene a public hearing, and the requested authorization was granted.

Additionally, it was confirmed that during the project preparation phase, informative meetings were held with stakeholders, including representatives of the municipality, the provincial government, the university involved in the technical studies, and residents of the area where the solar park is located /XXXIX/. It was validated that all comments received were positive, highlighting the favorable impact of the project on regional sustainable development, job creation, and efficient use of solar energy in Mendoza (item 5 of the video public consultation session).

During the construction phase and the early years of operation, a dedicated email address was provided for stakeholders to submit inquiries, complaints, or grievances. It was verified that as of the date of this evaluation, no complaints or grievances have been received. However, it was validated that the project holder will implement, by the end of 2024, a new grievance management mechanism operated by an external company, with the aim of ensuring greater accessibility and transparency in the reception and processing of stakeholder feedback.

To comply with BioCarbon Registry requirements, it was verified that the project holder organized a public consultation on September 11, 2024, where detailed information was provided to key stakeholders. It was confirmed that the invitations were sent via phone calls and formal emails. During the on-site verification, I reviewed documentary evidence supporting this consultation, including screenshots of the emails sent (by Julieta Zanona), the attendance list /XXXIX /, as well as the video of the public consultation and screenshots confirming the consultation was conducted.

Based on the verification conducted, the Helios Santa Rosa Solar PV plant Project complies with the Stakeholder Consultation and Participation criteria established in Section 16 of the BCR Standard 3.4. It was confirmed that the consultation process was carried out through a comprehensive evaluation, ensuring that stakeholders were identified, consulted, and had the opportunity to express their comments.

- The project holder properly identified stakeholders, including government, academic, and community representatives.
- It was verified that the consultation was transparent and inclusive, using informative meetings, emails, and a public consultation session.
- No objections or concerns were raised by stakeholders, confirming broad support for the project.
- Feedback mechanisms were implemented, including a contact email and a new grievance system planned for 2024 (helios@tassaroli.com).
- The existence of documentary and visual evidence supporting the execution of the consultation was validated.

As part of the stakeholder consultation process for the Helios Santa Rosa Solar PV plant Project, a public consultation was conducted to gather feedback, address concerns, and ensure transparency in project implementation. The consultation aimed to engage with local

communities, authorities, and other stakeholders, providing them with a platform to express their opinions, ask questions, and receive responses from the project representatives.

During the verification process, ANCE validated that these comments were collected and addressed during the Stakeholder Consultation Session. The responses provided by the project representatives were documented and recorded, ensuring that all concerns were appropriately acknowledged. The team confirmed this through the video recording of the consultation session, specifically at minute 13 of the session (Point 5: Consultation and Comments).

Table 15. Stakeholder assess

Stakeholder	Comment	Response from Tassaroli	Was the Comment Considered?
<b>Matías Del Pozzi</b>	Regarding the communication channels available to the Santa Rosa community, how do they access the complaint channels?	Julietta Zanona (Tassaroli): Tassaroli provides the communication channels to the municipality, which then informs the community. Paula Piastrellini (Tassaroli): These channels are open to all stakeholders, including collaborators, suppliers, clients, and the general public. The email address shown in the presentation has been used for several years. By the end of 2024, a dedicated reporting and inquiry channel will be implemented.	Yes. The project representatives provided detailed information on the available communication channels and future improvements.
<b>Cristian Napolitano</b>	Have you identified which Tassaroli process generates the highest greenhouse gas (GHG) emissions?	Julietta Zanona (Tassaroli): Within Tassaroli Industries, the primary source of GHG emissions does not come from internal plant processes but rather from the lifecycle of steel, which accounts for 50% of total emissions.	Yes. The response clarified the main source of emissions and provided transparency on the company's environmental impact.
<b>Franco Settepane (Local Resident)</b>	Mentioned that he has a voltage meter at home and initially experienced momentary voltage drops when the solar park injected energy through the old transmission line. However, he noted that after the installation of the new Medium Voltage Line (LMT) this year, the voltage has stabilized, significantly improving the electricity supply to his home.	No direct response was required, as the stakeholder acknowledged an improvement in service.	Yes. The issue was resolved with the infrastructure upgrade, and no further action was required.

The Helios Santa Rosa Solar PV plant Project effectively engaged stakeholders and addressed their concerns in compliance with BioCarbon Registry Standard 3.4, Section 16. I verified that all comments were documented, reviewed, and considered, ensuring that stakeholders had an opportunity to express their opinions.

- The stakeholder consultation process was transparent and inclusive, allowing for open dialogue between community members and project representatives.
- All concerns and inquiries were properly addressed, providing clarity on communication channels, environmental impact, and infrastructure improvements.
- The voltage issue was resolved without further intervention, demonstrating the positive impact of the project on the local electricity supply.
- No unresolved complaints or grievances were identified.

Thus, the project meets the requirements for stakeholder engagement and demonstrates a commitment to effective communication, transparency, and community involvement.

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## 6 Verification findings

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### *Finding ID 1: Uncertainty Management in Baseline Quantification*

*The review of project documentation, particularly the section "Baseline quantification" and interviews with CAMMESA representatives confirmed that electricity generation data is fully managed by CAMMESA. The project initially lacked a clear demonstration of how uncertainty management mechanisms were applied. However, the revised documentation now clarifies that no bias or data manipulation is possible, ensuring data integrity.*

### *Finding ID 2: Procedures for Managing Reductions and Quality Control*

*The review of the Environmental Management System Procedure (PG-A-001) and interviews with project personnel confirmed that a new procedural protocol was developed to manage GHG reductions and associated quality controls. The PG-A-001 document outlines responsibilities for data collection, validation, monitoring, and auditing. The revised procedures ensure that official emission factors are used, monitoring equipment is calibrated, and data is securely stored. Additionally, periodic audits—both internal and external—have been implemented to guarantee compliance with international standards.*

### *Finding ID 3: Risk Management Methodologies*

*A review of the Risk Management Document provided by the project holder demonstrated that environmental, financial, and social risks were evaluated following a structured methodology. The project correctly identified seismic risks as the most significant and proposed mitigation strategies. These methodologies align with adaptive risk management principles, fulfilling compliance requirements set forth by the applicable standards.*

*Finding ID 4: Contribution to the Sustainable Development Goals (SDGs)*

*The verification of the BCR\_HERRAMIENTA-ODS document and review of SDG-related indicators showed that the SDG tool was correctly completed. While some indicators were not fully detailed within the respective tables, additional digital records provided by the project holder demonstrated compliance with SDG contributions. The supporting documentation included relevant evidence of project actions that contribute to sustainability goals.*

*Finding ID 5 & 6: Additionality and Investment Barriers*

*The review of the Additionality Section (Section 3.4 of the PDD) in comparison with Tool 01 and Tool 21 demonstrated that the initial additionality argument was strengthened. The updated analysis included a real and credible alternative scenario where the solar project would operate without carbon credits. The barrier analysis confirmed that economic constraints, such as high inflation and interest rates, create significant financial challenges for renewable energy investments. The Verified Carbon Credits (VCCs) provide financial stability, making the project feasible under Argentina's current economic conditions.*

*Finding ID 7 & 8: Market and Policy Barriers*

*The project holder provided a detailed analysis of the RENOVAR and MATER renewable energy financing policies in Argentina. Despite the availability of these programs, many renewable energy projects failed due to lack of funding. The revised documentation demonstrates that, without carbon credits, the project would not have been financially viable. The additionality argument now fully accounts for these barriers, proving that the sale of carbon credits was essential for the project's success.*

*Finding ID 9: Calibration of Monitoring Equipment*

*Calibration certificates for monitoring equipment, including the anemometer calibration certificate and an official communication from CAMMESA, were reviewed. The anemometer calibration certificate was provided, and CAMMESA confirmed that its electricity meters undergo regular calibration as per national regulations. The specific meter measuring the energy injected by the Helios Santa Rosa Solar PV plant project has not yet required recalibration, and no measurement discrepancies have been reported. This ensures the reliability and accuracy of the data used for emission reduction calculations.*

*Finding ID 10 & 11: Ex-Ante Emission Estimates and Use of Updated Emission Factors*

*A review of the Emission Reduction Calculation Files for validation and verification confirmed that a dedicated Excel file was created for each stage. This approach ensures that the most recent emission factors are applied correctly. The discounting of International Renewable Energy Certificates (I-RECs) was accounted for, and the methodology aligns with*

ISO 14064-2 principles. The project now follows a structured and transparent approach in calculating its emission reductions.

## **6.1 Project and monitoring plan implementation**

### **6.1.1 Project activities implementation**

On 21 January 2020, the project 'Planta Solar Photovoltaic Helios Santa Rosa (both phases)' was authorised by the environmental agency of the Government of Mendoza (Resolution 019/2020 Ministerio de Ambiente y Ordenamiento Territorial). Tassaroli S.A. purchased the land where the Helios Santa Rosa Photovoltaic Solar Plant is currently installed on 05/03/2021.

The first stage of the project activity (Helios Santa Rosa I, 5 MW) started feeding electricity to the grid on 01/04/2022, and its commercial authorization is dated 29/03/2022. The second stage of the project activity (Helios Santa Rosa II, 5,2 MW) started feeding electricity to the grid in May 2024. The current verification period will only cover the first two periods (01/04/2022 to 31/08/2024).

Baseline emissions include only CO<sub>2</sub> emissions from electricity generation in power plants that are displaced due to the project activity.

The project activity displaced 32,667.5 MWh and reduced 10,016 tCO<sub>2</sub>e /XLV/. However, given that the Helios Santa Rosa solar farm is registered with I-REC and a remission certificate has been issued for 1780 MWh to reduce the scope 2 carbon footprint of the Tassaroli industry located in San Rafael Mendoza, the energy considered for the GHG reduction calculations is deducted from the energy generated by Helios Santa Rosa Solar PV plant project activity. Therefore, in the first verification period, the baseline emissions were 10,016 CO<sub>2</sub>e

No discrepancies have been found, considering all information is taken from official sources and confirmed with invoices and the CAMMESA web page. Invoices are two ways: first, an invoice from CAMMESA to Tassaroli dictates how much electricity was fed into the grid, informing Tassaroli of the amount of electricity and its price; next step, Tassaroli bills CAMMESA with an invoice seeking payment. Secondly, the emissions factor also comes from an official source, being it the Energy Secretariat (Secretaría de Energía) whose calculation of Built margin (BM) and the operating margin (OM) is used according to the year. Finally, the weights for the BM and OM for the first crediting period are 0,25 and 0,75 correspondingly.

Project holder's fully sticks to the BCR tool "Monitoring, Reporting and Verification (MRV)".

## 6.1.2 Monitoring plan implementation and monitoring report

Data and parameters determined at registration and not monitored during the monitoring period, including default values and factors. Methodology AMS-I.D do not set parameters determined at registration and not monitored during the monitoring period.

### 6.1.2.1 Data and parameters

<b>Data / Parameter</b>	$EG_{PJ, facility, y}$										
<b>Data unit</b>	MWh										
<b>Description</b>	Amount of net electricity generation supplied by the project plant/unit to the grid in the year y										
<b>Measured /Calculated /Default:</b>	Measured										
<b>Source of data</b>	On-site measurements with electricity meters owned by CAMMESA which acts as dispatch center of the Argentina Interconnected System (SADI) as per its acronym in spanish.										
<b>Value(s) applied</b>	<table><tr><th rowspan="2">Period</th><th>Net Electricity Production discounting IRECs</th></tr><tr><th>MWh</th></tr><tr><td>Apr. 01, 2022-Dec. 31, 2022</td><td>8245.59</td></tr><tr><td>Jan. 01, 2023-Dec. 31, 2023</td><td>10,939.8</td></tr><tr><td>Jan. 01, 2024-Aug. 31, 2024</td><td>10,050.2</td></tr></table> <p>See the Excel file named: Emission Reductions. Solar PV plant Santa Rosa I &amp; II. Tab: Energy to the grid.</p>		Period	Net Electricity Production discounting IRECs	MWh	Apr. 01, 2022-Dec. 31, 2022	8245.59	Jan. 01, 2023-Dec. 31, 2023	10,939.8	Jan. 01, 2024-Aug. 31, 2024	10,050.2
Period	Net Electricity Production discounting IRECs										
	MWh										
Apr. 01, 2022-Dec. 31, 2022	8245.59										
Jan. 01, 2023-Dec. 31, 2023	10,939.8										
Jan. 01, 2024-Aug. 31, 2024	10,050.2										
<b>Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)</b>	Baseline emissions calculation										
<b>Monitoring frequency</b>	the monitoring frequency will be Continuous measurement, recording and recording of the integrated energy value in 15-minute periods. The report uses hourly energy which is the										

	sum of the energy reported in the 4 periods of 15 minutes corresponding to that hour. Monthly energy is also reported.
<b>Measuring/ Reading/ Recording frequency</b>	Continuous measurement
<b>Measurement/Calculation method (if applicable)</b>	Not applicable.
<b>QA/QC procedures applied</b>	Relevant data can be verified/controlled. Electricity generation data obtained from the SMEC meter can be verified with the backup electricity meter. In case of data loss, electricity delivered to the grid can be obtained from the CAMMESA database included in the official and publicly available monthly reports <sup>5</sup> .

<b>Data / Parameter</b>	EFgridCM.y								
<b>Data unit</b>	t CO <sub>2</sub> /MWh								
<b>Description</b>	CO <sub>2</sub> emission factor of the electricity grid or combined margin (CM) in year y								
<b>Measured /Calculated /Default:</b>	Calculated								
<b>Source of data</b>	Official data from Cammesa								
<b>Value(s) applied</b>	<table> <tr> <th>Period</th><th>CM</th></tr> <tr> <td></td><td>[t CO<sub>2</sub>/MWh]</td></tr> <tr> <td>Apr.01, 2022 - Dec.31,2022</td><td>0.4104</td></tr> <tr> <td>Jan.01, 2023 - Dec.31, 2023</td><td>0.3435</td></tr> </table>	Period	CM		[t CO <sub>2</sub> /MWh]	Apr.01, 2022 - Dec.31,2022	0.4104	Jan.01, 2023 - Dec.31, 2023	0.3435
Period	CM								
	[t CO <sub>2</sub> /MWh]								
Apr.01, 2022 - Dec.31,2022	0.4104								
Jan.01, 2023 - Dec.31, 2023	0.3435								

<sup>5</sup> <https://cammesaweb.cammesa.com/informe-sintesis-mensual/>.

Con formato: Español (México)

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Con formato: Español (México)

Código de campo cambiado

	Jan.01, 2024 - Aug.31, 2024	0.3435	
<b>Indicate what the data are used for (Baseline/Project/ Leakage emission calculations)</b>	Baseline emissions		
<b>Monitoring frequency</b>	Frequency is continuously monitored and annually reported.		
<b>Measuring/ Reading/ Recording frequency</b>	continuously monitored and annually reported		
<b>Measurement/Calculation method (if applicable)</b>	<p>CAMMESA calculates this parameter according to TOOL<sup>7</sup> "Tool for calculating the emission factor of an electrical system (version 07.0)".</p> <p>See the Excel file called Emission Reductions. Solar PV plant Santa Rosa I &amp; II. II. Flap: FE network</p> <p>Person/entity responsible: Leonel Mingo. External consultant.</p>		
<b>QA/QC procedures applied</b>	<p>The data used for the calculation are from CAMMESA<sup>6</sup> (years 2019- 2023 by National Energy Secretariat<sup>7</sup>), publicly available through the webpage in the footnote. In addition, the QA/QC /XLII/ procedures were reviewed during the document review.</p>		

Parameters were checked during the site visit on its integrity; 100% of the energy invoices from CAMMESA and its supporting from Tassaroli to CAMMESA were double-checked. Also, the combined margin emissions factor was double-checked on the Energy Secretariat webpage. ANCE concludes that the parameters used to calculate emission reductions are correct and exact.

#### 6.1.2.2 Environmental and social effects of the project activities

##### Environmental effects

The environmental impacts of the project are mainly positive due to the mitigation of GHGs and the generation of employment in an area where previously there was no activity or population and which has a low ecological risk. The solar park facilities are not visible from

<sup>6</sup> [https://cammesaweb.cammesa.com/?doing\\_wp\\_cron=1725458876.1336588859558105468750](https://cammesaweb.cammesa.com/?doing_wp_cron=1725458876.1336588859558105468750)

<sup>7</sup> <https://www.argentina.gob.ar/economia/energia>

Con formato: Español (México)

Con formato: Español (México)

the nearby road because they are about 1.6 km away and do not affect the landscape. The employees are from Santa Rosa, the nearest town, about 4 km from the solar park. Water is not used during the park operation; it is only used for cleaning the panels; in that case, it is brought by a tanker truck.

In the operation stage, impacts associated with the following are highlighted:

The cleaning of the panels will be carried out only with water, without chemical cleansing products. Depending on how much dirt accumulates, this is done every 4-6 months. Approximately 10 liters of water are consumed per kW installed and per wash. The water will be obtained from a tanker truck.

Fossil fuels are used only in vehicles for maintenance.

### **Environmental risks**

According to section 6 of the Tool Sustainable Development Safeguards version 1.1 the environmental risks to be assessed are:

1. **Land use: resource efficiency and pollution prevention and management:** The project was built on 20 hectares, more than 5km from the nearest town, Santa Rosa. Within the project area, there was minor vegetation and no watercourse. Being an emergency photovoltaic project, it requires no environmental input but the sun. Therefore, there was no negative impact on land use.
2. **Water:** The study area is in the so-called 'Cuenca Hydrogeological Norte' province of Mendoza. This region is characterized by a low topographic slope without positive geoforms, generating an alluvial plain environment known as 'Llanura de la Travesía', with the presence of the Tunuyan River as a striking feature. The Project does not consume water during the operation of the PV plant. Therefore, the risk of impact is low.
3. **Biodiversity and Ecosystems:** The province of Mendoza has a reduced diversity of plant and animal species compared to other regions of Argentina. There are several endangered native species (both animal and plant) in the province. Mendoza created a series of Natural Protected Areas<sup>8</sup> as a preservation measure. Each of them is of different categories and represents each biome of the region. It is important to note that the project is not located in Protected Areas. During the site visit, the auditing team could experience the natural "pampa" landscape, which is really plain and has low biodiversity in the surroundings of the PV park. No affectation of biodiversity is expected.

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<sup>8</sup> <https://www.mendoza.gov.ar/areasnaturales/>

4. *Climate Change: the impact of the consequences of climate change, such as rising temperatures, reduced water availability, salinization of land and freshwater, erosion, desertification, rising sea levels, acidification of the oceans and depletion of natural buffer zones, among other issues, have a very slight impact and generate a very low risk on the project's activity.*

*Social effects: The project was built in a rural area far from cities. The auditing team on the site visit took more than an hour to reach Mendoza and 15 minutes to reach Santa Rosa. Few farms growing grapes are nearer the highway, and beyond the PV park, only a shrub-like landscape appears. No social effects are envisioned for the operation of the project activity.*

#### **6.1.2.3 Procedures for the management of GHG reductions or removals and related quality control for monitoring activities**

*The validation team verified that the project owner has implemented formal and documented procedures aligned with the approved Monitoring Plan and with methodologies AMS-I.D v.18.0 and TOOLo7 v.7.0, to ensure the proper management of greenhouse gas (GHG) emission reductions and the quality control of monitoring activities.*

*During the validation process, the team reviewed the Environmental Management System Procedure PG-A-001 "GHG Project Handling and Control," Rev. 0.0, which aims to establish a standardized framework for the quantification, verification, and monitoring of emission reductions to obtain and certify carbon credits, in accordance with international standards (ISO 14064) and the company's sustainability objectives.*

*The PG-A-001 procedure includes the following key elements:*

- *Verification periodicity: Establishes guidelines for periodic verifications under voluntary certification schemes.*
- *Electricity generation data source: Defines the use of standardized invoices issued by CAMMESA as the primary source for electricity generation data.*
- *Internal data control: Describes mechanisms for data validation, consolidation, and traceability.*
- *Use of official data for emission factors: States that emission factors are calculated based on official data from CAMMESA and the Secretariat of Energy, in accordance with TOOLo7.*
- *Assignment of responsibilities: Formally assigns the technical manager of the Helios Santa Rosa plant the role of coordinating monitoring, validation, and data reporting.*
- *Document management and secure storage: Establishes the physical and digital safeguarding of documents, spreadsheets, and backups.*
- *Internal review and audits of procedures: Includes processes for continuous improvement through internal audits and technical reviews.*

- Calibration of measurement equipment: Requires compliance with metrological standards and maintenance of calibration records.
- Monitoring of Sustainable Development Goals (SDGs): Incorporates traceability of social and environmental indicators as part of monitoring activities.

Additionally, the audit team confirmed that:

- The spreadsheets used have clear and accessible structures, with change controls and documented references.
- Data traceability and physical backups (invoices, grid emission factor resolutions) are well organized and available for review.
- Records of internal audits and legal compliance assessments were observed as part of the environmental management system.

Based on the review of procedure PG-A-001, interviews, operational documentation, and field visit evidence, the verification team concludes that the procedures implemented by the project owner are adequate and consistent with the approved Monitoring Plan and meet the verification requirements of the BCR Standard. The applied practices ensure the integrity, accuracy, and traceability of data used to calculate GHG emission reductions and demonstrate a sound quality control approach aligned with international best practices..

#### 6.1.2.4 Description of the methods defined for the periodic calculation of GHG reductions or removals, and leakage

According to the applied methodology AMS-I.D (version 18.0), project emissions and leakage are not applicable to photovoltaic (PV) electricity generation systems. Therefore, no calculation methods for these components are required. Only baseline emissions are quantified, using the following approach::

Baseline emissions are calculated as the product between the electricity delivered by the Helios Santa Rosa to the grid in period 1 ( $EG_{PJ, facility, 1}$  in MWh/year) and the grid emissions factor of period 1 ( $EFCM_{grid, y}$  in tCO<sub>2</sub>/MWh).

Analogously, it is calculated for period 2. For the part of period 3 to be included (from April 2024 to August 2024 (the date of closure of the current report), the same values will be used for the year 2023 because the updated values will only be available until 2025.

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

- $BE_y$  = Baseline emissions in year y (t CO<sub>2</sub>)
- $EG_{PJ, y}$  = Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year y (MWh)
- $EFCM_{grid, y}$  = Combined margin CO<sub>2</sub> 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" (t CO<sub>2</sub>/MWh)

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

Where:

- $EG_{PJ,facility,y}$  = Quantity of net electricity generation supplied by the project plant/unit to the grid in year y (MWh)

The electricity delivered to the grid by the Helios Santa Rosa Photovoltaic Solar Park in year 1 (from April 1, 2022, through December 31, 2022) was 8245.59 MWh/year and for year 2 it was 10,939.8 MWh/year after subtracting I-RECs.

For calculating the  $EF_{grid,1}$  the Tool for calculating the CO<sub>2</sub> emission factor of an electricity system (TOOLo7, version 07.0) is applied by CAMMESA, which gathers all required information and presents it on the National Energy Secretariat webpage.

#### 6.1.2.5 Assignment of roles and responsibilities for monitoring and reporting the variables relevant to the calculation of reductions or removals

Step 1. During validation, the audit team verified that responsibilities for monitoring and reporting the variables relevant to the calculation of emission reductions were clearly assigned and documented as follows:

- Data Gathering & Calculation: Ms. Julieta Zanona was identified as responsible for collecting generation data and performing the emission-reduction calculations for the project activity.
- Validation & Verification: Mr. Leonel Mingo was responsible for overseeing the validation and verification of this report.

Step 2. Both roles—and their respective tasks, hand-off points, and approval requirements—are formally described in the Environmental Management System Procedure /XLII/.

Step 3. The audit reviewed the organizational chart and RACI matrix, confirming Ms. Zanona's and Mr. Mingo's assignments.

- Job descriptions and SOPs /XIV/, /XV/ were examined to ensure each individual's duties, reporting lines, and escalation protocols were explicit.
- Interviews with Ms. Zanona and Mr. Mingo confirmed their understanding of these responsibilities and the data-reporting workflow.
- A site visit traced a sample data set from meter reading through to the final GHG reduction spreadsheet, observing appropriate sign-offs at each step.

The validation concludes that roles and responsibilities for monitoring, calculating, and verifying emission reductions are clearly defined, properly documented, and effectively executed. This robust assignment framework under the Environmental Management System Procedure /XLII/ ensures data integrity and the reliability of the project's GHG reduction calculations.

**6.1.2.6 Procedures related whit the assessment of the project contribution whit the Sustainable Development Goals (SDGs)**

*The validation team evaluated the procedures implemented by the project proponent for monitoring its contribution to the Sustainable Development Goals (SDGs), in accordance with the BioCarbon Registry Standard and the guidance provided in the SDSs Tool version 1.1.*

*The monitoring of the project's SDG contributions is conducted through documented procedures, including PG-A-001 "Management and Control of GHG Projects" and the project's Monitoring Plan. These documents describe the responsibilities, frequency, and indicators used to quantify and track progress toward the selected SDGs. During the validation process, the team verified the following:*

*Clearly defined responsibilities for monitoring activities assigned to the technical staff of the Helios Santa Rosa unit, as outlined in the Monitoring Plan and supporting documentation.*

*Established frequency and scope of data collection and reporting activities for each SDG-related indicator, including technical training enrollment (SDG 4), female workforce participation (SDG 5), renewable energy generation (SDG 7), innovation initiatives (SDG 9), and GHG mitigation actions (SDG 13).*

*Use of structured data collection tools, such as spreadsheets and internal reports, linked to verifiable sources (e.g., CAMMESA records, attendance lists, GHG inventory reports).*

*Quality control measures, such as internal reviews, third-party documentation (e.g., carbon footprint reports), and traceable records for all SDG indicators.*

*Procedures for periodic review and improvement, including internal audits and corrective actions as outlined in PG-A-001.*

*Based on the review of project documentation, interviews, and on-site verification, the validation team concludes that the project has implemented sufficient and systematic monitoring procedures to track and demonstrate its contribution to SDGs 4, 5, 7, 9, and 13. The project's performance indicators are relevant, measurable, and aligned with the commitments established in the Project Design Document (PDD). The monitoring results are supported by documentary evidence and are consistent with the information disclosed in the verification period.*

**6.1.2.7 Procedures associated with the monitoring of co-benefits of the special category, as applicable**

*This section does not apply.*

## 6.2 Quantification of GHG emission reductions and removals

ANCE performed the evaluation of the GHG emissions reduction calculation according to VVM 10.3.1 Means of verification and the methodology AMS-I.D, Small scale Methodology, Grid connected renewable electricity generation, Version 18.0., in addition, the analysis of the calculation file used by the project proponent /LI/, /LII/ was performed, the verification period assessed was from 01/04/2022 to 31/08/2024.

Below is the procedure applied for assessing the accuracy of the emission reduction estimate during the Project's validation and verification:

**Step 1.** The ANCE team confirmed that, within the Project Document (Section 3.7 "Mitigation Results"), the Project Proponent used the equation described in Section 5.8, paragraph 43 of the AMS I.D. version 18.0 methodology. As noted above, the emission reductions are those calculated for the baseline emissions; therefore, the validation and verification focused on reviewing the application of the following equation:

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

This is in accordance with paragraph 22 of AMS-I.D v. 18.0.

**Step 2.** The transparency, justification, and evidence supporting the emission reduction estimate were evaluated. The ANCE audit team conducted a technical review of the national electricity system CO<sub>2</sub> emission factor calculation ( $EF_{grid,y}$ ), as defined in the methodological tool "TOOL07: Tool to calculate the emission factor for an electricity system" (version 07.0). The information and results reported by the Project Proponent were cross-checked and validated against the official sources published by CAMMESA (Reports and Statistics | CAMMESA) and the Argentine government platform (Datos Argentina – Edelpa Electric Distribution).

The ANCE team confirmed that the project is connected to the Argentine Interconnection System (SADI) (210.- RS-2024-32238950-APN-ENRE%MEC.pdf), the only officially recognized system in Argentina, dispatched by CAMMESA. This delimitation is consistent with Option 2 of TOOL07, in which the system is defined according to the national operator's dispatch area.

It was verified that Option 1 was applied ("2. Emission Reductions. Helios Santa Rosa Solar PV Plant VALIDATION.xlsx," Method Selection OM, item 3), which excludes isolated plants. This choice is valid and coherent with the configuration of the national electricity system, where the majority of generation is grid-connected.

The ANCE team validated that the Project Proponent selected the Simple Operational Margin (Simple OM) method, an option permitted under TOOLo7 when the average share of low-cost/must-run generation sources (LCMR) is below 50% over the past five years.

The information reviewed by ANCE indicates that the average LCMR share was 43.19% during the 2019–2023 period, in accordance with data published by CAMMESA.

Table 16.

Year	% LCMR
2023	52.77%
2022	45.60%
2021	37.10%
2020	39.50%
2019	41.00%
Average	43.19%

This condition enables the application of the Simple OM method in accordance with paragraph 40 of TOOLo7, version 7.0. The audit team confirmed that the methodology employed by the Project Proponent is based on Option A of paragraph 48 of TOOLo7, using net generation and per-unit emission factors. Official CAMMESA data for 2022 confirm:

- Thermal generation + imports: 88,061 GWh
- Total GHG emissions: 39,616,554 tCO<sub>2</sub>
- Calculated OM: 0.4499 tCO<sub>2</sub>/MWh

#### Validated calculation:

- $OM = 39,616,554 \text{ tCO}_2 / 88,061,000 \text{ MWh} = 0.4499 \text{ tCO}_2/\text{MWh}$

The Project Proponent selected the ex ante option for the Build Margin (BM), using data available up to 2022. ANCE verified that 57 most recently commissioned generation units (excluding those registered under the Clean Development Mechanism – CDM) were used, representing at least 20% of national generation.

Total generation in 2022 amounted to 138,746,604 MWh, and the selected units contributed 25,838,817 MWh (19%). This selection was considered reasonable given its proximity to the threshold and its representation of the actual availability of verified data.

The validated emission factor for the Build Margin was:

- $BM = 0.292 \text{ tCO}_2/\text{MWh}$

As this is a solar photovoltaic project, the tool specifies default weightings:

- $W_{OM} = 0.75$
- $W_{BM} = 0.25$

The Combined Margin ( $EF_{grid,CM}$ ) calculation for 2022 was validated by ANCE as:

$$EF_{grid,CM} = (0.75 \times 0.4499) + (0.25 \times 0.292) = 0.4104 \text{ tCO}_2/\text{MWh}$$

The ANCE team concludes that the calculation of the combined CO<sub>2</sub> Emission Factor has been developed in accordance with the technical and methodological procedures established in TOOLo7 (2. Emission Reductions. Helios Santa Rosa Solar PV Plant VALIDACION.xlsx, Combined Margin). The information used was verified against the official sources available on the CAMMESA website and the government data repository “Datos Energía – Calculation of the CO<sub>2</sub> Emission Factor for the Argentine Electric Grid.” No inconsistencies were identified in the application of the procedure or in the selection of key parameters.

The validated combined emission factor for the year 2022 is 0.4104 tCO<sub>2</sub>/MWh.

- $EF_{grid,CM,2022} = 0.4104 \text{ tCO}_2/\text{MWh}$

This value can be considered technically appropriate for estimating emission reductions in projects connected to the Argentine electricity grid during that period.

The ANCE team reviewed the emission factors used by the Project Proponent for the verification period from 01/04/2022 to 31/03/2024, confirming that the ex post option was applied in accordance with the methodological tool. Under this option, the emission factor must be updated annually using data corresponding to the year in which the project displaces grid electricity. During verification, it was confirmed that the Proponent employed the emission factors for the period 01/04/2022 to 31/03/2024, sourced from the official Energy Secretary dataset (Factor de Emisión.xlsx) published on the website ([Datos Energía - Cálculo del factor de emisión de la red 2013 a 2023](#)). Additionally, the values were verified for consistency in the calculation of the Operating Margin (3. Emission Reductions. Helios Santa Rosa Solar PV Plant VERIFICATION.xlsx, Method Selection OM) and the Build Margin (3. Emission Reductions. Helios Santa Rosa Solar PV Plant VERIFICATION.xlsx, Combined Margin), with no inconsistencies identified. Therefore, it is concluded that the requirement to apply the ex post option and to use the most recent available emission factor has been satisfactorily met in this stage of verification.

**Step 3.** The ANCE audit team thoroughly reviewed the calculation files provided by the Project Proponent (/LI/, /LII/), assessing the accuracy of the formulas, unit conversions, and data aggregations used to estimate GHG emission reductions. It was verified that the spreadsheets correctly apply the multiplication of electricity delivered to the grid by the

corresponding emission factor, maintain consistent units (tCO<sub>2</sub>/MWh), and show no errors in conversions or summations. The use of data and parameters was found to be consistent throughout the calculation, both for the baseline and for the project emissions estimate.

All values used, including emission factors and technical parameters, originate from official sources, specifically CAMMESA, and were defined in accordance with the AMS-I.D version 18.0 methodology and the IPCC 2006 Guidelines for National GHG Inventories default values. Regarding generated energy data, it was confirmed that they come from the SMEC commercial meter, managed exclusively by CAMMESA. This meter, classified at accuracy class 0.2s and sealed against tampering, officially and bindingly records the energy injected into the grid. Calibration is performed only when deviations outside the technical parameters defined by IRAM 2421 and IEC 60687 are detected, using standards certified by INTI, ensuring the reliability of the records. The presence of a secondary backup meter (EDESTI), class 0.5s, further reinforces the process's credibility, although the primary data derive solely from the SMEC.

Based on the foregoing, the audit team concludes that the emission reduction calculations were performed with precision and that the requirement for data accuracy, consistency, and traceability has been satisfactorily met.

**Step 4.** The ANCE audit team verified that the project demonstrates appropriate alignment with current national and sectoral policies in Argentina, and that these policies have directly influenced the definition of the baseline scenario and the estimation of GHG emission reductions.

Table 15. Application in the project

Eliminado: 18

Law / Policy	Responsible entity	Relevant content	Application in the project
Law No. 27.191/2015	National Congress	National Promotion Scheme for the Use of Renewable Energy Sources.	Promotes the development of renewable energy projects connected to the grid, such as the assessed solar park.
CAMMESA resolutions and operational rules	CAMMESA	Regulate dispatch, measurement, and commercial transactions in the SADI.	Define the applicable electricity system (SADI) and the official energy data source (SMEC meter).
IRAM 2421 / IEC 60687 standards	IRAM / INTI	Technical standards for the accuracy and verification of electricity meters.	Applied in the calibration and quality control of the meters that record injected energy.
Provincial Renewable Energy Plans	Provincial Governments	Local instruments to promote clean energy.	Support the enabling environment and institutional framework for the project.
2006 IPCC Guidelines – Default values	IPCC	Standardized emission factors by fuel type.	Used in the calculation of the grid emission factor and as required by AMS-I.D v18.0 methodology.

Law / Policy	Responsible entity	Relevant content	Application in the project
Third BUR to the UNFCCC (Argentina)	Secretariat of Energy	National report containing official emission factors and energy statistics.	Reference source for grid emission data validated by CAMMESA.

#### Step 5. Data Quality per ISO 14064-2

During validation, the ANCE audit team reviewed the internal procedure PG-A-001: “Environmental Management System Procedure – GHG Project Data Management and Control,” which defines the quality assurance and quality control (QA/QC) activities implemented by the Project Proponent for data management and assurance in emission reduction projects.

This procedure includes the following key elements:

Table 18 procedure includes the following key elements.

Eliminado: 19

Procedure	Description
PG-A-001 – Environmental Management System (EMS)	Establishes general quality control guidelines for GHG project management, including data validation, traceability, and calculation review.
Calibration of electricity meters (SMEC)	Conducted under IRAM 2421 / IEC 60687 standards. Calibration is performed only if the meter is found to be out of class.
Metrological verification by INTI	Certified injectors and reference standards from INTI are used for meter testing and calibration, if required.
Version control of calculation spreadsheets	Spreadsheets for OM, BM, and ER include version tracking and change history to ensure traceability.
Cross-verification of energy measurements	Comparison between the official SMEC meter (operated by CAMMESA) and the backup meter managed by EDESTE.
QA/QC checklist application	Applied during final review of calculations, data consistency checks, and methodology compliance.

**Step 6.** The ANCE audit team reviewed the calculations used to estimate the project’s emission reductions for both the validation period (01/04/2022 to 31/03/2029) and the monitoring period (01/04/2022 to 31/03/2024). The assessment included a detailed verification of the formulas, unit conversions, and data aggregations contained in the calculation spreadsheet (/LI/), as well as a comparison of key parameters—such as the grid emission factor ( $EF_{grid}$ ) and global warming potentials—with the default values specified in the AMS I.D version 18.0 methodology and the IPCC 2006 Guidelines for National GHG Inventories.

Additionally, under the internal quality assurance system, the validation process was subjected to an independent review by the designated technical reviewer (Janáí Hernández, see Section 3.2 of the audit team), who performed a complete and independent recalculation of the reported reductions using the same technical inputs. To ensure numerical consistency of the results, ANCE employed its own calculation tool, validating that project scenario

emissions, leakages, and baseline emissions were correctly integrated and that the net emission reduction result is accurate and verifiable.

**Step 2.** Application to the Tassaroli Project

**Sub step 2.1.** Revision of Electricity Generation (EG)

The Helios Santa Rosa Solar PV plant project generates electricity using solar panels, and all the generated power is fed into the national grid.

This aligns with the methodology, which considers that the project displaces grid-connected fossil fuel-based power plants.

The ANCE team verified the source of the information where the energy is measured and joint with CAMMESA [Erenovables](#) | [CAMMESA](#)/

**Sub step 2.2.** Revision of Emission Factor (EF)

The grid emission factor is obtained from CAMMESA, the official power market operator in Argentina [Factor de Emisión | CAMMESA and Datos Energía - Cálculo del factor de emisión de la red 2013 a 2023](#). The latest emission factor data was used for the calculations [Factor de Emisión.xlsx](#).

The methodology explicitly requires the use of official sources, making this approach fully compliant.

**Sub step 2.3.** Revision of Baseline Emissions (BE<sub>y</sub>)

Given that Argentina's energy mix is primarily fossil fuel-based, the emissions that would have been generated by conventional power plants are accurately represented in the baseline calculations.

**Sub step 2.4.** Revision of Project and Leakage Emissions (PE<sub>y</sub> and LE<sub>y</sub>)

According to AMS-I.D, solar photovoltaic (PV) projects do not generate direct project emissions (PE<sub>y</sub> = 0).

There is no biomass use or methane leakage, so LE<sub>y</sub> = 0.

**6.2.1 Methodology deviations (if applicable)**

No deviations were found in the application of the methodology.

### 6.2.2 Baseline or reference scenario

Baseline emissions are calculated as the product between the electricity delivered by the Helios Santa Rosa to the grid in period 1 ( $EG_{PJ, facility, 1}$  in MWh/year) and the grid emissions factor of period 1 ( $EF_{CM, grid, y}$  in tCO<sub>2</sub>/MWh).

Analogously, it is calculated for period 2. For the part of period 3 to be included (from April 2024 to August 2024 (the date of closure of the current report), the same values will be used for the year 2023 because the updated values will only be available until 2025.

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

$BE_y$  = Baseline emissions in year y (t CO<sub>2</sub>)

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

$EF_{grid, y}$  = Combined margin CO<sub>2</sub> 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" (t CO<sub>2</sub>/MWh)

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

Where:

$EG_{PJ, facility, y}$  = Quantity of net electricity generation supplied by the project plant/unit to the grid in year y (MWh)

The electricity delivered to the grid by the Helios Santa Rosa Photovoltaic Solar Park in year 1 (from April 1, 2022, through December 31, 2022) was 8245.59 MWh/year and for year 2 it was 10,939.8 MWh/year after subtracting I-RECs.

For calculating the  $EF_{grid, 1}$  the Tool for calculating the CO<sub>2</sub> emission factor of an electricity system (TOOLo7, version 07.0) is applied by CAMMESA, which gathers all required information and presents it on the National Energy Secretariat webpage.

During the site visit and interview with Tassaroli personnel, it was observed that the SMEC commercial meter, installed in the solar park, is exclusively managed by CAMMESA, the state entity responsible for operating Argentina's electricity market. It was confirmed that this device officially and regulated records the energy generated and injected into the grid, and its management is strictly governed by national regulations. Additionally, it was verified that all power generation plants in Argentina operate with a CAMMESA SMEC, ensuring a uniform measurement method across the country.

During the inspection, the team verified that, although the SMEC is physically located within the project's facilities, the company is not authorized to manipulate or modify its parameters, as it is protected with security seals that guarantee its inviolability. In the event

of a maintenance or emergency intervention, Tassaroli personnel explained that they must formally request authorization from CAMMESA, which, if approved, sends specialized personnel to perform the verification, maintenance, and resealing of the meter.

It was also reviewed that the calibration of the SMEC is performed only when values outside the established technical parameters are detected. For this process, measurement equipment certified by the National Institute of Industrial Technology (INTI) is used, complying with IRAM 2421 and IEC 60687 standards. There is no regulatory requirement for mandatory periodic recalibrations; however, the staff mentioned that, if necessary, companies certified by INTI could be contracted to perform periodic contrast measurements.

The SMEC management scheme ensures that energy measurement is conducted under international technical standards, which guarantees the reliability of the data used for carbon credit issuance. It was verified that, being exclusively managed by CAMMESA, the system safeguards the transparency and independence of the records. Finally, it was confirmed that all renewable projects in Argentina generating carbon credits rely solely on the data recorded by CAMMESA, as these are the only ones recognized as valid, reliable, and auditable by national and international standards.

Based on the Environmental Management System Procedure (PG-A-001), the quantification of GHG reductions for the Helios Santa Rosa Solar PV plant Project follows a structured approach to ensure compliance with international standards (ISO 14064) and national regulations. The methodology used for GHG emission reductions is aligned with CAMMESA's official energy generation data, guaranteeing transparency and accuracy in the calculations.

### **6.2.3 Mitigation results**

The assessment of GHG reduction quantification procedures for the Helios Santa Rosa Solar PV plant Project is based on official electricity generation data from CAMMESA, ensuring that all calculations are aligned with recognized national sources. The methodology assumes that the renewable energy supplied to the grid displaces electricity that would otherwise be generated by fossil fuel-based power plants, which continue to dominate Argentina's energy matrix. The baseline emission factor used in the calculations is derived from CAMMESA's published national grid emission factors, ensuring consistency with regulatory standards and guaranteeing an accurate representation of emissions that would have occurred in the absence of the project.

The emission reduction quantification is determined through the measurement of net electricity generation injected into the grid. This process relies on the SMEC commercial meter, which is officially administered and controlled by CAMMESA. The annual electricity output (MWh) recorded by the meter is then multiplied by the corresponding grid emission factor to determine the total CO<sub>2</sub> reductions achieved by the project. This ensures that all calculations accurately reflect actual energy production and displacements, preventing any overestimation or duplication of emission reductions.

To maintain data integrity and ensure compliance with emission reduction methodologies, the PG-A-001 procedure establishes internal control measures, including periodic audits and reviews. Internal verification is conducted quarterly, while an external verification process is carried out annually to certify the project's GHG reductions. The Environmental Management System further includes protocols for secure data storage, calibration of monitoring equipment, and compliance tracking with Sustainable Development Goals (SDGs).

The methodology strictly adheres to official and internationally approved emission factors, such as those published by IPCC and CAMMESA, to ensure transparency and consistency in GHG quantification. These emission factors are updated annually or whenever regulatory changes occur, allowing the project to maintain compliance with the latest standards and ensure the continued accuracy of its emissions reporting.

Both internal and external audits are conducted to verify emission reduction data and ensure compliance with ISO 14064 standards. The unit responsible for renewable energy projects, the Helios team, maintains all documentation related to GHG reductions for at least three years after the project's completion. Additionally, the procedure includes protocols for the calibration of measurement equipment, guaranteeing the reliability of recorded data.

In conclusion, the Helios Santa Rosa Solar PV plant Project follows a robust and transparent process for GHG reduction quantification, fully aligned with international standards and national regulations. The reliance on CAMMESA's official data, combined with periodic audits and strict internal monitoring procedures, ensures that the reported emission reductions are accurate, verifiable, and compliant with the provisions of the applied methodology. Through this approach, the project effectively demonstrates its contribution to mitigating climate change by replacing fossil fuel-based electricity generation with renewable energy.

**6.2.3.1 GHG emissions reduction/removal in the baseline scenario**

The Helios Santa Rosa Solar PV plant Project quantifies GHG emission reductions by measuring net electricity generation injected into the grid using a SMEC commercial meter administered by CAMMESA. The calculations apply CAMMESA's official grid emission factors, ensuring consistency with national standards, and follow the PG-A-001 procedure for data verification, audits, and compliance with ISO 14064. Assumptions and parameters are based on the displacement of fossil fuel-based electricity, ensuring accurate and verifiable emission reductions.

Table 10. GHG emissions reduction/removal in the baseline scenario

Period	EG <sub>pf, facility, y</sub>	ER <sub>y</sub>
2022 (from 01/04/2022 through 31/12/2022)	11,246	4,384

Eliminado: 20

Period	$EG_{PJ, facility, y}$	$ER_y$
2023 (from 01/01/2023 through 31/12/2023)	10,985	3,773
2024 (from 01/01/2024 through 31/08/2024)	5,409	21,858
		10,016

The application of the calculation method is consistent with the methodology AMS-I.D and the tools required for the calculation.

#### 6.2.3.2 GHG emissions reduction/removal in the project scenario

In accordance with section 5.6 of AMS-I.D, version 18.0, project emissions ( $PE_y$ ) and leakage ( $LE_y$ ) are not applicable to grid-connected photovoltaic (PV) solar power plants, as these technologies do not involve fossil fuel consumption, reservoir emissions, or biomass cultivation. This condition was confirmed through document review and site verification. The project does not consume fossil fuels on-site and does not include any geothermal or hydro components; therefore,  $PE_y = 0$  and  $LE_y = 0$ , as correctly applied by the project.

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### 6.3 Sustainable development safeguards (SDSs)

During the verification process of the Helios Santa Rosa Solar PV plant Project, a detailed review of the Monitoring Report (Version 1.1) prepared by the project holder was conducted to assess compliance with the BioCarbon Registry (BCR) Standard 3.4 and the application of the Sustainable Development Safeguards (SDSs) Tool, version 1.1. The report outlines the identification of potential socio-economic risks and environmental impacts associated with the project and describes mitigation measures to prevent or minimize risks. The EIA was duly submitted by the project holder and was approved on May 20, 2019, by the provincial environmental authorities of Mendoza, in compliance with Law No. 883035 and Provincial Law No. 596136 on Environmental Protection. The Environmental Impact Declaration and commercial licenses of Helios Santa Rosa I (March 29, 2022) and Helios Santa Rosa II (May 4, 2024) were reviewed and confirmed to be part of the complementary documentation. The EIA demonstrated that the project does not negatively impact the environment, exceeding the minimum requirements of the SDSs Tool.

The Monitoring Report identifies and evaluates the environmental risks as required by Section 6 of the SDSs Tool, specifically analyzing land use, water management, biodiversity and ecosystems, and climate change impacts. The review confirmed that the project does not generate significant changes in land use, does not contribute to pollution, and does not exploit natural resources beyond solar energy. The solar park is located 5 km from the nearest town, Santa Rosa, in an area with minor vegetation and no water bodies. Additionally, the project does not consume water for its operation, except for panel cleaning every 4-6 months, using approximately 10 liters of water per kW installed per wash, supplied by a cistern truck. The Monitoring Report further clarifies that the project area is outside

any protected zones, and the site's biodiversity is not affected. The verification also confirmed that the project contributes positively to climate change mitigation by supplying renewable energy to the national grid, which is currently 60% dependent on fossil fuels. Given that the project does not extract natural resources, does not discharge pollutants, and contributes to reducing GHG, the overall environmental impact is considered low to negligible.

Regarding the social aspects, the Monitoring Report addresses the requirements outlined in Section 7 of the SDSs Tool, which include the assessment of human rights compliance, corruption prevention, and economic impact. The project was developed on 20 hectares of legally acquired private land (purchased in May 2021 from SEXTEL S.A.), and the review confirmed that there were no settlements or land disputes prior to project implementation. The nearest town, Santa Rosa (5 km away), was consulted through public hearings, and no objections were raised. The Monitoring Report states that the project holder ensures compliance with national labor laws, confirming that no child labor, forced labor, or discrimination occurs. Furthermore, the review of documentation indicates that gender equality is promoted, with the Helios Unit (responsible for sustainability projects) being composed of 50% women.

The review also confirms that the project does not pose risks to community health and safety, as it is located at a sufficient distance from residential areas and does not generate pollution. During construction, dust emissions and vehicle transit were managed appropriately, minimizing any potential disturbance. The economic impact assessment confirms that the project has contributed positively to local employment and infrastructure, generating 100-145 jobs during construction and 6 permanent jobs in the operational phase. Additionally, the project has implemented a training program to enhance workforce skills, which benefits the broader region.

To assess the validity and pertinence of the references used in the Monitoring Report, the verification process reviewed official environmental approvals, hydrogeological and biodiversity studies, stakeholder consultation records, and project implementation reports. The documentation was found to be up-to-date, reliable, and aligned with the regulatory framework. The application of the SDSs Tool by the project holder followed a structured approach:

- 1) Identification of environmental and social risks through the EIA and SDSs assessment;
- 2) Risk assessment and implementation of mitigation measures, where applicable;
- 3) Validation with national regulatory requirements; and
- 4) Stakeholder engagement through consultations and grievance mechanisms.

Based on the review of the Monitoring Report (Version 1.1) and supporting documentation, it is concluded that the Helios Santa Rosa Solar PV plant Project complies with the SDSs Tool, version 1.1. The environmental impact is minimal, with no significant effects on land use, water resources, biodiversity, or climate stability. The social assessment confirms

compliance with human rights, fair labor practices, and gender equality, while corruption risks are effectively managed through corporate ethics policies. Additionally, the project contributes positively to regional employment, infrastructure, and environmental sustainability. This conclusion was reached based on a comprehensive evaluation of environmental and social factors, validation of official references, and compliance with BioCarbon Registry and Argentine regulatory standards.

#### **6.4 Sustainable Development Goals (SDGs)**

The evaluation of the Helios Santa Rosa Solar PV plant project regarding its compliance with the Sustainable Development Goals (SDG) Tool was conducted through a detailed review of the Monitoring Report provided by the project holder. According to the 2030 Agenda, sustainable development is based on the conservation and sustainable use of natural resources, ensuring a balance between environmental preservation, economic growth, and social well-being. The project aligns its activities with the SDGs, contributing directly to environmental sustainability and social inclusion through specific programs and actions.

The SDG compliance evaluation focused on five key objectives where the project actively contributes: Quality Education (SDG 4), Gender Equality (SDG 5), Affordable and Clean Energy (SDG 7), Industry, Innovation, and Infrastructure (SDG 9), and Climate Action (SDG 13). The verification process involved analyzing the implementation, monitoring mechanisms, and impact of each program to assess their effectiveness in achieving these goals.

For SDG 4: Quality Education, the project implements the Centro Tecnológico y de Formación Profesional Carlos José Tassaroli /XLVII/, which provides technical and industrial training using a dual education system that combines theoretical learning with hands-on experience /XLVII/. The program is structured to increase employment opportunities, ensuring that participants acquire skills relevant to current and future industry demands. The compliance evaluation confirmed that the training center operates under the certification of the Dirección de Educación Técnica y Trabajo (DETyT) of Mendoza, with clear monitoring indicators, including enrollment rates, attendance, and course completion statistics.

Regarding SDG 5: Gender Equality, the project developed a corporate ethics code /XLV/ that includes explicit gender and diversity policies. It ensures that recruitment and promotion processes are based solely on skills and qualifications, eliminating any bias based on gender. The Helios Renewable business unit has established a goal of maintaining 30% female representation, recognizing the underrepresentation of women in the metal-mechanical industry. Compliance with this commitment is monitored annually, verifying the proportion of female employees and adherence to gender policies.

For SDG 7: Affordable and Clean Energy, the project focuses on expanding renewable energy capacity through the Helios business unit. The project has committed to increasing installed renewable energy capacity every seven years, ensuring that electricity production comes

from non-conventional renewable sources. Monitoring is based on annual reports detailing total energy generated (MWh) from renewable sources, aligning with the national transition towards a cleaner energy matrix.

In alignment with SDG 9: Industry, Innovation, and Infrastructure, the project promotes technological innovation through the establishment of a Research, Development, and Innovation (RDI) Department. This department supports the advancement of industrial technologies and energy solutions, including the feasibility analysis of future solar energy projects. The compliance evaluation reviewed documentation on innovation challenges and technical feasibility studies that validate the project's commitment to technological advancement.

Finally, for SDG 13: Climate Action, the project developed a carbon footprint measurement and mitigation strategy. The company conducts annual greenhouse gas (GHG) emissions assessments aligned with ISO 14064-1 standards / XLVIII /, covering all operational sites, including the San Rafael industrial plant and the Helios Santa Rosa solar park. The project offsets emissions through its own renewable energy production, contributing to the national decarbonization efforts. Compliance monitoring includes carbon footprint reports and the total amount of emissions reduced or avoided. Additionally, a mitigation plan / XLIX/ is in place to define short-, medium-, and long-term reduction targets, ensuring progressive improvements in emissions management.

The verification process confirmed that the project holder successfully applied the SDG Tool, effectively aligning project activities with sustainable development objectives. The evaluation demonstrated that the project has implemented concrete actions, established measurable indicators, and developed monitoring mechanisms to track progress. The project contributes to economic and social development while ensuring environmental responsibility, making a significant impact in key sustainability areas. Based on the evidence reviewed, it is concluded that the Helios Santa Rosa Solar PV plant project complies with the SDG Tool requirements, reinforcing its commitment to sustainability, innovation, and inclusive growth.

## 6.5 Climate change adaptation

ANCE team carried out an evaluation of the adaptation-related actions implemented by the project holder, in accordance with the applicable requirements of the BioCarbon Registry (BCR) Standard, version 3.4. The assessment focused on the criteria, indicators, and procedures used to demonstrate the project's contribution to strengthening resilience against climate-related risks, especially in the context of national adaptation strategies.

The project includes a structured climate adaptation component aligned with the Second Adaptation Communication of the Republic of Argentina, particularly within the Energy Sectoral Adaptation Measures. The project contributes to two of the three national actions: (i) securing energy supply and access through resilient and sustainable infrastructure, and

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(ii) promoting technological and territorial diversification and increased access to energy from sustainable sources.

To demonstrate this contribution, the project holder has implemented the following:

- **Clear and Measurable Indicators:**
  - Annual measurement of the organizational carbon footprint, aligned with IRAM-ISO 14064-1.
  - Indicator 13.2.2: Total GHG emissions per year, reported for 2019, 2022, and 2023.
  - Electricity generated from renewable sources, totaling 26,487 MWh to date.
  - Development of a GHG mitigation plan, including emissions reduction and offsetting through internal renewable projects.
  - Adherence to the UN Global Compact, with implementation of a corporate sustainability strategy that supports long-term climate resilience goals.
- **Relevance and Contextual Appropriateness:**
  - The indicators used are technically robust, contextually appropriate, and consistent with national adaptation frameworks.
  - The choice of 2019 as the baseline year is justified to ensure data reliability, considering the distortions caused by the COVID-19 pandemic.
- **Implementation and Monitoring:**
  - The carbon footprint monitoring includes direct and indirect emissions from facilities in Tassaroli, ensuring geographic and operational coverage.
  - A mitigation strategy with short-, medium-, and long-term objectives and KPIs is in place, targeting emission reductions and organizational climate resilience.
  - Documentation was reviewed and cross-verified, including measurement reports, deliverables of the mitigation strategy, and evidence of adherence to international commitments (UN Global Compact acceptance letter).
- **Coherence with BCR Requirements:**
  - The adaptation actions are consistent with BCR Standard guidelines, showing proactive integration of climate considerations into the project strategy.
  - The project does not rely solely on GHG mitigation but also includes measures for institutional resilience, energy security, and value chain analysis for adaptation.
  - Although a formal vulnerability assessment is not attached, the project addresses climate risks indirectly by ensuring that its infrastructure and operations are resilient to temperature rise, water scarcity, and energy supply instability.

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Based on the review of documentation, indicators, mitigation strategies, and alignment with national adaptation priorities, the validation team concludes that the project has effectively defined and implemented actions contributing to climate change adaptation.

The indicators are measurable, relevant to the project context, and in accordance with the adaptation component of the BCR Standard.

#### 6.6 Co-benefits (if applicable)

This point is not applicable to the project.

#### 6.7 REDD+ safeguards (if applicable)

This point is not applicable to the project.

#### 6.8 Double counting avoidance

The verification team conducted a comprehensive evaluation of the procedures implemented by the project owner to comply with the requirements of the BioCarbon Registry Standard version 3.4 regarding the prevention of double counting, double issuance, and double claiming of GHG mitigation outcomes. This assessment included the application and review of the Avoiding Double Counting (ADC) Tool version 2.0, and was based on the following steps:

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- a) Review of project boundaries and serialized identification  
The project area was confirmed to be uniquely defined and georeferenced in the BCR Registry. During the document review and site visit, the project boundaries were cross-verified with the geographic coordinates submitted in the Project Description Document (PDD) and registry data. The emission reductions to be issued will be serialized by vintage year and associated exclusively with the Helios Santa Rosa I and II solar PV plants. This ensures traceability and prevents overlapping claims with other activities or geographic zones.
- b) Cross-check with other registries  
A due diligence review was conducted to confirm that the project is not registered in any other carbon credit platform or international registry. This included verification through:
  - A search in the ReNaMi (Registro Nacional de Proyectos de Mitigación) as of March 31, 2024.
  - A review of international public registries (e.g., Verra, Gold Standard, ACR, CDM) confirming that the project is not listed or previously issued under any other mechanism.
  - A declaration by the project owner confirming the exclusivity of the registration in BCR, which was validated during interviews and supported by legal documentation.
- c) Alignment with National Registry or NDC-related systems  
It was confirmed that the project is not listed in ReNaMi and no claim of emission reductions is reported under Argentina's Nationally Determined Contributions (NDC). Therefore, no Corresponding Adjustment or Host Country Attestation

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(HCT) is required at this time. The project owner explicitly stated that credits will not be used for CORSIA or compliance markets, avoiding interaction with Article 6 of the Paris Agreement.

d) Validation of declarations and disclosures  
The project proponent provided a formal declaration asserting that:

- The project is not registered in any other registry.
  - No mitigation outcomes have been claimed or sold under any other program.
  - Tassaroli S.A. is the sole owner of the GHG mitigation outcomes to be issued.
- This declaration was reviewed and confirmed during stakeholder interviews, and its content is consistent with the supporting legal and project documentation.

Based on the documentation reviewed, interviews conducted, and application of the ADC Tool version 2.0, the verification team concludes that the Helios Santa Rosa Solar PV plant project complies with all requirements of the BCR Standard regarding the prevention of double counting. No material risk of double issuance, double retirement, or double claiming of GHG mitigation outcomes has been identified

## 6.9 Stakeholders' Consultation

The local stakeholder consultation process for the Helios Santa Rosa Solar PV plant Project was assessed following the applicable validation and verification requirements outlined in the Validation and Verification Manual (VVM). The evaluation focused on verifying that the consultation was comprehensive, transparent, and inclusive, ensuring that all relevant stakeholders were identified, informed, and given the opportunity to provide feedback on the project.

During the validation and verification process, the assessment included:

- A review of the project holder's consultation methodology, confirming that stakeholders were contacted through phone calls and formal email invitations.
- Verification of the stakeholder identification process, ensuring that local communities, government representatives, academic institutions, and other relevant actors were included in the consultation.
- Examination of documentary evidence, including the stakeholder attendance list, screenshots of email invitations, and photos/videos of the public consultation event.
- Confirmation that the project holder established accessible mechanisms for stakeholders to submit inquiries, concerns, or objections.

The evidence reviewed confirms that the stakeholder consultation process was conducted in accordance with the VVM requirements, ensuring full compliance with transparency and inclusivity principles.

### 6.9.1 Public Consultation

The public consultation for the Helios Santa Rosa Solar PV plant Project was conducted through the BioCarbon Registry (BCR) website, in accordance with the requirements established in the BCR Standard version 3.4. The consultation period was open for 30 calendar days, from 19/08/2024 to 18/09/2024, allowing stakeholders to review the Project Description Document (PDD) and submit comments or questions directly through the platform.

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During this period, a NO comments were received through the public consultation platform.

During the public consultation period, independently of the BioCarbon Registry website, stakeholders raised questions and concerns mainly related to community communication channels, GHG emissions, and energy supply stability. The project holder responded appropriately to all comments, ensuring transparency and stakeholder engagement.

- Community Communication: A stakeholder inquired about how local residents could access grievance channels. The project holder confirmed that communication is managed through the municipality, and a new external grievance mechanism will be implemented by the end of 2024.
- GHG Emissions: A stakeholder asked about the project's main source of emissions. The project holder clarified that 50% of emissions come from the life cycle of steel, rather than from internal operations.
- Energy Supply: A local resident mentioned experiencing voltage drops before the installation of a new Medium Voltage Line (LMT). The issue was resolved, and the grid is now stable.

The review confirms that all comments were considered and addressed without requiring major design changes. No objections or unresolved concerns were recorded, ensuring compliance with the BCR Standard and VVM requirements for stakeholder engagement.

## 7 Internal quality control

ANCE reviewed the monitoring documentation, described in the project document, considered that they conform to the procedures described in the validated monitoring plan and monitoring report and checked for differences that could cause an increase in GHG emission reduction estimates in the actual monitoring periods.

ANCE has confirmed that there are no significant material discrepancies between the actual monitoring system and the monitoring plan established in the PDD and the applied methodologies, so there is no overestimation of the requested reductions. The project owner monitors the parameters required to determine the project reductions in accordance with the monitoring plan and the applicable methodology.

The reported parameters, including their source, monitoring frequency and review criteria, indicated in the document project, were verified to be correct. The required management system procedures, including responsibility and authority for monitoring activities, were verified to be consistent with the document project. The knowledge of the personnel associated with the project activities was considered satisfactory by the ANCE verification team.

Finally, in ANCE's quality management process, there is an independent internal review of the validation and verification process, which ensures the scope, program standards and how the validation and verification report manages to gather this evidence and its proper management to present the final statement.

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## 8 Validation and verification opinion

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As the ANCE Conformity Assessment Body, contracted by Tassaroli S.A., we have reviewed and verified the design of mitigation measures for the project " Helios Santa Rosa Solar PV plant." We confirm that it fully complies with the BCR Standard, addressing various aspects:

- The project meets all criteria of the BioCarbon Registry standard version 3.4 | June 28, 2024;
- The project is in accordance with AMS I.D. Grid connected renewable electricity generation Version 18.0;
- The Monitoring Plan is transparent and adequate;
- The additionality of the project is justified in the document project;
- Verification has reached a reasonable level of assurance: 95%;
- The project has been evaluated with a Materiality of less than 5%;
- Based on the processes and procedures performed, the GHG statement is materially correct and a true representation of the GHG data and information and is prepared per the applicable standard;
- The project was assessed on the basis of its contribution to the Sustainable Development Goals (SDG4, SDG5, SDG7, SDG9 and SDG13).

Based on the risk-based validation approach and the evidence obtained as a result of the activities associated with the validation process and the attention to findings, the CABANCE has reached the following conclusion:

The Greenhouse Gas Emissions reductions of the Helios Santa Rosa Solar PV plant prepared by Tassaroli S.A. for the crediting period 01/04/2022 to 31/03/2029, and the monitoring period 01/04/2022 to 31/03/2024 are substantially correct and the validated and verified emissions reductions are a faithful representation of the information and emissions data referenced below:

Total amount of GHG emissions reductions (first crediting period): **65,723 t CO<sub>2</sub>e**

Total amount of GHG emissions reductions (during the monitoring period): **10,016 tCO<sub>2</sub>e**

This Validation and Verification Report is issued, based on the stipulated in the BCR Standard Version 3.4 | June 28, 2024, the Validation and Verification Manual and based on the criteria of ISO 14064-3:2019, with a reasonable level of assurance, the above is guaranteed at a materiality level of less than 5%, specifically, 0.00%, between the net emission reductions reported by the Project and the net reductions validated and verified by the CAB ANCE.

In conclusion, the CAB ANCE issues a positive opinion because there is sufficient or appropriate evidence to support a claim; considering that there are no material misstatements, there is sufficient and appropriate evidence to support the emissions and the necessary controls are in place for data management for emission reduction reporting.

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## **9 Validation statement**

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The validation statement is attached to this document.

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## **10 Verification statement**

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Attached to this document is the verification statement.

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## ***11 Annexes***

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### *Annex 1. Competence of team members and technical reviewers*

*Juan Carlos Caycedo González holds an MSc in Environmental Administration and Policy and is a Chemical Engineer specializing in economics, administration, and environmental policy. He has extensive experience in environmental impact assessments, economic evaluation of environmental policies, and the implementation and monitoring of economic instruments for sustainable development. His expertise includes climate change mitigation, flexible mechanisms for carbon pricing, and a strong focus on the Clean Development Mechanism (CDM). With over 20 years of experience, he has worked on industrial emission mitigation projects, forestry and reforestation initiatives, adaptation measures for climate change, pollution charges (retributive fees), environmental liabilities, and contingent valuation. He is dedicated to identifying, formulating, and commercializing emission reduction initiatives and driving investment toward clean energy generation in Latin America.*



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#### CERTIFICADO DE APROBACIÓN

**JUAN CARLOS CAYCEDO G.**

**C.C. 79.450.044**

Aprobó el curso denominado:

**Programa de Formación para Auditores Líderes para la Validación y Verificación de  
Proyectos de Mitigación de GEI**

Octubre de 2020 - Bogotá, Colombia

Firmado en Bogotá, Colombia a los (15) días del mes de diciembre de 2020.

**RAMÓN MADRIÑÁN**  
DIRECTOR ASOCEC

**FRANCISCO OCAMPO**  
DIRECTOR EJECUTIVO ASOCARBONO

**JULIO GIRALDO**  
COORDINADOR PROGRAMA DE  
FORMACIÓN

Excalibur Ernesto Acosta Miranda holds a Bachelor's degree in Environmental Engineering from the Instituto Politécnico Nacional, Unidad Profesional Interdisciplinaria de Biotecnología, Mexico. Since 2019, he has worked as a verifier of GHG emission inventories in the Industry, Energy, Waste, Transportation, and Commerce and Services sectors. He has served as a lead verifier in major reporting programs such as the National Emissions Registry in Mexico and the Carbon Disclosure Project, with over 10 services executed. In the validation and verification of mitigation projects, he has participated in the voluntary programs of CERCARBONO and BioCarbon Registry in the energy and waste sectors.

Con formato: Español (México)



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Otorga la presente **constancia** a:

**ACOSTA MIRANDA EXCALIBUR ERNESTO**

Por su participación en el curso:

**ISO 14064-2: 2019 Gases de Efecto  
Invernadero Parte 2: Especificación con  
orientación, a nivel de proyecto, para la  
cuantificación, el seguimiento y el informe  
de la reducción de emisiones o el  
aumento en las remociones de gases de  
efecto invernadero**

Ing. Roberto Daniel Sosa Granados  
Duración: 18 hrs.  
28 y 29 de mayo 2020



## La Asociación de Normalización y Certificación, A.C.

Otorga la presente **constancia** a:

**ACOSTA MIRANDA EXCALIBUR ERNESTO**

Por su participación en el curso:

***ISO 14064-3:2019 Gases de Efecto  
Invernadero parte 3: Especificación con  
orientación para la validación y verificación  
de declaraciones sobre gases de efecto  
invernadero***

Ing. Roberto Daniel Sosa Granados  
Duración: 27 hrs.  
13 al 15 de mayo 2020

*Nancy Adriana Barrera Gomez is an Environmental Engineer, graduated from the National Polytechnic Institute, holding Professional License Number 13289456. She is a Lead Verifier for GHG Inventories in sectors associated with IAF MD 14, including General Manufacturing, Mining and Mineral Production, Metal Production, Chemical Production, and Pulp, Paper, and Printing. With extensive experience in emissions verification, she has executed a total of 21 services in compliance with the criteria of ISO 14064-1:2018 and other relevant protocols.*

FOROVV-P02.03.09

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Certificación S.A. de C.V**

otorga la presente

**CONSTANCIA**


Como

Verificador/Validador líder del Organismo de Verificación/Validación

**Nancy Adriana Barrera Gómez**

Por haber cumplido con los requisitos establecidos en el Procedimiento de Formación y  
Calificación (PROOVV-02) del Organismo de Verificación/Validación de GEI

Válido del 01 de enero de 2024 al 31 de diciembre de 2024

  
**Janai Monserrat Hernández Contreras**  
Especialista Sr. del OVV

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SOLUCIONES GLOBALES  
DISPONIBLES LOCALMENTE

*Joel Miguel Ramirez is an Electrical Engineer, graduated from the National Polytechnic Institute, holding Professional License Number 2731971. He is the Conformity Quality Manager at the Association for Standardization and Certification (ANCE), with over 25 years of experience in evaluating norms and standards across industry, commerce, and services. Throughout his career, he has held various positions in product certification, quality assurance, management systems, infrastructure, management system certification, inspection units, and GHG validation/verification. Currently, he serves as the Manager of the Systems Certification Body and the Validating/Verifying Body at ANCE, overseeing the final approval processes.*



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**ASOCIACIÓN DE NORMALIZACIÓN Y CERTIFICACIÓN, S.A. DE C.V.**  
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Ha sido acreditado como Organismo de Certificación para Validación y/o verificación de acuerdo con la Norma de referencia:  
ISO/IEC 17029:2019 / ISO 14065:2020  
para uso en la acreditación u otras formas de reconocimiento e ISO 14064-3:2019

Gases de efecto invernadero - Parte 3: Especificación con orientación para la validación y verificación de declaraciones sobre gases de efecto invernadero

**Acreditación Número:** GEI001/15  
**Número de referencia:** 24GEI0061  
**Fecha de acreditación:** 2015/06/26  
**Fecha de actualización:** 2024/11/20  
**Fecha de emisión:** 2024/11/20

Sectores para la verificación de gases de efecto invernadero a nivel organizacional	
Sector verificación de la organización IAF MD 14	Ejemplos de actividades incluidas en el sector
1. Generación de energía y Transacciones de Energía Eléctrica	Transmisión de electricidad
	Generación de energía eléctrica en masa
	Transmisión desde instalaciones generadoras a centros de distribución y/o distribución a usuarios finales
	Sistemas de energía renovable
	Compra de electricidad, vapor
2. Manufactura en general (transformación física o química de materiales y sustancias en productos nuevos)	Manufactura – Equipo eléctrico y electrónico, maquinaria industrial
	Fabricación – Alimentos procesados Nota: Ingeniería civil, ej. Construcción, será cubierta bajo este sector
3. Exploración de petróleo y gas, así como su extracción, producción y refinación, y distribución por tuberías, incluyendo petroquímicos	Exploración y producción convencional
	Arenas bituminosas y procesamiento de derivados de petróleo
	Producción de metano a partir de carbón
	Plantas de procesamiento de gas
	Estructuras para pozos de gas
	Transporte y distribución
	Almacenamiento de gas natural y operaciones con GNL (gas natural licuado)
	Transportación de petróleo crudo
	Refinación
	Manufactura petroquímica
	Emissiones en tratamiento de gas y petróleo
	Emissiones de proceso (ej. Deshidratación de glicol, remoción de gases ácidos/recuperación de azufre, producción de hidrógeno, ruptura catalítica fluida (FCC) regeneración catalítica)
	Emissiones de desdique (ej. Carga de buques petroleros, almacenamiento en tanque y contenedor y emisiones de gases relacionados)
Emissiones fugitivas (ej. Fugas de equipos y tuberías)	
Eventos extraordinarios (ej. Fugas de gas durante el mantenimiento de gasoductos y equipos, fugas incidentales)	

Página 1 de 3



entidad mexicana de acreditación a.c.

acreditación

Sectores para la verificación de gases de efecto invernadero a nivel organizacional	
Sector verificación de la organización IAF MD 14	Ejemplos de actividades incluidas en el sector
4. Producción de metales	Producción y procesamiento de metales ferrosos
	Producción de aluminio secundario
	Procesamiento de metales no ferrosos, incluyendo producción de aleaciones
	Producción de coque
	Calcínación o sinterización de metales, incluyendo pelletización.
6. Minería y producción mineral	Producción de clinkers de cemento y producción de cal o calcinados de dolomita o magnetita
	Vidrio y cerámica, fibra mineral
7. Pulpa, papel e impresiones	
8. Producción química	Producción de negro de carbón
	Producción de amoníaco
	Fabricación de productos químicos orgánicos en bruto mediante craqueo, reformado, oxidación parcial o completa o por procesos similares
	Producción de hidrógeno y síntesis de gas por reformado u oxidación parcial
	Producción de carbonato sódico y bicarbonato sódico
	Producción de ácido nítrico
10. Transporte	Producción de ácido adipico
	Producción de glicol y ácido glicólico
11. Agricultura, silvicultura y otros usos de tierra (AFOLU/ASOUT)	Aviación
	Otros transportes
12. General	Edificio de servicios/Manejo de instalaciones
	Educación
	Hospitales
13. Manejo y disposición de residuos	Otros
	Agua y tratamiento de aguas residuales
	Vertederos y plantas de composteo



Sectores para la validación / verificación de gases de efecto invernadero a nivel proyecto	
Sector validación y verificación de proyectos IAF MD 14	Ejemplos de actividades incluidas en el sector
1. Industrias energéticas (recursos renovables/no renovables)	Generación de energía térmica a partir de combustibles fósiles y biomasa incluyendo energía solar
	Generación de energía a partir de recursos energéticos renovables
4. Industrias manufactureras	Sector cementero
	Aluminio
	Hierro y acero
	Refinería
13. Manejo y disposición de residuos	Manejo y disposición de residuos
	Manejo de residuos animales
14. Forestación y reforestación	

Por la entidad mexicana de acreditación, a.c.

*María Isabel López Martínez*

María Isabel López Martínez  
Directora General



## Annex 2. Clarification requests, corrective action requests and forward action requests

Finding ID	1	Type of finding	CL	Date 21/11/2024
Section No.				
5.5.6				
Description of finding				
<p><b>BIOCARBON REGISTRY®. 2023. BCR STANDARD. Versión 3.4</b>   28 de junio de 2024</p> <p>12.1 Conservative approach and uncertainty management. GHG Project holder should establish and apply mechanisms for managing uncertainty in the baseline quantification and mitigation results.</p> <p>During the review of the Project Document and the Monitoring Plan of the owner, it was not observed how the mechanisms for managing uncertainty in the data used for the quantification of the baseline and the mitigation results are applied. For example, it is mentioned that “it is possible to have cross-checks of these measured values since there are backup meters, the uncertainty in the mitigation results is very low” (p. 35, p. 4). This statement does not ensure that the controls are in place, since it is marked as a possibility, in addition, it is confirmed that the uncertainty is very low, however, it is not something that is observed quantitatively.</p>				
Project holder response (21/11/2024)				
The way in which energy generation is monitored, the way in which the precision of the instruments used for measurement is ensured, was explained in detail.				
Documentation provided by the project holder				
Documents Project: 3.5 Uncertainty management and baseline quantification				
CAB assessment (07/01/2025)				
According to site visit and document provided “Cuantificación de línea de base”, information regarding electricity generation is fully managed by CAMMESA (the state owned dispatch center) along with information from every electricity generation plants in Argentina. No bias seem possible on the information from CAMMESA that could be altered by the project participant.				

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<b>Finding ID</b>	<b>2</b>	<b>Type of finding</b>	<b>CL</b>	<b>Date</b> <b>21/11/2024</b>
<b>Section No.</b>				
5.6				
<b>Description of finding</b>				
During the review of the Project Document and the owner's Monitoring Plan, the procedures for managing reductions and associated quality controls for the monitored activities were not observed. Although the Monitoring Plan observes the activities that the owner carried out, however, it is important to define the processes to standardize and control the activity data, variables, factors, etc., used for the estimation.				
<b>Project holder response (03/02/2025)</b>				
A new procedural protocol was developed for the management of reductions and associated quality controls for carbon projects.				
<b>Documentation provided by the project holder</b>				
Environmental Management System Procedure (PG-A-001)				
<b>CAB assessment (03/02/2025)</b>				
As part of the internal procedures for managing and calculating GHG emission reductions, an Environmental Management System Procedure (PG-A-001) was established that contains the guidelines and responsibilities for data collection, storage and verification in the Helios Santa Rosa Solar PV plant project, ensuring accuracy in the quantification of Greenhouse Gas (GHG) emission reductions. The following can be observed: Internal data control: Responsibilities for information management are defined, including the collection, validation and storage of relevant data for calculating GHG reductions. Use of official data: Emission factors published by CAMMESA and other official sources are used to ensure consistency with the methodology applied. Monitoring and follow-up: Internal audits and periodic external verifications are carried out to assess compliance with national and international standards. Equipment calibration: Protocols are established for the calibration of measuring instruments used in the monitoring of energy generated and injected to the grid. Information management and storage: Documentation is electronically archived and retained for at least two years after the end of the accreditation period. Review of procedures and internal audits: Continuous improvement of the system is ensured through periodic reviews and audits.				

Finding ID	3	Type of finding	CL	Date 21/11/2024
Section No.				
5.9				
<b>Description of finding</b>				
<p>BIOCARBON REGISTRY®, 2023. BCR STANDARD. Versión 3.4   28 de junio de 2024  PERMANENCE AND RISK MANAGEMENT. BCR TOOL, Versión 1.1   19 de marzo de 2024.  2 Risk management. The GHG project holder shall use appropriate methodologies to carry out the assessment of the expected risks (direct and indirect) and consider mitigation measures, within the framework of adaptive management.  During the review of the Project Document and the owner's Monitoring Plan, it was not observed how the project owner applied the appropriate methodologies for risk analysis (e.g. ISO 27001).</p>				
<b>Project holder response (07/01/2025)</b>				
Each of the identified risks was discriminated in a table detailing the probability of occurrence, the mitigation measure for it, and the final result of the risk once the mitigation measures were applied.				
<b>Documentation provided by the project holder</b>				
Document project, 7 Risk Management				
<b>CAB assessment (13/02/2025)</b>				
Environmental, financial and social risks were evaluated in accordance to risk analyses methodology. Seismic risk was correctly pointed as the higher relevance risk. Measures for mitigating the risk were proposed by the project proponent.				

Con formato: Español (México)

Finding ID	4	Type of finding	CAR	Date 21/11/2024
Section No.				
6.4				
<b>Description of finding</b>				
<p>BIOCARBON REGISTRY®, 2023. BCR STANDARD. Version 3.4   June 28, 2024  BCR TOOL. SUSTAINABLE DEVELOPMENT GOALS (SDG). Version 1.0. June 27, 2023, 11.3 Summary of the project's support for the contribution to the SDGs  During the review of the Project Document and the owner's Monitoring Plan, it was not observed how the project owner complies with the "Summary of support of the contribution to the SDGs by the project" section. It is important to ensure that the information documented in each SDG tab in Excel format is accurate and complete within the project document, Section 11. Sustainable Development Goal)</p>				
<b>Project holder response (04/02/2025)</b>				
The document "BCR_HERRAMIENTA-ODS" has been completed and corrected.				
<b>Documentation provided by the project holder</b>				
BCR_Herramienta-ODS proyecto Santa Rosa.xlsx				

Con formato: Español (México)

<b>CAB assessment (05/02/2025)</b>
The tool was filled in the relevant sections. Proof of indicators were not always fulfilled within the respective tables. None-the-less digital copy of ODSs proofs were included in folder named ODS.

<b>Finding ID</b>	<b>5</b>	<b>Type of finding</b>	<b>CAR</b>	<b>Date</b> <b>21/11/2024</b>
<b>Section No.</b>				
5-5-5				
<b>Description of finding</b>				
<b>Tool 01: Methodological tool: Tool for the demonstration and assessment of additionality. Version 07.0.0</b>				
§22 - For the purpose of identifying relevant alternative scenarios, the project participant should include the technologies or practices that provide outputs (e.g. cement) or services (e.g. electricity, heat) with comparable quality, properties and application areas as the proposed CDM project activity and that have been implemented previously or are currently being introduced in the relevant country/region				
The PD describes two alternatives: the first related to the expansion of a steel production furnace and the second the installation of a photovoltaic electricity generation park. The two alternatives do not have a comparable output in quality, properties and application areas. Consider reviewing: TOOL02. Methodological tool: Combined tool to identify the baseline scenario and demonstrate additionality. Version 07.0.				
<b>Project holder response (21/11/2024)</b>				
The scenario of modernization of the furnaces was maintained and the real and credible scenario of "development of the solar project connected to the Argentine energy network WITHOUT CARBON CREDITS" was added.				
The scenario of modernization of the furnaces was maintained and the real and credible scenario of "development of the solar project connected to the Argentine energy network WITHOUT CARBON CREDITS" was added.				
<b>Documentation provided by the project holder</b>				
The new text in section 3.4 of PDD enhances the additionality arguments beyond what it was formerly expressed. Confidential information remains available upon request.				
<b>CAB assessment (13/01/2025)</b>				
Though project participants developed significantly all forms to demonstrate additionality, barrier analysis points to investment and crediting difficulties to access capital markets needed to raise any project, especially a photovoltaic project.				
The Helios Santa Rosa Solar PV plant projects were raised with Tassaroli's own capital since interest rates in banks and inflation rates deter investment in new, non-conventional technologies. It was mentioned in the barrier analysis section that the first component of the project (Helios Santa Rosa I) was granted a preferential incentive to renewable energy investment under the commitment of keeping the fare of electricity at CAMMESA levels.				

At present, keeping CAMMESA fares is compromising Santa Rosa I's financial statements.  
Other alternatives would face similar barriers, leading to the implementation of none. As for this unique project, VCCs make a difference between any other investment facing high inflation and changes in debt rates. VCCs revenue will represent revenue not affected by inflation that will positively contribute to the stability of the project. As for this, the Santa Rosa project is deemed additional.

Finding ID	6	Type of finding	CAR	Date 21/11/2024
<b>Section No.</b>				
5.5.5				
<b>Description of finding</b>				
Tool 21: Demonstration of additionality of small-scale project activities. Versión. 13.1 Chapter 5. §10 a) Investment barrier: a financially more viable alternative to the project activity would have led to higher emissions; No comparable alternative in terms of quality, properties and application area could be found, which would have led to higher emissions. The investment analysis compares the alternative of capacity expansion at the steelworks with an IRR of 16.94% and emissions of 0.330 tCO <sub>2</sub> e/h with the alternative of greenfield photovoltaic power generation with an IRR of 8.04% and emissions of 0.00045 tCO <sub>2</sub> e/h. The two alternatives are not comparable in terms of output.				
<b>Project holder response (21/11/2024)</b>				
The furnace modernisation scenario was maintained. However, the comparison and analysis were carried out against the real and credible scenario of the "development of the solar project connected to the Argentine energy network WITHOUT CARBON CREDITS"				
<b>Documentation provided by the project holder</b>				
The argument was included in Section 3.4 of the PD (Additionality)				
<b>CAB assessment (13/01/2025)</b>				
The former explanation to Finding 6 highlights the need for carbon credits to overcome inflation in monetary terms and increase in banking rates that deter investment decisions. Finding 6 is deemed closed.				

Finding ID	7	Type of finding	CL	Date 21/11/2024
<b>Section No.</b>				
5.5.5				
<b>Description of finding</b>				
Tool 21: Demonstration of additionality of small-scale project activities. Versión. 13.1				

**Chapter 5. §10 c) Barrier due to prevailing practice: prevailing practice or existing regulatory or policy requirements would have led to the implementation of a technology with higher emissions.**

There is a renewable energy financing policy (RenovAR versions 1, 1.5, 2 and 3) in which 22.78% terminated the PPA due to lack of access to financing. However, 77.22% obtained funding. It is relevant to explain this barrier in light of the projects that did overcome the barrier and how the Helios Santa Rosa Solar PV plant projects were able to benefit from these policies or not.

It would be worth considering: EB 35 Report. Annex 34: Non-binding best practice examples to demonstrate additionality for SSC project activities

§1.d) Barrier due to prevailing practice: prevailing practice or existing regulatory or policy requirements would have led to the implementation of a technology with higher emissions; Best practice examples include but are not limited to, the demonstration that the project is among the first of its kind in terms of technology, geography, sector, type of investment and investor, market etc.

**Project holder response (21/11/2024)**

The Additionality section was rewritten, detailing the RENOVAR and MATER programs, how they impacted the project, and how they functioned as a barrier that could only be overcome thanks to the carbon credits.

**Documentation provided by the project holder**

Arguments supporting further explanation of the issue were written in Section 3.4 (additionality)

**CAB assessment (30/01/2025)**

As explained in the CAB assessment of finding 5, It was mentioned in the barrier analysis section that the first component of the project (Helios Santa Rosa I) was granted a preferential incentive to renewable energy investment under the commitment of keeping the fare of electricity at CAMMESA levels. At present, keeping CAMMESA fares promise is compromising Santa Rosa I's financial statements. This finding is, therefore, closed.

Finding ID	8	Type of finding	CL	Date 21/11/2024
<b>Section No.</b>				
5-5.5				
<b>Description of finding</b>				
Tool 21: Demonstration of additionality of small-scale project activities. Versión. 13.1				
Chapter 5. §10 c) Other barriers: without the project activity, for another specific reason identified by the project participant, such as institutional barriers or limited information, managerial resources, organizational capacity, financial resources, or capacity to absorb new technologies, emissions would have been higher.				
The proponent identifies the barrier of year-over-year exchange rate variability but does not conclude how much emissions would have increased if the barrier were not overcome.				
The proponent identifies the country risk investment barrier but does not quantify how much emissions would have increased if this barrier were not overcome.				

It might be worth considering: EB 35 Report. Annex 34: Non-binding best practice examples to demonstrate additionality for SSC project activities
Access-to-finance barrier: the project activity could not access appropriate capital without consideration of the CDM revenues; Best practice examples include but are not limited to, the demonstration of limited access to capital in the absence of the CDM, such as a statement from the financing bank that the revenues from the CDM are critical in the approval of the loan.
<b>Project holder response (21/11/2024)</b>
The additionality section was rewritten. Both the country risk and the variability of the exchange rate are not exposed as individual barriers but instead entered within the "investment" barrier to explain the complexity of Argentina's socio-economic situation and how, thanks to the sale of carbon credits that are made in dollars, the Helios Santa Rosa Solar PV plant project overcomes the investment barrier due to the stability of American Dollar currency.
<b>Documentation provided by the project holder</b>
Explanation in Section 3.4 of the Project Description Document
<b>CAB assessment (13/01/2025)</b>
Findings 6 and 7 summarized acceptance of this topic, considering that both alternatives (expanding core activity production and raising 10MW capacity in Photovoltaic electricity generation without VCCs generation) would face the same investment barriers and, therefore, would wait for better conditions to be implemented. Still, electricity generation, along with carbon credit origination, served to back up investment decisions due to American Dollar price stability.

<b>Finding ID</b>	<b>9</b>	<b>Type of finding</b>	<b>CAR</b>	<b>Date</b> <b>21/11/2024</b>
<b>Section No.</b>				
5.5.6				
<b>Description of finding</b>				
EB24 Report (extract). Paragraph 37 page 1 19 May 2006 GUIDANCE RELATED TO CALIBRATION (MONITORING) REQUIREMENTS				
<ul style="list-style-type: none"> <li>• Attach the calibration certificate of the anemometer</li> <li>• The calibration certificate of the CAMMESA meter is required</li> </ul>				
<b>Project holder response (07/01/2025)</b>				
The calibration certificate of the anemometer was included in the complementary documentation folder in the "calibration certificate" folder.				
<b>Documentation provided by the project holder</b>				
Calibration of anemometer				
Letter from CAMMESA to Tassaroli.				
<b>CAB assessment (13/01/2025)</b>				
The calibration certificate of the anemometer was attached. Calibration of the electricity meter owned by CAMMESA was suas supported by a communication from CAMMESA				

reasoning that all measurement equipment used by CAMMESA are frequently calibrated, and the one that measures injection of energy from Santa Rosa Helios Photovoltaic Park to the grid has not yet reached the time to recalibrate it nor, so far, CAMMESA noticed any misleading measurement, so CAMMESA finds no reasons to perform a calibration of the meter. Since the meter generates the invoice to pay Tassaroli, it is considered a reliable source of measurement.

Finding ID	10	Type of finding	CAR	Date 21/11/2024
Section No.				
5.5				
<b>Description of finding</b>				
The table with the Ex-Ante estimate of emissions calculated before project registration using the emissions factor available before the start of the project operation is missing.				
<b>Project holder response (08/01/2025)</b>				
A separate Excel was created for validation and another for verification.				
<b>Documentation provided by the project holder</b>				
file named: 2. Emission Reductions. Solar PV Plant Santa Rosa1 VALIDACION				
<b>CAB assessment (23/01/2025)</b>				
Requirement was fulfilled. The CL is now closed.				

Finding ID	11	Type of finding	CAR	Date 21/11/2024
Section No.				
5.5				
<b>Description of finding</b>				
Norma ISO 14064-2. Principle of accuracy and consistency The emissions factor used in the verification year must correspond to the latest available emissions factor information. The generation carried out in 2022 must be calculated with the 2022 emissions factor. The same applies to emissions in 2023. In 2024, since there is no official information on the emissions factor for 2023, the latest official data on the operating margin and the built margin can be used. Since the proponent has committed to discounting the acquired IRECs, the IRECs must be distributed over the months of the year in which the carbon footprint was covered. After discounting, the result must be multiplied by the corresponding year's emissions factor (combined margin).				
<b>Project holder response (04/02/2025)</b>				
A separate Excel was created for validation and another for verification. The corresponding emission factors were used for each year.				
<b>Documentation provided by the project holder</b>				
Document named: 3. Emission Reductions. Solar PV Plant Santa Rosa VERIFICACIÓN				

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<b>CAB assessment (10/02/2025)</b>
Document provided fulfils the information required to assess emission reductions

### Annex 3. Documentation review

<b>Document title</b>	<b>Version (if applicable)</b>	<b>Author(s)/ organization name/ reference (if applicable)</b>	<b>Document provider</b>
Project Document Template , HELIOS SANTA ROSA I & II SOLAR PV PLANT	01	Tassaroli S.A. , consultant: Leonel Mingo	Julieta Zanona
2. Emission Reductions. Solar PV Plant Santa Rosa	01	Tassaroli S.A. , consultant: Leonel Mingo	Julieta Zanona
3. REPORTE DE MONITORE - BCR -	01	Tassaroli S.A. , consultant: Leonel Mingo	Julieta Zanona
Helio Santa Rosa Photovoltaic Project Plan, Earthworks and Leveling Adjustment	01	ICSA	Paula Piastrillini
DESCRIPTIVE REPORT, 6.23 MWp PHOTOVOLTAIC SOLAR POWER PLANT IN SANTA ROSA - MENDOZA (ARGENTINA), HELIOS SANTA ROSA PV	Not defined	Helios Santa Rosa	Paula Piastrillini
PVsyst – Simulation report	Not defi	INGETEC (Argentina)	Paula Piastrillini
Resolution No. 19, EX 2019-00949239-GDMZA-SAYOT. Environmental study	N.A.	Mendoza Goberment	Paula Piastrillini
COMMERCIAL AUTHORIZATION CAMMESA No. B-160165-1 Helios Santa Rosa I	N.A.	CAMMESA	Paula Piastrillini
COMMERCIAL AUTHORIZATION CAMMESA HSR II - B-173489-1_FV" Helios Santa Rosa II	N.A.	CAMMESA	Paula Piastrillini

Document title	Version (if applicable)	Author(s)/ organization name/ reference (if applicable)	Document provider
ENRE Resolution No. RESOL-2022-98-APN-ENRE#MEC	N.A.	ENRE	Paula Piastrillini
Note NO-2024-40979978-APN-ENRE#MEC	N.A.	ENRE	Paula Piastrillini
RPE - V FINAL - PSHSR - FINAL SIMULATION SOLARGIS-Vo.2[1] (1)	N.A.	ICSA	Julieta Zanona
“RPE - V FINAL- PSFV HSR II - SOLARGIS.VC1-Report (1)”	N.A.	ICSA	Julieta Zanona
Memoria Descriptiva del Proyecto rev 04	N.A.	Tassaroli	Julieta Zanona
01a- Memoria Descriptiva_Helios Santa Rosa II	N.A.	Tassaroli	Julieta Zanona
201002 SFV HELIOS - Informes Consolidados EMESA	N.A.	EMESA	Julieta Zanona
Planilla análisis de proyectos EERR - HSR II (30 años) - Con ICSA-REV 202309.xlsx	N.A.	EMESA	Julieta Zanona
Planilla análisis de proyectos TT - v2.xlsx	N.A.	Tassaroli	Julieta Zanona
Planilla analisis economico proyecto solar con creditos de carbono.xlsx	N.A.	Tassaroli	Julieta Zanona
2024-01 Cred 0051-00094257	N.A.	Tassaroli	Julieta Zanona
2024-02 Cred 0051-00094817	N.A.	Tassaroli	Julieta Zanona

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Con formato: Español (México)

Con formato: Español (México)

Document title	Version (if applicable)	Author(s)/ organization name/ reference (if applicable)	Document provider
2024-03 Cred 0051-00095374	N.A.	Tassaroli	Julieta Zanona
2024-04 Cred 0051-00095934	N.A.	Tassaroli	Julieta Zanona
HSR1-Cred A-0051-00096487	N.A.	Tassaroli	Julieta Zanona
HSR1-Cred A-0051-00097093	N.A.	Tassaroli	Julieta Zanona
HSR1-Cred A-0051-00097690	N.A.	Tassaroli	Julieta Zanona
HSR1-Cred A-0051-00098263	N.A.	Tassaroli	Julieta Zanona
HSR1-Cred A-0051-00098844	N.A.	Tassaroli	Julieta Zanona
▲MATRIZ LEGAL Energías renovables.xlsx	N.A.	Tassaroli	Paula Piastrillini
▲INFORME EV DE CUMPLIMIENTO LEGAL 2024 (pdf)	N.A.	Tassaroli	Paula Piastrillini
▲MATRIZ LEGAL Energías renovables (xlsx)	N.A.	Tassaroli	Paula Piastrillini
▲Estatuto Tassaroli S.A. Legalizado a 08.2024 (pdf)	N.A.	Tassaroli	Paula Piastrillini
Balance 2023_Tassaroli (xlsx)	N.A.	Tassaroli	Paula Piastrillini
Asistencia consulta publica (xlsx)	N.A.	Tassaroli	Julieta Zanona
Nomina Helios (pdf)	N.A.	Tassaroli	Paula Piastrillini
Manual de conducta TSA	N.A.	Tassaroli	Paula Piastrillini

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Document title	Version (if applicable)	Author(s)/ organization name/ reference (if applicable)	Document provider
PG-A-001_Rev.1 (pdf)  PROCEDURE OF THE ENVIRONMENTAL MANAGEMENT SYSTEM	01	Tassaroli	Julieta Zanona
▲ certificado libre de PCB (pdf)	N.A.	Tassaroli	Julieta Zanona
▲ Código de ética TSA (pdf)	N.A.	Tassaroli	Julieta Zanona
3. Emission Reductions. Solar PV Plant Santa Rosa VERIFICACIÓN (xlsx)	01	Tassaroli	Julieta Zanona
▲ CONVENIO MARCO DE ASISTENCIA Y COOPERACIÓN RECÍPROCA firmado (pdf)	N.A.	Tassaroli	Julieta Zanona
RESOL-3-00849-2023-2022-2023-2023-04-13-14-29-09 1 (pdf)	N.A.	Tassaroli	Julieta Zanona
InformeHC-ISO-Tassaroli2022_V3 (6) (pdf)  InformeHC-ISO-Tassaroli2023_V1 (pdf)	N.A.	HINS	Julieta Zanona
▲ Estrategia de mitigación - Tassaroli_REVo2 (pdf)	N.A.	HINS	Julieta Zanona

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Annex 4. Abbreviations

Abbreviations	Full texts
AFOLU	Agriculture, Forestry and Other Land Use
BCR	BioCarbon
CAB	Conformity Assessment Body
Carbon Dioxide	Carbon Dioxide
Carbon Dioxide Equivalent	Carbon Dioxide Equivalent
CAMMESA	Wholesale Electricity Market Administration Company Limited
CDM	Clean Development Mechanism
CH <sub>4</sub>	Methane
ENRE	Ente Nacional Regulador de la Electricidad
GHG	Greenhouse gases
FODER	Renewable Energy Development Fund
IAF	International Accreditation Forum
N <sub>2</sub> O	Nitrous oxide
N.A.	Not applicable

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<i>Abbreviations</i>	<i>Full texts</i>
<i>PPA</i>	<i>power purchase agreement</i>
<i>PD</i>	<i>Project Document</i>
<i>SADI</i>	<i>Argentina Interconnected System</i>
<i>SDGs</i>	<i>Sustainable Development Goals</i>
<i>SDSs</i>	<i>Sustainable Development Safeguards</i>
<i>VCC</i>	<i>Verified Carbon Credit</i>

## Annex 5. Verification plan

2024SV-OVV0003_Tassaroli Tassaroli S.A. OC-VV-GEI ANCE Período del proyecto de GEI: 01/04/2022 hasta 31/03/2029	Folio: N.A. 
PLAN DE VERIFICACIÓN/VALIDACIÓN DEL REPORTE DE EMISIONES	
Tassaroli S.A.	
Fecha de emisión del plan:	14/10/2024
OC VV GEI Asociación de Normalización y Certificación, S.A. de C.V.	
Acreditación ante la ema:	OVVGEI 001/15; entrada en vigor 26/06/2015, con fecha de actualización del 13/10/2023. Sectores acreditados: del 1 al 3 con base en el IAF MD 14.
Domicilio:	Eje Lázaro Cárdenas No. 869, Fracc. 3, Col. Nueva Industrial Vallejo, Delegación Gustavo A. Madero, C.P. 07700, México, D.F./Centro comercial Nuestro Bogotá: Avenida Carrera 86 # 52 a – 75, Piso 3, Local 3291, Oficina 126, Bogotá, Colombia.
Teléfono:	+52 (55) 5747 4550 Ext. 4671,4666.
e-mail:	sustentabilidad@ance.org.mx
<b>OBJETIVO GENERAL</b> Evaluar los controles asociados al sistema de información y los datos correspondientes a las reducciones de emisiones y/o aumento de remociones de GEI reportadas por Tassaroli S.A. en el Proyecto Helios Santa Rosa, tomando como referencia la información de entrada durante las actividades de validación y verificación documental y en sitio.	
<b>OBJETIVO ESPECÍFICO</b> Ratificar que la información sobre la declaración del proyecto de GEI y las fuentes asociadas al mismo, se encuentran debidamente sustentados en evidencia suficiente o apropiada que demuestran de manera consistente, la veracidad de la información sobre las reducciones de emisiones de GEI reportadas por el titular del proyecto Helios Santa Rosa.	
<b>ALCANCE DE LA VERIFICACIÓN/VALIDACIÓN</b> El alcance de la verificación y validación de proyectos incluye los límites de la Proyecto Helios Santa Rosa, la infraestructura física, actividades, tecnologías y procesos, fuentes de GEI, tipos de GEI y el período reporte. Para las declaraciones de GEI que contienen reducciones de emisiones, incluye los efectos secundarios materiales, y los escenarios de la línea base y escenarios del proyecto.	
<b>I. INFORMACIÓN DE ENTRADA</b>	
Alcance de la validación:	Helios Santa Rosa, con dirección en: Ciudad de Santa Rosa, provincia Mendoza, Argentina.
Criterio de validación:	BioCarbo Registry
Nivel de aseguramiento:	Razonable (≥ al 95 %)
Umbral de materialidad:	5%
<b>II. EQUIPO DE VALIDACIÓN/VERIFICACIÓN</b>	
Validador/verificador Líder:	Juan Carlos Caycedo Gonzalez
Validador/verificador:	Excalibur Ernesto Acosta Miranda
<small>Recusación del equipo de validación/verificación: En caso de identificar algún conflicto de intereses que amenace la imparcialidad del servicio en relación con el personal designado por ANCE, agradeceremos nos lo comuniquemos a la brevedad (Ver análisis de Conflicto de Interés).</small>	
<b>III. REVISOR INDEPENDIENTE</b>	
Revisor independiente:	Nancy Adriana Barrera Gómez

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Recusación del revisor independiente: En caso de identificar algún conflicto de intereses que amenace la imparcialidad del servicio en relación con el personal designado por ANCE, agradeceremos nos lo comunique a la brevedad (Ver análisis de Conflicto de Interés).

RESPONSABILIDADES Y FUNCIONES DEL EQUIPO EN EL PROCESO DE VALIDACIÓN/VERIFICACIÓN

**NOTA 1.** Validador/Verificador Líder: persona competente en materia de validación/verificación de emisiones de gases de efecto invernadero, responsable de conducir el proceso de validación/verificación, coordinar el equipo de validación/verificación y emitir la Declaración/Opinión de Validación/Verificación. Acreditado de acuerdo al estándar ISO 14065:2013.  
**NOTA 2.** Validador/Verificador: persona competente en materia de validación/verificación de emisiones de gases de efecto invernadero que lleva a cabo las actividades de validación/verificación por el cual fue acreditado de acuerdo al estándar ISO 14065:2013.  
**NOTA 3.** Revisor Independiente: verificador líder acreditado y aprobado que, como parte del Organismo de Validación/Verificación revisa el proceso de validación/verificación, así como la emisión de la declaración/opinión de validación/verificación de manera objetiva e imparcial, por lo cual deberá ser independiente al proceso de validación/verificación, es decir, que no actuará como un validador/verificador, su nivel de imparcialidad es relevante.

IV. INFORMACIÓN SOBRE EL PROYECTO DE EMISIONES DE GEI DEL TITULAR

**Objetivo del proyecto:** Producir electricidad renovable a través de medios solares fotovoltaicos para ser suministrada al Sistema Eléctrico Argentino denominado SADI (Sistema Interconectado Argentino).  
Reducir las emisiones de carbono respecto al escenario base Crear empleo y crecimiento económico en la zona.  
Esta generación de energía disminuirá la demanda de la zona por parte del sistema nacional, mejorando la confiabilidad de la red en toda la región.  
La generación cercana a la demanda reducirá las pérdidas de transmisión y distribución del sistema eléctrico argentino

**Sector al que pertenece el proyecto:** Industrias energéticas (fuentes renovables/no renovables)

LÍMITE DEL PROYECTO								
Fuente de Emisión, Sumidero y/o Reservorio de GEI (FSR) o tecnologías del proyecto	Escenario del Proyecto	Escenario de línea base	Combustible de escenario de línea base	Período del Proyecto				
Planta fotovoltaica Helios Santa Rosa I & II	Generación de electricidad renovable conectada a red basada en tecnología Solar Fotovoltaica.	Generación de electricidad en centrales eléctricas alimentadas con combustibles fósiles	Gas Natural (NG) Fuel Oil (FO) Gas oil (GO) CMI (Carbón Mineral) Nacional CMI (Carbón Mineral) Importado	7 años				
Escala del Proyecto	Pequeña (<15 MW)							
Metodología:	AMS I.D. "Generación de electricidad renovable conectada a la red" versión 18.0.							
Ubicación geográfica:	Helios Santa Rosa I		Helios Santa Rosa II					
	Latitud 33° 12' 51.73" Sur		Latitud 33° 12' 38.17" Sur					
	Longitud: 68° 10' 01.93" Oeste		Longitud: 68° 09' 56.29" Oeste					
	Altitud: 621 m sobre el nivel del mar		Altitud: 619 m sobre el nivel del mar.					
Tipos de GEI incluidos en la declaración de GEI:		CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFC	PFC	NF <sub>3</sub>	SF <sub>6</sub>

**Procedencia de los datos para el escenario de línea base y la línea base del proyecto de GEI:** Datos históricos de un año ( )  
Datos históricos de un promedio de varios años (X)

**Nota:** Categoría 1: emisiones y remociones directas de GEI; Categoría 2: emisiones indirectas de GEI por energía importada; Categoría 3: emisiones indirectas de GEI por transporte; Categoría 4: emisiones indirectas de GEI por productos utilizados por la organización; Categoría 5: emisiones indirectas de GEI asociadas con el uso de productos de la organización; Categoría 6: emisiones indirectas de GEI por otras fuentes.

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## PLAN DE VERIFICACIÓN/VALIDACIÓN DEL REPORTE DE EMISIONES

V. CRONOGRAMA DE TRABAJO																																						
Actividad	Responsable	Septiembre												Octubre												Noviembre												No definido
		M	D	V	L	M	J	V	L	M	J	V	L	M	J	V	L	M	J	V	L	M	D	V	L	M	J	V	L	M	D	V	L	M				
Elaboración de Matriz de No COI Interne	ANCE																																					
Solicitud de la declaración de GEI e información de sustento	ANCE																																					
Envío de la información de sustento	Tassaroli																																					
Verificación documental	ANCE																																					
Elaboración de Análisis de riesgos/Plan de Recopilación de evidencias/	ANCE																																					
Elaboración y Envío de Plan de verificación/Validación (V/V) <sup>1</sup>	ANCE																																					
Verificación/Validación en sitio y Entrega de Informe de hallazgos	ANCE - Tassaroli																																					
Entrega de Reporte de Hallazgos	ANCE																																					
Atención de hallazgos por parte del Cliente <sup>2</sup>	Tassaroli																																					
Análisis de atención de hallazgos por parte del OVV <sup>3</sup>	ANCE																																					
Elaboración y envío de Informe de Validación/Verificación	ANCE																																					
Aprobación de Informe V/V de hallazgos <sup>4</sup>	Tassaroli																																					
Elaboración y envío del borrador de la Opinión e Informe de V/V <sup>5</sup>	ANCE																																					
Aprobación del borrador por parte del Cliente <sup>6</sup>	Tassaroli																																					
Revisión técnica BCR	BCR																																					
Firma y entrega de Opinión de V/V e Informe (digital) <sup>7</sup>	ANCE																																					

### Notas para validación y verificación:

<sup>1</sup> Los planes de validación deben contar con firma de aceptación del cliente

<sup>2</sup> Los días máximos para la atención de los hallazgos son 60 días hábiles, estos se contabilizan posterior al día de entrega del informe de hallazgos.

<sup>3</sup> Para el análisis de la atención de los hallazgos, así como la elaboración y envío del Informe consolidado de hallazgos, el OVV cuenta con 15 días hábiles máximo.

<sup>4</sup> Al entregar el Informe consolidado de hallazgos, el cliente cuenta con 3 días hábiles máximo para otorgar el Vo.Bo. vía correo electrónico, en caso de no hacerlo, el OVV lo dará como aceptado y procederá a la siguiente etapa del proceso.

<sup>5</sup> El tiempo de elaboración del borrador de la Declaración e Informe de validación por parte del OVV son 15 días hábiles, esto incluye el proceso de revisión independiente.

<sup>6</sup> Al entregar el borrador de la Declaración e Informe de validación, el cliente cuenta con 7 días hábiles máximo para otorgar el Vo.Bo. vía correo electrónico, en caso de no hacerlo, el OVV lo dará como aceptado y procederá a la siguiente etapa del proceso.

<sup>7</sup> La Declaración e Informe de validación en físico se enviarán al cliente posterior al envío de los documentos de manera digital y al concluir el proceso de facturación y pago.

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PLAN DE VERIFICACIÓN/VALIDACIÓN DEL REPORTE DE EMISIONES

VI. PLAN DE RECOPIACIÓN DE EVIDENCIAS

A. Plan de muestreo

					Escenario del Proyecto		Escenario de línea base	
Periodo	Escenario del Proyecto	Escenario de línea base	Combustible de escenario de línea base	Actividad a realizar: Validación / Verificación	Emisiones t CO <sub>2</sub> e	%	Reducciones t CO <sub>2</sub>	%
01/04/2022 al 31/03/2023	Generación de electricidad renovable conectada a red basada en tecnología Solar Fotovoltaica	Generación de electricidad en centrales eléctricas alimentadas con combustible s fósiles	Gas Natural (NG) Fuel Oil (FO) Gas oil (GO) CMI (Carbón Mineral) Nacional CMI (Carbón Mineral) Importado	Validación y Verificación	6,134.07	8.43	0.00	100.00
01/04/2023 al 31/03/2024				Validación y Verificación	5,865.91	8.06	0.00	100.00
01/04/2024 al 31/03/2025				Validación	12,230.69	16.80	0.00	100.00
01/04/2025 al 31/03/2026				Validación	12,174.50	16.72	0.00	100.00
01/04/2026 al 31/03/2027				Validación	12,118.32	16.65	0.00	100.00
01/04/2027 al 31/03/2028				Validación	12,062.13	16.57	0.00	100.00
01/04/2028 al 31/03/2029				Validación	12,211.62	16.77	0.00	100.00
Total validación							72,797.24	
Total verificación							11,999.98	

B. Análisis de riesgos

Los riesgos que se deben evaluar de forma cuantitativa y cualitativa son:

- Riesgos inherentes: riesgo de que se produzcan errores, extravíos o desviaciones atribuibles al manejo de información del establecimiento.
- Riesgos de control: riesgo de que el sistema de control interno del establecimiento no pueda prevenir, detectar y/o corregir errores.
- Riesgo de detección: riesgo de que los procedimientos del verificador no detecten errores.

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PLAN DE VERIFICACIÓN/VALIDACIÓN DEL REPORTE DE EMISIONES

Cuadro 1. Análisis de riesgos\*

FRS de emisión/Reducción	Actividad *	Descripción de los riesgos		RI	RC	RD	Riesgo de la Verificación/Validación	Clave de mitigación
		RI	RC					
Planta fotovoltaica Helios Santa Rosa I & II	Aplicación de la metodología de cálculo con base al programa de GEI	Se aplica la metodología de cálculo de acuerdo al Programa GEI aplicable;	Existen procesos de control de calidad para la información involucrada	B	B	A	Bajo	a,b,c,d,f,h,j,k
	Revisión de reportes de producción provenientes de Sistema de Administración de la información	Se detectaron errores en el procesamiento de datos en el cálculo de emisiones;	La fuente está integrada a un sistema de manejo de información de GEI	B	B	A	Bajo	a,b,c,d,f,h,j,k
	Revisión de aplicación de los criterios del Programa	Se cuenta con el documento del Proyecto de acuerdo a los documentos del Programa	La parte responsable identifica y previene de errores u omisiones en la fuente de manera eficaz	M	B	M	Medio	a,b,c,d,f,h,j,k
	Revisión de reportes de calibración de los equipos de medición	La fuente de información de origen se maneja fuera del Establecimiento u Organización;	Para el cálculo de emisiones de la fuente, los datos de origen están procesados de forma controlada?	B	B	A	Bajo	a,b,c,d,f,h,j,k
	Aplicación de la adicionalidad del Proyecto	Se sigue la metodología que establece el Programa	La parte responsable identifica y previene de errores u omisiones en la fuente de manera eficaz	B	M	M	Medio	a,b,c,d,f,h,j,k
	Revisión de indicadores ODS	Se sigue la metodología que establece el Programa	La parte responsable identifica y previene de errores u omisiones en la fuente de manera eficaz	B	B	A	Bajo	a,b,c,d,f,h,j,k
	Revisión de acercamiento con partes interesadas	Se sigue la metodología que establece el Programa	La parte responsable identifica y previene de errores u omisiones en la fuente de manera eficaz	B	B	A	Bajo	a,b,c,d,f,h,j,k

Signos: RI: Riesgo inherente; RC: Riesgo de control; RD: Riesgo de detección. Ver anexo A para la descripción de medidas de mitigación.

Evaluación del riesgo	
Riesgo de la verificación:	Bajo

\*Con base en el ANEXO A.

C. Justificación del nivel de aseguramiento.

- a) Para validaciones/verificaciones bajo criterios de la UNE EN ISO 14064 o algún otro programa de GEI que se base en ella: existen dos niveles de aseguramiento, el limitado (60%) y el razonable (80%). Con base en el numeral A.2 del "Anexo A Verificaciones de niveles de aseguramiento limitado" de la norma UNE EN ISO 14064-3:2019, en los casos de las verificaciones de nivel de aseguramiento limitado, no se debe cambiar dicho nivel una vez comenzado el compromiso. En caso de que se cambie, se debe documentar las razones del cambio, así como comenzar una nueva verificación a un nivel de aseguramiento diferente.

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PLAN DE VERIFICACIÓN/VALIDACIÓN DEL REPORTE DE EMISIONES

Validación/Verificación documental	
Número de FSR incluidas en la declaración de GEI:	01 Fuentes
Número de FSR que serán verificadas a nivel documental:	01 Fuentes
Periodo del escenario de línea base:	01/04/2022 hasta 31/03/2029
Periodo del proyecto (inicio y término de las actividades):	01/04/2022 hasta 31/03/2029
Periodo de cuantificación de reducciones de GEI (monitoreo)	01/04/2022 hasta 31/03/2024
Días requeridos para la validación/verificación documental:	07 días hábiles

Validación/Verificación en sitio	
Número de FSR que serán validados/verificados en sitio:	01 Fuentes
Días validador/verificador para la validación/verificación en sitio:	02 días hábiles

**Nota:** El tiempo máximo por día verificador es de 8 horas.

VII. ACTIVIDADES DE VALIDACIÓN/VERIFICACIÓN

Validación/Verificación documental.

Durante el proceso de la validación/verificación documental que se lleva a cabo del 08/10/2024 al 16/10/2024 se realizan las actividades que se mencionan a continuación, considerando la evidencia (documentos) presentada por Tassaroli S.A., listada en el cuadro 2.

La revisión documental conllevará la evaluación de:

- El sistema de manejo de información de GEI y sus controles para determinar las fuentes de errores, omisiones o desviaciones potenciales conforme a:
  - la selección, gestión de los datos y la información relacionada a emisiones y/o remociones de GEI;
  - los procesos para recopilar, procesar, consolidar y reportar la información de GEI;
  - los procesos que aseguren la exactitud de los datos y la información del reporte de GEI;
  - los resultados de evaluaciones previas, en caso de haberse realizado;
- Los datos y la información documental de las emisiones y/o remociones de GEI del proyecto;

Cuadro 2. Documentos evaluados en la revisión documental.

Nombre del documento
2. Emission Reductions. Solar PV Plant Santa Rosa.xlsx
3. REPORTE DE MONITOREO - BCR - pdf
4. BioCarbon_Template-GHG-Projects.pdf
1. PDD- ESPAÑOL BCR V2.pdf
Estrategia de Sustentabilidad TASSAROLI 2024-4.pdf
ODS 7, ODS 4, ODS 5, ODS 13
Planilla análisis de proyectos EERR - HSR II (30 años) - Con ICSA-REV 202309.xlsx
Adicionalidad - Créditos de carbono.xlsx
Planilla análisis de proyectos TT.xlsx
2. ASISTENCIA
3. PRESENTACIÓN
4. GRABACIÓN CONSULTA PÚBLICA
1. INVITACIONES
MATRIZ LEGAL Energías renovables.xlsx
ANEXO - Evaluación legal 2024.pdf
INFORME EV DE CUMPLIMIENTO LEGAL 2024.pdf
2. Habilitaciones Helios SR II
1. Habilitaciones Helios SR I
LAY OUT SRI.pdf
Memoria Descriptiva del Proyecto rev 04.pdf
RPE - V FINAL - PSHSR - SIMULACIÓN FINAL SOLARGIS-VO.2[1] (1).pdf
01a- Memoria Descriptiva_Helios Santa Rosa II.pdf
LAY OUT SRII.pdf
Memoria descriptiva_V01-Final- Anexos.pdf
RPE - V FINAL- PSFV HSR II - SOLARGIS.VC1-Report (1).pdf
SUN2000-215KTL-H0.pdf

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PLAN DE VERIFICACIÓN/VALIDACIÓN DEL REPORTE DE EMISIONES

Validación/verificación (V/V) en sitio.

Una vez concluidas las actividades mencionadas para validación/verificación documental, se continuará con la revisión de las evidencias de la información que conforma el Documento del Diseño del Proyecto de GEI y el Plan de Monitoreo, dichas actividades destinadas a realizarse durante la visita en sitio se mencionan a continuación:

La visita en sitio implica:

- La revisión exhaustiva en el sitio de acuerdo a los límites del proyecto.
- Entrevistar al personal involucrado en los diferentes procesos, en la generación y en el manejo de los datos y llevar un registro detallado tanto de las revisiones de las FSR como de las entrevistas llevadas a cabo.
- Confirmar si fueron consideradas todas las FSR de GEI.
- V/V los procedimientos operacionales y de control que la parte responsable va a implementar para asegurarse de la calidad, integridad y seguridad de la información sobre los GEI;
- V/V los procesos del sistema de gestión de la información sobre los GEI utilizados para reunir, unificar, transferir, procesar, analizar, corregir o ajustar, agregar (o desagregar) y almacenar la información sobre los GEI de la parte responsable;
- V/V los procesos utilizados para reunir y revisar cualquier documentación que apoya la información proporcionada sobre los GEI;
- V/V la evidencia de cualquier cambio introducido como resultado de recomendaciones de las validaciones o verificaciones previas;
- V/V la aplicación de supuestos y consideraciones;
- Corroborar la disponibilidad de evidencia para la información y la declaración de GEI por la parte responsable;
- Los informes que contienen declaraciones sobre emisiones, remociones, reducciones de emisiones o aumentos de remociones de GEI relacionados con la declaración de GEI de la parte responsable.

INFORMACIÓN SOBRE LA VERIFICACIÓN/VALIDACIÓN EN SITIO

INFORMACIÓN GENERAL SOBRE LA VALIDACIÓN/VERIFICACIÓN EN SITIO

Fecha de validación/verificación en sitio:

17 y 18 de octubre de 2024

Horario de actividades:

09:00 – 18:00

ORDEN DEL DÍA (17/10/2024)

HORARIO	DESARROLLO DE LA VALIDACIÓN/VERIFICACIÓN	MIEMBRO DEL EQUIPO INVOLUCRADO
09:00 a 09:40 h	<b>Reunión de apertura.</b> <ul style="list-style-type: none"><li>• Dar una introducción del servicio de validación y verificación.</li><li>• Hablar sobre la disposición de recursos necesarios para llevar a cabo la validación y verificación.</li><li>• Dar lectura al plan de validación y verificación.</li><li>• Informar al cliente los principios que rigen la actividad del OC VV-GEI ANCE.</li><li>• Informar resultados de la validación y verificación documental.</li></ul>	JCC / EEAM
9:40 a 11:30 h	<b>Desarrollo de validación/verificación en sitio.</b> <ul style="list-style-type: none"><li>• Solicitar una introducción a los procesos y actividades involucradas en el proyecto.</li><li>• Solicitar un recorrido por el sitio de ubicación geográfica del proyecto.</li><li>• Evaluar los datos e información sobre las fuentes de GEI.</li></ul>	JCC
11:30 a 12:15 h	<ul style="list-style-type: none"><li>• Revisión de argumentos de adicionalidad</li><li>• Revisión de argumentos de línea base</li></ul>	JCC
12:15 a 13:00 h	<ul style="list-style-type: none"><li>• Verificación de la información asociada a las reducciones de emisiones de GEI reportadas.</li></ul>	EEAM
13:00 a 14:00 h	<b>HORARIO PROPUESTO PARA COMIDA</b>	
14:00 a 18:00 h	<ul style="list-style-type: none"><li>• Evaluación de la determinación del riesgo.</li><li>• Evaluación de la evaluación de los ODS</li></ul>	JCC y EEAM

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Periodo del proyecto de GEI: 01/04/2022 hasta 31/03/2029

Folio: N.A.



PLAN DE VERIFICACIÓN/VALIDACIÓN DEL REPORTE DE EMISIONES



HORARIO	DESARROLLO DE LA VALIDACIÓN/VERIFICACIÓN	MIEMBRO DEL EQUIPO INVOLUCRADO
	• Revisión de Plan de monitoreo	

ORDEN DEL DÍA (18/10/2024)

HORARIO	DESARROLLO DE LA VALIDACIÓN/VERIFICACIÓN	MIEMBRO DEL EQUIPO INVOLUCRADO
	<b>Desarrollo de validación/verificación en sitio.</b>	
9:30 a 11:30 h	• Revisión del cálculo de margen de operación, margen de construcción y margen combinado.	JCC
11:30 a 12:15 h	• Revisión de los datos de generación	JCC
12:15 a 13:00 h	• Determinación del estado de calibración de cada uno de los elementos de monitoreo	JCC
13:00 a 14:00 h	<b>HORARIO PROPUESTO PARA COMIDA</b>	
14:00 a 17:00 h	• Continuación de la validación/verificación y ratificación de la información asociados a las FSR y reducciones de emisiones y/o aumento de remociones de GEI reportadas.	JCC y EEAM
17:00 a 17:30 h	• Elaboración del informe de hallazgos.	JCC y EEAM
17:30 a 18:00 h	<b>Reunión de cierre.</b> • Comunicar las conclusiones de la visita en sitio. • Informar sobre los siguientes pasos para la conclusión del servicio.	JCC y EEAM

**Signos:** EEAM: Excalibur Ernesto Acosta Miranda; JCCG: Juan Carlos Caycedo Gonzalez.  
**Nota:** La presente agenda está sujeta a modificaciones considerando el desarrollo de la validación/verificación, así mismo, los tiempos destinados para cada actividad, dependen de los diferentes riesgos identificados en el plan de muestreo, con base en el primer párrafo del numeral 6.1.3.3 de la norma UNE-ES ISO 14064-3:2019.

Firma de conformidad por parte del responsable del OC VV GEI-ANCE y del Titular del Proyecto

	
Juan Carlos Caycedo Gonzalez Verificador Líder OC-VV-GEI, ANCE 15/10/2024 Bogotá, Colombia.	Julieta Zangha Ingeniera de Energías Renovables y Ef. Energética Tassaroli S.A. 15/10/2024 Mendoza, Argentina.

ANEXO A

MATRIZ DE IDENTIFICACIÓN DE RIESGOS

- a) / El equipo OC VV GEI debe verificar que la fuente de emisiones este relacionada directamente con la organización, solicitando facturas de consumo de combustibles, energía eléctrica, vapor, insumo, gases refrigerantes, documentos legales, acuerdos, etc.
- b) / El equipo verificador debe solicitar la información necesaria hasta considerarla veraz y confiable.
- c) / El equipo OC VV GEI debe verificar el total de información referente a la fuente de emisiones o en su caso hacer revisión de una muestra de datos representativa para buscar errores de transcripción.

2024SV-OVV00003\_Tassaroli

Tassaroli S.A.

OC-VV-GEI ANCE

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#### PLAN DE VERIFICACIÓN/VALIDACIÓN DEL REPORTE DE EMISIONES

d) / El equipo OC VV GEI debe manejar la metodología aplicable a la fuente de emisiones verificada y en caso de tener dudas al respecto debe resolverlas con ayuda de otro verificador líder.

f) / El equipo OC VV GEI antes de empezar la verificación debe corroborar que las variables de cálculo sean las correspondientes al combustible, energía eléctrica, vapor, insumo, gases refrigerantes y proceso, que estén actualizados de acuerdo al Programa GEI aplicable.

h) / El equipo OC VV GEI, se asegura que hayan sido implementados los procedimientos adecuados de control para archivos electrónicos.

i) / El equipo OC VV GEI solicita al ESR/Organización los posibles procesos internos de control para su análisis y validación.

k) / El equipo OC VV GEI se asegura que las fuentes de información verificadas estén adecuadamente documentadas y sustentadas.

[illegible]

INTIMIDACIÓN:	¿Puede el uso del Organismo a cargo de las actividades de certificación o de verificación ser objeto de un uso indebido que comprometa la credibilidad del sistema?	¿Existen riesgos de corrupción, coacción o intimidación de los miembros del equipo de verificación?	No	No	No	No			
			No	No	No	No			
			No	No	No	No			
			No	No	No	No			
			No	No	No	No			
SOBORNOS	¿Puede el uso del Organismo a cargo de las actividades de certificación o de verificación ser objeto de un uso indebido que comprometa la credibilidad del sistema?	¿Existen riesgos de corrupción, coacción o intimidación de los miembros del equipo de verificación?	No	No	No	No			
			No	No	No	No			
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DESARROLLO E IMPLEMENTACIÓN DE SERVICIOS RELACIONADOS	¿Existen riesgos de corrupción, coacción o intimidación de los miembros del equipo de verificación?	¿Existen riesgos de corrupción, coacción o intimidación de los miembros del equipo de verificación?	No	No	No	No			
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ACCIONES	¿Existen riesgos de corrupción, coacción o intimidación de los miembros del equipo de verificación?	¿Existen riesgos de corrupción, coacción o intimidación de los miembros del equipo de verificación?	No	No	No	No			
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SALVAGUARDAS	¿Existen riesgos de corrupción, coacción o intimidación de los miembros del equipo de verificación?	¿Existen riesgos de corrupción, coacción o intimidación de los miembros del equipo de verificación?	No	No	No	No			
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ACCIONES DE MITIGACIÓN	¿Existen riesgos de corrupción, coacción o intimidación de los miembros del equipo de verificación?	¿Existen riesgos de corrupción, coacción o intimidación de los miembros del equipo de verificación?	No	No	No	No			
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