

# **VALIDATION REPORT**

# YUNGAS PV POWER PLANTS BUNDLE PROJECT

BCR-AR-131-1-003



BCR Validation report template Version 1.3

April 2024



VALIDATION REPORT PROJECT ID				
Project Title	Yungas PV Power Plants Bundle Project			
Project ID	BCR-AR-131-1-003			
Project holder	Industrias Juan F. Secco SA			
Project Type/Project activity Energy Sector - Non-Conventional and Rene Energy Sources (NCRE)				
Grouped project Not applicable				
Version number and date of the Project Document to which this report applies	Version number: 3.0  Date: 04/12/2024			
Applied methodology	AMS-I.D - Grid connected renewable electricity generation – Version 18.0			
Project location	Chalican, Jujuy Province, Argentina Rodeito, Jujuy Province, Argentina			
Project starting date	Chalican Project: 01/09/2024 Rodeito Project: 01/12/2024			
Quantification period of GHG emissions reductions/removals	Chalican Project: 01/09/2024 to 31/08/2031 (both dates included)  Rodeito: 01/12/2024 to 30/11/2031 (both dates included)			



Estimated total and mean annual amount of GHG emission reductions/removals	54,844 tCO2e 7,835 tOC2e/y	
Contribution to Sustainable Development Goals	SDG 3: Good Health and well-being SDG 5: Gender equality SDG 7: Affordable and clean energy SDG 8: Decent Work and Economic Growth SDG 10: Reduced Inequalities SDG 13: Climate Action	
Special category, related to co- benefits	Not applicable	
Document date	18/02/2025	
Work carried out by	Norberto Ardila Rodríguez	
Approved by	Martha Corredor	



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#### 1 Executive summary

The GHG Project called "YUNGAS PV POWER PLANTS BUNDLE PROJECT" with Project ID # BCR-131-1-003, consists of the of the installation of Greenfield power plants (Solar photovoltaic plant), which the project activities supply electricity to a grid (EJESA) whose distribution system is connected to the SADI (Argentine Interconnection System) with a total installed nominal capacity of 10.5 MW. The GHG project is in Yungas region, which is geographical region of the province of Jujuy, Argentina. The GHG project is composed of photovoltaic solar panels, inverters, smart transformer stations (STS), electrical substation and energy meters. Before the project implementation, no photovoltaic solar plants had been installed on site.

The scope of this validation exercise is to assess the estimated total GHG emission reductions of 54,844 t CO2e for the first quantification period of GHG emissions reduction of the following way:

- Chalican Project: 01/09/2024 to 31/08/2031 (both dates included)
- Rodeito Project: 1/12/2024 to 30/11/2031 (both dates included)

The estimated average annual GHG emission reduction of 7,835 tCO2e. The purpose of this validation exercise is to confirm the compliance of the GHG project with the BCR standard, version 3.4 /BCR1/ and AMS-I.D methodology, version 18.0 /UN1/ and its related tools. ICONTEC validated the project design, and the implementation status based on evidence-gathering activities (Documentary review, onsite visit, interviews, crosschecking) addressing conservatively the restrictions and uncertainties associated to this validation process. ICONTEC confirms that it achieved a reasonable level of assurance during validation. The ICONTEC audit team was able to conclude that as it was described in the GHG Project document, version 3.0 /1/, it meets all relevant BCR requirements and correctly applies the baseline and monitoring plan of the AMS-I.D methodology, version 18.0 /UN1/.

# 2 Objective, scope and validation criteria

ICONTEC has been commissioned by "Sustainable and Carbon Finance LLC" to perform an independent validation of the GHG project "YUNGAS PV POWER PLANTS BUNDLE



PROJECT", with Project ID # BCR-131-1-003¹, for the quantification period of GHG emissions reduction of the following way:

- Chalican Project: 01/09/2024 to 31/08/2031 (both dates included)
- Rodeito Project: 1/12/2024 to 30/11/2031 (both dates included)

The objective of this validation exercise is to have an independent third party for the assessment of the project design, and to ensure a thorough assessment of the proposed project activity against the applicable BCR Standard, version 3.4 /BCR1/ and in particular, the project's baseline and monitoring plan were assessed against the AMS-I.D methodology, version 18.0 /UN1/.

According to BCR Standard, version 3.4 /BCR1/, which constitutes the requirement for the audit (see numeral 1.2 of this report), the objectives are:

- Evaluate the probability that implementing the planned GHG project will increase the reduction in GHG emissions declared by the project proponent.
- Validate compliance with the regulatory requirements and those established by the GHG program and the referential to determine the viability of implementing the GHG project.
- Assess compliance in the implementation of the mitigation project activities, including those associated with the methodology selected for the Project holder.
- Evaluate compliance with the monitoring, verification, and reporting system principles necessary to comply with current legislation.

The scope of the independent validation performed by ICONTEC audit team includes:

- Project boundaries.
- An assessment to confirm that project areas are not included in, or overlap with,
- the geographic boundaries of other projects.
- The physical infrastructure, activities, technologies, and processes of the GHG project.
- An Assessment of the NDC of the country where the Project is under development
- to determine whether the Project's activities are covered by the NDC.
- The adequate use of an appropriate methodology.
- The baseline scenario and additionality.
- The project participants, ownership and carbon rights.
- The risk assessment and the project permanence.
- The areas or instances of the project, where is a grouped project.
- The project length and the quantification periods.

<sup>&</sup>lt;sup>1</sup> https://globalcarbontrace.io/projects/95



- The sustainable development safeguards.
- The contribution of the project to sustainable development objectives.
- The monitoring plan.
- The assessment of uncertainty and conservative approach.
- Stakeholder engagement and consultation.
- Compliance with applicable legislation.

The ICONTEC audit team used the following validation criteria for the evaluation of the GHG project under evaluation:

- BCR Standard, version 3.4 /BCR1/
- Project conformance to Validation and Verification manual Greenhouse Projects, version 2.4 /BCR2/.
- BCR baseline and additionality, version 1.3 /BCR3/.
- List of the CDM methodologies accepted from the energy sector under BCR Standard, February 2024 /BCR4/.
- BCR Avoiding Double Counting (ADC) Tool, version 2.0 /BCR5/.
- Energy Sector Non-Conventional Renewable Energy sources, version 1.1 /BCR6/.
- BCR Sustainable Development Goals (SDG), version 1.0 /BCR7/.
- BCR Sustainable Development Safeguards, version 1.1 /BCR8/.
- BCR Permanent and Risk Management, version 1.1 /BCR9/.
- AMS-I.D Grid connected renewable electricity generation, version 18.0 /UN1/.
- Toolo7 Tool to calculate the emission factor for an electricity system, version o7.0
  /UN2/.
- Tool 21 Demonstration of additionality of small-scale project activities, version 13.1 /UN3/.
- Tool27 Investment analysis, version 12.0 /UN4/.

The ICONTEC Audit team carries out audits according to its ethics code and internal procedures for carrying out validation, verification and certification audits of BCR project activities, which, in turn, are based on the BCR Standard. Likewise, ICONTEC focuses on the identification of significant risks for emissions reduction generation, and verification of the mitigation during its audits.

The validation does not intend to provide any consulting for the project participants. However, stated requests for clarifications and/or corrective actions may have provided input for improvement of the project design.

# 3 Validation planning

#### 3.1 Validation plan

The ICONTEC audit team developed the following validation plan:



Title of GHG Project mitigation	Yungas PV Power Plants Bundle Project				
Name and position of the Project Responsible	Hernán Juri Administration & Finance Manager INDUSTRIAS JUAN F. SECCO S.A.				
Email	hjuri@secco.com.ar	Mo	bile	+54 (0	0341) 409-4000
Address		Juan Pal	blo II 5665		
(including	(Circunvalac	ión Ave. ar	nd Uriburu Ave	e. colle	ctor)
country)	Rosario, Argentina				
		Herr	ián Juri		
T C	Administration & Finance Manager				
Information	INDUSTRIAS JUAN F. SECCO S.A.				
and position of contact person	Alejandra Camara Proposer				
	Sustainable Carbon Finance LLC				
Audit type	Validation	X	Verification		N/A
Audit type	Completely remote	N/A	Partially rer	note	X

With cordial greetings, I am writing you to submit the proposal for the audit plan to be carried out on the GHG mitigation project presented by your organization. Likewise, for the opening meeting and closing meeting of the audit, I would like to thank you for inviting the relevant people from the areas that will be audited.

For the daily balance of information of the audit team, I thank you for having an agenda and a physical or remote space to hold the meeting, as well as access to the essential documentation of the GHG mitigation initiative.

Regarding the occupational health and safety conditions applicable to your organization, please inform them before conducting the on-site visit so that the audit team can request from ICONTEC the necessary personal protection elements.

The information known from the execution of this audit will be treated confidentially by the audit team and Icontec. The language of the audit interviews will be in Spanish; nevertheless, the documentation from the verification service like the audit plan, and verification report will be in English.

The conditions of this service are indicated in R-PS-012 REGULATION FOR VALIDATION AND VERIFICATION SERVICES.

Audit	Criteria

- ISO 14064-3:2019 Greenhouse gases. part 3: specification with guidance for the verification and validation of greenhouse gas
- BCR Standard, version 3.4

Con formato: Español (Colombia)



	- Va	lidation and Veri	ficatio	n manual Gree	nhouse Gas Projects,	
	version 2.4 - AMS-I.D Small-Scale Methodology - Grid connected renewable electricity generation, version 18.0					
	suppo	rt of technological			pe performed with the lote.	
	Valida	tion:				
Audit	projec		GHG	removals/reduc	n of the planned GHG tions declared by the	
objectives	•	principles and re programs within The establishmen	equire the sc nt, jus	ments of releva ope of validation stification and o	criteria, including the nt GHG standards or locumentation of the	
		GHG mitigation p			Cala CIIC	
	•				f the GHG project.	
	•	scenarios. Physical infrastru	ıcture,	O .	ologies and processes	
Audit scope		of the GHG proje				
	•	GHG sources, sin Types of GHG.	ks and	l/or reservoirs.		
	•	Defined time peri	iods to	execute the pro	ject activity	
Level of assurance	F	95% Paragraph 22.3(a) BCR Standard	1	Materiality	5% Paragraph 22.3(b) BCR Standard	
	D.	Version 3.4		1	Version 3.4	
					of the GHG mitigation	
	project planning, including procedures and criteria for the project, the baseline, quality control and assurance, risk management, and the documents of this validation, listed in the following table:  Risk control system in the system in th					
Sampling plan/						
Evidence gathering plan	No.	generate errors, omissions and potential distortions	Risk level	Justification	validation and/or verification plan and/or in the sampling or evidence collection plan	
	Cont	rol risks:				



1.	Human errors in the quantification of emissions.  Inaccuracy: double accounting, significant manual transfer of key data and inappropriate use of emission factors	Low	The quantification data related to the period between:  Chalican Project: o1/09/2024 to 31/08/2031  Rodeito Project: o1/12/2024 to 30/11/2031  are taken manually by the personnel in charge of the operation and this has risks of errors, omissions or discrepancies	Cross-reference the information and data indicated in the ER spreadsheets with the data downloaded from the central monitoring system during the evaluation of the ER calculations.
2.	Lack of full data coverage. Exclusion of significant sources, incorrectly defined boundaries, leakage effects.	Low	Lack of knowledge of the requirements of the methodology related to its applicability.	In validation, it must be ensured that the audit plan covers the applicability requirements of the methodology.
3.	Inconsistency: lack of documentation of methodological changes in the calculation of GHG emissions or removals in relation to those	Half	Lack of knowledge of the requirements of the quantification methodology and/or the requirements of the	Ensure that the audit plan considers reviewing the status of the project for changes that could affect the quantification of



	used in previous		certification	GHG removals or
	years.		program.	reductions.
Inhe	rent risks:			
3.	Reliance on a technology platform designed for data capture, which can lead to omissions and errors in the transfer of raw or raw data to the emissions reduction or removal Excel spreadsheet.	Half	Data transfer quality control failures due to unclear QA/QC procedure.	Verify the quality management procedures and instructions designed for this purpose.  The project proponent must demonstrate how data transfer is carried out and how it is cross-checked.  The auditor must establish in the audit plan a space to conduct interviews with the personnel responsible for recording data and verifying it through compliance with its procedures.
4.	Facts discovered after validation or verification	Half	Project changes that may affect the GHG Validation or Verification statement.	The audit plan must ensure a remote or inperson visit to the project facilities to confirm the implementation status. If the project modifies the GHG statement, the audit team must evaluate the modified GHG



Dete	ction risks:			statement to determine whether or not the evidence supports the modified GHG statement to be determined.
			Omissions by	
5.	Delays in the calibration of measurement or monitoring equipment related to the quantification of GHG removals or reductions.	Half	the project proponent to the equipment calibration frequencies established in the monitoring plans.  Failures in maintenance controls of monitoring equipment.	The audit plan must include the time period to verify the calibration status of 100% of the monitoring equipment.
6.	Absence of data due to failures in the operation of measurement equipment.	Low	The monitoring plan defines quality controls and corrective maintenance in case of failure of measurement equipment.	The auditor must include in the audit plan the time period to verify if the measurement equipment is installed according to the monitoring plan and conduct interviews with the responsible personnel to determine their level of knowledge regarding quality controls and



			corrective maintenance.
Lead auditor name	Norberto Ardila (NA)	Email	nardila@icontec.net
Auditor	Not applicable	Technical expert	Norberto Ardila (NA)
Opening meeting	22/10/2024	Time	o8:00 (Argentina time)
Closing meeting	11/11/2024	Time	12:00 (Argentina time)
Date on which the			
audit plan was	12/10/2024		
completed	A CITIVA III	TS/ DI ANI	

ACTIVITY PLAN

DATE	TIME	AUDIT REQUIREMENT	AUDITOR	AUDITEE NAME AND POSITION
22/10/2024	09:00 - 09:15 (Argentin a time)	Opening meeting:  - Presentation of the audit team.  - Confirmation of audit criteria, audit objectives, audit scope, assurance level and sampling plan.  - Confirmation of basic information of the GHG program.  - general conditions for on-site inspection	NA (On-site)	Hernán Juri Administration & Finance Manager (On-site) Alejandra Camara Proposer Sustainable Carbon Finance LLC (On-site)
23/10/2024	14:00 - 18:00	On-site inspection	NA (On-site)	Hernán Juri Administration & Finance Manager



	r .	1	1	
	(Argentin			(On-site)
	a time)			Alejandra Camara Proposer Sustainable Carbon Finance LLC (On-site)
24/10/2024	08:30 - 10:30 (Argentin a time)	Evidence-gathering activities for the following aspects:  - General description of the project Compliance with Laws, Statutes and Other Regulatory Frameworks Carbon ownership and rights Climate change adaptation Risk management Sustainable development safeguards (SDSs) Stakeholder engagement and consultation Sustainable Development Goals (SDGs) Double counting avoidance.  Note: These aspects will be transversal to the other projects.	NA (On-site)	Hernán Juri Administration & Finance Manager (On-site) Alejandra Camara Proposer Sustainable Carbon Finance LLC (On-site)
24/10/2024	12:30 - 14:00 (Argentin a time)	Break	N	lot applied
24/10/2024	08:30 - 10:30	Evidence-gathering activities for the following aspects:	NA (On-site)	Hernán Juri Administration & Finance Manager





		<ul> <li>Baseline         Emissions.</li> <li>Project         Emissions.</li> <li>Leakage         Emissions.</li> <li>Estimated GHG         Emission         Reductions and         Carbon Dioxide         Removals</li> <li>Data and         Parameters         Available at         Validation.</li> <li>Data and         Parameters         Monitoring Plan.</li> <li>Note: These aspects will be transversal to the other projects.</li> </ul>		
25/10/2024	12:30 - 14:00 (Argentin a time)	Break	N	ot applied
25/10/2024	14:00 - 16:00 (Argentin a time)	Evidence-gathering activities for the following aspects:  - Quantification of GHG emissions reduction:  o Applicability of Methodology.  o Project Boundary.  o Baseline Scenario.  o Additionality.  o Methodology Deviations.	NA (On-site)	Hernán Juri Administration & Finance Manager (On-site) Alejandra Camara Proposer Sustainable Carbon Finance LLC (On-site)



	ı	,		,
		<ul> <li>Baseline         Emissions.</li> <li>Project         Emissions.</li> <li>Leakage         Emissions.</li> <li>Estimated GHG         Emission         Reductions and         Carbon Dioxide         Removals</li> <li>Data and         Parameters         Available at         Validation.</li> <li>Data and         Parameters         Avoilable at         Validation.</li> <li>Dout and         Parameters         Monitoring Plan.</li> <li>Note: These aspects will         be transversal to the         other projects.</li> </ul>		
25/10/2024	16:00 - 17:00 (Argentin a time)	Preparation of partial report	NA (On-site)	Not applied
25/10/2024	17:00 - 17:30 (Argentin a time)	Closing meeting of the on-site inspection	NA (On-site)	Hernán Juri Administration & Finance Manager (On-site)  Alejandra Camara Proposer Sustainable Carbon Finance LLC (On-site)
11/11/2024	11:00 - 12:00 (Argentin a time)	Identification of CARs, CLs and FARs Audit closing meeting	NA (Remote)	Hernán Juri Administration & Finance Manager (On-site) Alejandra Camara Proposer



		Sustainable Carbon Finance LLC (On-site)

#### **Observations:**

- During the interviews, the audit team will review, by sampling, the documentation referenced within the project description and/or in the monitoring report.
- This activity plan is flexible and can be modified by mutual agreement with the project owner.
- All project owner personnel related to the GHG mitigation initiative must be available if requested by the audit team to evaluate any requirements
- During any phase of this evaluation process (documentary review, before the onsite visit, on-site visit, drafting of the audit report or technical review) findings may be declared, which must be resolved before sending the relevant documentation (project description, monitoring report, spreadsheets, audit reports, among others) to the GHG program.
- The schedule of Validation/verification activities is described in document F-GVo86 NOTIFICATION OF VALIDATION AND VERIFICATION SERVICES

#### For the development of the remote audit, take into account:

In applicable cases, the project proponent must send the information to the audit team under the following characteristics:

Ítem	Format	Traceability	Information sending medium
Videos	Original video recording formats: mp4, mkv, avi, dvd, wmv, mov, among others. Preferably tablets. Date, time and associated tracks in .gpx, kml or shape format.	specifying the characteristics of the video, the camera used, the encoding of each video and its	Through Hard Drive – Cloud Storage.
Photographs	Format: jpg, jpeg, gif, png, bmp, etc. Date, time and associated tracks in .gpx, kml or shape format.	characteristics of	Through Hard Drive - Cloud Storage.



	archiving and	
1	sending medium.	

The lead auditor during the execution of the audit plan and together with the client, will evaluate the risks of performing the remote audit, if applicable, and the control, inherent and detection risks identified during the documentary review and service planning and will complete the following table:

No	Risk	Risk level	Treatment of risks in the Validation/Verification plan
1	Limited access to area Low		There is unlimited access to the areas to be verified-validated, however access will be correctly verified in each area, also knowing that there are no restricted areas as long as physical work is not carried out at the time required.
2	Interference or poor quality in communication		This point of quality in communication will be seen to always exist in each area and in each part of interest of the project, several different people and networks are available.
3	Difficulties in interviewing project participants	Low	There is no restricted area in the project.
4	Project proponent access to area due to mobility restrictions (COVID-19 or other condition)	Low	This is taken into account and there will be a vehicle that will transport, if necessary, the audit personnel to the destination and area that must be audited, reviewed or verified.
7	Loss of evidence in the implementation of controls	Low	In this context, there are two ways to safeguard information, one automatically on a server and the other manually with tickets that allow you to have two controls and NOT LOSE INFORMATION.
8	Identification of errors in methodology calculations	Medium	100% data cross check



#### 3.2 Validation team

The appointment process of the validation team considers the technical area(s), sectoral scope(s), and relevant host country experience required amongst team members for the accurate and thorough assessment of the project design. The ICONTEC audit team was assigned to this validation activity on 14/08/2024, taking all the above factors into consideration and as a result of the contract review process, where is assessed the compliance of the validation team with the requirements of BCR Antibribery policy. The ICONTEC audit team members are given in Table below:

Name	Role in the Audit team	Activities to be carried
Norberto Ardila	Lead Auditor and Technical Expert	Documentary review, on- site visit, interviews
Ana Isabel Aubad	Technical reviewer	Technical review

In Annex 1, it is provided information to demonstrate how the team meets the compliance required for the validation and list the documentation that supports the competencies of the validation team, required in the Project conformance to Validation and Verification manual Greenhouse Projects, version 2.4 /BCR2/.

#### 3.3 Level of assurance and materiality

During the validation the ICONTEC audit team used documentary review, on-site visit, interviews and secondary sources as audit techniques to achieve an assurance level of no less than 95%, according to paragraph 22.3(a) of the BCR Standard, version 3.4 /BCR1/. The ICONTEC audit team planned and carried out the validation using the concept of materiality, to ensure that the reported GHG emissions reductions meet the agreed reasonable level of safety and are free of errors, omissions or mistakes. As established in the audit plan approved by the project participants of the project activity, a materiality threshold of  $\pm 5\%$  was used, according to paragraph 22.3(b) of the BCR Standard, version 3.4 /BCR1/.

# 3.4 Sampling plan

During the documentary review stage, the ICONTEC audit team carried out a risk assessment. At this stage, the audit team studies the GHG Project Document, version 1.0



/1/ (Report registered on the Global Carbon Trace platform; Project ID: BCR-AR-131-1-003²) together with the spreadsheet that contains the estimate of the reduction of GHG emissions for the quantification period from 01-September-2024 to 31-August-2024 (Both dates included), version 1.0 /2/. The documentary review stage was conducted to ensure consistency with and identify any deviation from BCR Standard requirements /BCR1/. Documentary review stage included an examination of the project design details, baseline scenario, additionality, ex ante and monitoring data and parameters, and quantification of GHG emission reductions. As a result of the desktop review, a risk analysis is carried out, covering the aspects of the guidelines of the standard ISO 14064-3 /ISO1/. The result of the risk analysis is summarized in the following table:

	Risks that may	RIS	SK ASSESSMENT	Risk control system in the validation and/or
No.	No. generate errors, omissions and potential distortions	Risk level	Justification	verification plan and/or in the sampling or evidence collection plan
Contro	ol risks:			
1.	Human errors in the quantification of emissions.  Inaccuracy: double accounting, significant manual transfer of key data and inappropriate use of emission factors	Low	The quantification data related to the period between:  Chalican Project: o1/09/2024 to 31/08/2031  Rodeito Project: o1/12/2024 to 30/11/2031  are taken manually by the personnel in charge of the operation and this has risks of errors, omissions or discrepancies	data downloaded from the central monitoring system during the evaluation of the ER calculations.
2.	Lack of full data coverage. Exclusion	Low	Lack of knowledge of the requirements	In validation, it must be ensured that the audit

<sup>&</sup>lt;sup>2</sup> https://globalcarbontrace.io/projects/95



3.	of significant sources, incorrectly defined boundaries, leakage effects.  Inconsistency: lack of documentation of methodological changes in the calculation of GHG emissions or removals in relation to those used in	Half	of the methodology related to its applicability.  Lack of knowledge of the requirements of the quantification methodology and/or the requirements of the certification	plan covers the applicability requirements of the methodology.  Ensure that the audit plan considers reviewing the status of the project for changes that could affect the quantification of GHG removals or reductions.
	previous years.		program.	
Inhere	ent risks:			Varify the guality
3.	Reliance on a technology platform designed for data capture, which can lead to omissions and errors in the transfer of raw or raw data to the emissions reduction or removal Excel spreadsheet.	Half	Data transfer quality control failures due to unclear QA/QC procedure.	Verify the quality management procedures and instructions designed for this purpose.  The project proponent must demonstrate how data transfer is carried out and how it is cross-checked.  The auditor must establish in the audit plan a space to conduct interviews with the personnel responsible for recording data and verifying it through compliance with its procedures.
4.	Facts discovered after validation or verification	Half	Project changes that may affect the GHG Validation or Verification statement.	The audit plan must ensure a remote or inperson visit to the project facilities to confirm the implementation status. If the project modifies the GHG statement, the audit team must



				evaluate the modified GHG statement to determine whether or not the evidence supports the modified GHG statement to be determined.
Detect	ion risks:			
5.	Delays in the calibration of measurement or monitoring equipment related to the quantification of GHG removals or reductions.	Half	Omissions by the project proponent to the equipment calibration frequencies established in the monitoring plans.  Failures in maintenance controls of monitoring equipment.	The audit plan must include the time period to verify the calibration status of 100% of the monitoring equipment.
6.	Absence of data due to failures in the operation of measurement equipment.	Low	The monitoring plan defines quality controls and corrective maintenance in case of failure of measurement equipment.	The auditor must include in the audit plan the time period to verify if the measurement equipment is installed according to the monitoring plan and conduct interviews with the personnel responsible to determine their level of knowledge regarding quality controls and corrective maintenance.

Based on the strategic and risk analysis carried out by the ICONTEC audit team that considered the requirements of the BCR Standard, version 3.4 /BCR1/ related to the level of assurance, the scope of validation, the validation criteria, the quality, and type of evidence (qualitative and quantitative) required to achieve the required level of assurance, the methodologies for determining representative samples, and the risks of potential errors, omissions, or misinterpretations, in the case of this project, a sampling was not carried out and 100% of data and information has been reviewed.



# 4 Validation procedures and means

#### 4.1 Preliminary assessment

As was indicated in section 1 of this report, the scope of this validation exercise is to assess the estimated total GHG emission reductions of 54,844 tCO2e for the first quantification period of the following way:

- Chalican Project: 01/09/2024 to 31/08/2031 (both dates included)
- Rodeito Project: 1/12/2024 to 30/11/2031 (both dates included)

GHG emissions reduction of the project from 01/09/2024 to 31/08/2031 and estimated average annual GHG emission reduction of 7,835 tCO2e and the purpose of this validation exercise is to confirm the compliance of the project with the BCR standard, version 3.4 /BCR1/ and AMS-I.D methodology, version 18.0 /UN1/ and its related tools.

The independent validation of the GHG project "YUNGAS PV POWER PLANTS BUNDLE PROJECT", with Project ID # BCR-131-1-003, consists of the following three phases:

- According to paragraph 10.3.1 of the Project Conformance to Validation and Verification manual Greenhouse Projects, version 2.4 /BCR2/, there is a documentary review that includes:
  - a. Full review of the GHG project data and information
  - b. Cross-checking the information contained in the GHG project documents and other documentary sources used.
  - Review of other sources of information related to the type of GHG project or sector in which it is located.
  - d. Evaluation of the application of the methodology selected by the GHG project, including the identification of the baseline,
  - e. Consideration of the appropriate and accurate use of models and parameters for the estimation of GHG reductions or removals and,
  - f. Sampling applies a method following the GHG project's characteristics, the level of assurance, and materiality required.
- ii. According to paragraph 10.3.1 of the Project Conformance to Validation and Verification manual Greenhouse Projects, version 2.4 /BCR2/, there is an on-site visit stage followed by interviews with:
  - a. Relevant stakeholders such as people with knowledge about the design of the GHG project and its implementation.
  - b. GHG project participants and those in charge of designing, implementing, and monitoring GHG activities.
- iii. In accordance with section 10.4 of the Project Compliance manual for Validation and Verification of Greenhouse Projects, version 2.4 /BCR2/, there is a finding resolution stage followed by the issuance of a final GHG Validation report with a conclusion and opinion.



The ICONTEC Audit team carries out audits according to its ethics code and internal procedures for carrying out validation, verification and certification audits of BCR project activities, which, in turn, are based on the BCR Standard. Likewise, ICONTEC focuses on the identification of significant risks for emissions reduction generation, and verification of the mitigation during its audits.

The validation does not intend to provide any consulting for the project participants. However, stated requests for clarifications and/or corrective actions may have provided input for improvement of the project design.

All documentation reviewed during the documentary review stage has been included in Annex 3.

#### 4.2 Document review

The main documents reviewed at this stage are:

- a) GHG Project document, version 1/1/
- b) ER spreadsheet version 1/2/.
- c) Spreadsheet related with calculations of the combined margin emissions factor /3/.
- d) Information related to additionality /4/.
- e) Technical information of the GHH Project /5/.
- f) Stakeholder engagement and consultation /6/.
- g) Sustainable development safeguards (SDSs) /7/.
- h) Tool for Determining the Contributions of GHG Projects to Achieving the Sustainable Development Goals (SDGs) /8/.

Background documents related to methodologies employed in the design or other reference document t:

- i) AMS-I.D Grid connected renewable electricity generation, version 18.0 /UN1/.
- j) Toolo7 Tool to calculate the emission factor for an electricity system, version o7.0 /UN2/.
- k) Tool 21 Demonstration of additionality of small-scale project activities, version 13.1 /UN3/.
- l) Tool27 Investment analysis, version 12.0 /UN4/.

All documentation reviewed during the documentary review stage has been included in Annex 3.

#### 4.3 Interviews

Based on evidence-gathering activities (On-site interviews) were conducted with the GHG project participants and relevant stakeholders. The interviews were conducted in person (on-site) by the ICONTEC auditor team. Below is a list of the main interviewees:



	Inter	viewee		Qualification /	
No.	Name	Affiliation	Date	Role	Consulted aspect
1.	Hernan Juri	Industrias Juan F. Secco SA	23/10/2024 24/10/2024 25/10/2024	Administration and Finance Manager	Tour by the GHG project facilities.  GHG Project description.
2.	Juan José Salina	Industrias Juan F. Secco SA	23/10/2024 24/10/2024 25/10/2024	Maintenance engineer	Tour by the GHG project facilities.  GHG Project description.
3.	Elian Cerbán	Industrias Juan F. Secco SA	23/10/2024 24/10/2024 25/10/2024	Electric Generation Analyst	Tour by the GHG project facilities.  GHG Project description.
4.	Virginia Ravaioli	Industrias Juan F. Secco SA	22/10/2024 24/10/2024 25/10/2024	Head of Corporate Communication	Stakeholder engagement and consultation.  Sustainable development safeguards (SDSs).  Sustainable Development Goals (SDGs).
5.	Rocío Hernández	Industrias Juan F. Secco SA	25/10/2024	Compliance Officer	Stakeholder engagement and consultation.
6.	María Victoria Sosa	Industrias Juan F. Secco SA	24/10/2024	Regulatory affairs	Description about regulatory framework applicable for the GHG project activity.
7.	Diego Tartufoli	Industrias Juan F. Secco SA	25/10/2024	Finance Professional	Description and explanations about timing of the investment decision of the project activity and



					additionality analysis.
8.	Sergio Matus	Industrias Juan F. Secco SA	25/10/2024	GEE Assistant Manager	Description and explanations about monitoring plan
					Tour by the GHG project facilities.  GHG Project description.  Applicability conditions of the
					methodology  Project boundary  Description and explanations about quantification
9.	Laura Garzón	Sustainable and Carbon Finance LLC	23/10/2024 24/10/2024 25/10/2024	Consultant	period (project start date)  Description and explanations about methodology,
					baseline and emission reductions calculations  Description and explanations about
					explanations about monitoring plan Additionality. Sustainable
					development safeguards (SDSs).
					Development Goals (SDGs).

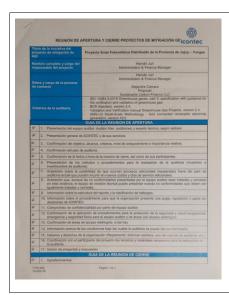


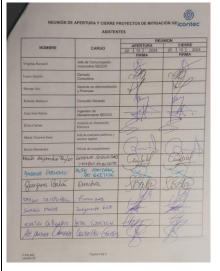
					Argentinean regulatory framework.  Tour by the GHG project facilities.  GHG Project description.  Applicability conditions of the methodology  Project boundary  Description and
10.	Roberto Beducci	Sustainable and Carbon Finance LLC	23/10/2024 24/10/2024 25/10/2024	Consultant	explanations about quantification period (project start date)  Description and explanations about methodology, baseline and emission reductions calculations  Description and explanations about monitoring plan Additionality.  Sustainable
					development safeguards (SDSs).  Sustainable Development Goals (SDGs).  Argentinean regulatory framework.



					Description and explanations about quantification period (project start date)
11.	Alejandra Camara	Sustainable and Carbon Finance LLC	25/10/2024	Consultant	Description and explanations about methodology, baseline and emission reductions calculations
					Description and explanations about monitoring plan Additionality. Argentinean regulatory framework.

Attached the images of the signed minutes:





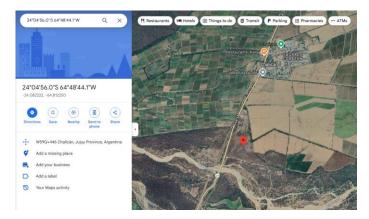


#### 4.4 On-site visit

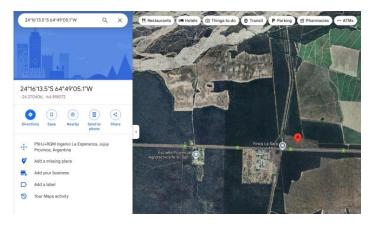
Based on evidence-gathering activities (On-site visit), a tour by the GHG project facilities. It was conducted with the GHG project participants and relevant stakeholders. The on-site visit included:

 Validation of the GHG project location: It is evident that the GHG project is in south of the Valles, which is geographical region of the province of Jujuy, Argentina. The validation of the GHG project location is carried out through Google maps (See photo below).

# Chalican project:



#### Rodeito project:





Validation of the GHG project type: According to paragraph 11.1.3 of the BCR Standard, version 3.4 /BCR1/, the solar energy is obtained from that non-conventional source of renewable energy that consists of electromagnetic radiation from the sun. It is evident that the GHG project uses solar photovoltaic energy (See photo below).

# Chalican project:



# Rodeito project:





 Validation of the GHG project scale: According to paragraph 11.3 of the BCR Standard, version 3.4 /BCR1/, the GHG projects in sectors other than AFOLU are subdivided into large-scale and small-scale, following the definitions of the Clean Development Mechanism.

Chalican project: It is evident that the GHG project has a nominal capacity of 7.5 MW (See photo below).



Rodeito project: It is evident that the GHG project has an installed nominal capacity of 3 MW (See photo below).





- Validation of the technical characteristics of the following equipment:

Chalican project Solar photovoltaic panels	
Manufacturer	Trina Solar
Model	TSM-655DEG21C.20
Nominal Power:	655 W
Quantity	13,500





Rodeito project	
Solar photovoltaic panels	
Manufacturer	Trina Solar
Model	TSM-650DEG21C.20
Nominal Power:	650 W
Quantity	5,520







Chalican project	
Inverters	
Manufacturer	Huawei Technologies Co., Ltd
Model	SUN2000-330KTL-H1
Nominal Power:	330 kVA
Quantity	28







Rodeito project Inverters	
Manufacturer	Huawei Technologies Co., Ltd
Model	SUN2000-330KTL-H1
Nominal Power:	330 kVA
Quantity	11







Chalican project		
Smart Transformers Station (STS)		
Manufacturer	Huawei Technologies Co., Ltd	
Model	JUPITER-9000k-H1	
Nominal Power:	9,000 kVA	
Quantity	3	
Input nominal voltage	800 V (0.8 kV)	
Output nominal voltage	33.000 V (33 kV)	
Quantity	1	







Rodeito project	
Smart Transformers Station (	STS)
Manufacturer	Huawei Technologies Co., Ltd
Model	JUPITER-3000k-H1
Nominal Power:	3,300 kVA
Quantity	3
Input nominal voltage	800 V (0.8 kV)
Output nominal voltage	33,000 V (33 kV)
Quantity	1







Chalican project Electrical Substation	
Property of	Industrias Juan F. Secco SA
Voltage level	33 kV
	Reclosers
Equipment	Voltage transformer
	Current transformer
Quantity	1



Rodeito project	
Electrical Substation	
Property of	Industrias Juan F. Secco SA
Voltage level	33 kV
	Reclosers
Equipment	Voltage transformer
	Current transformer
Quantity	1





Chalican project	
Main meter	
Manufacturer:	Schneider Electric
Type:	ION8650
Serial number:	MW-2303A482-02
Energy accuracy:	o.2 Class
Backup meter	
Manufacturer:	Schneider Electric
Type:	PM9000
Serial number:	MZ-2301B297-01
Energy accuracy:	o.2 Class









Rodeito project	
Main meter	
Manufacturer:	Schneider Electric
Type:	ION8650
Serial number:	MW-2403A973-02
Energy accuracy:	o.2 Class
Backup meter	
Manufacturer:	Schneider Electric
Type:	PM9000
Serial number:	MZ-2303A043-01
Energy accuracy:	o.2 Class







# 4.5 Clarification, corrective and forward actions request

According to section 10.4 of the Project Conformance to Validation and Verification manual Greenhouse Projects, version 2.4 /BCR2/, findings or issues related to baseline, implementation or project activities that require further elaboration, investigation or detail to meet the requirements of the BCR Standard, version 3.4 /BCR1/, must be considered as follows:

- A clarification request (CL) is issued when the information is insufficient, unclear or not sufficiently transparent to determine whether a requirement is met.
- b. A Corrective Action Request (CAR) is issued when: (a) errors have been made in assumptions, application of methodology, or project documentation that directly affect mitigation results; or (b) requirements considered relevant to the validation/verification of a project have not been met.
- c. A Future Action Request (FAR) may be raised in the context of validation if the OEC considers that some issues related to project implementation need to be reviewed during the initial verification.

For the process of resolution of any findings raised, the project participants must modify or rectify the GHG report and provide objective evidence that satisfies the findings issued by the ICONTEC audit team. In accordance with section 3.1.15 of the Regulation for ICONTEC Validation and Verification Services, code R-PS-012, version oo, the project



participants must present a new set of documents that resolve the findings no later than thirty (30) calendar days to from the date of notification. Likewise, in accordance with section 3.1.16 of R-PS-012, the final approval of the action plans for the findings takes place no later than sixty (60) calendar days from the audit closing meeting or thirty (30) calendar days from notification of non-compliance during the validation. In accordance with section 3.4.2 of the Regulation for ICONTEC Validation and Verification services, code R-PS-012, version oo, the decisions made by ICONTEC with respect to audit services are subject to appeal before the appeals committee, whose procedure will be followed in accordance with the procedure established by ICONTEC. This appeal must be presented by the project participants with supporting evidence within fifteen (15) days following receipt of notification of the decision that resolves the replacement. If after this period the Organization does not file any appeal, it will be understood that the Organization accepts these decisions without other judicial or extrajudicial claims. ICONTEC will respond to the appeal within a period of no more than thirty (30) days after receiving the communication of the appeal. While ICONTEC resolves the appeal, the deadlines for submitting the action plan and resolving the findings are suspended and will continue once a decision is made regarding the appeal.

This GHG validation report explains the findings or issues raised, the responses provided by the project proponent, the means of validating those responses, and references to any resulting changes to the GHG project document or supporting annexes.

In relation to the contribution to sustainable development goals (SDGs) and based on evidence-gathering activities (Documentary review and cross-checking) it is evident the GHG project uses The Tool for Determining the Contributions of GHG Projects to Achieving the Sustainable Development Goals (SDGs) proposed by BioCarbon /8/. It is evident that SDG3, SDG5, SDG7, SDG8, SDG10 and SDG13 are met.

In relation to the stakeholder consultation and based on evidence-gathering activities (Documentary review and cross-checking), it is evident that a stakeholder meeting was held on November 3, 2023, where the "Distributed Solar Photovoltaic Project of the Province of Jujuy" and specific details of the Yungas project were described. The projects located in Yungas were grouped together in the same meeting of interested parties due to the proximity between the sites and the fact that they are in the same region called Valle Sur.

In relation to monitoring plan and based on evidence-gathering activities (Documentary review and on-site visit), it is evident that the GHG Project has all its generation plants linked to the SCADA system and operated from the Operations Center (COG) located in Rosario that operates 24 hours a day, seven days a week.



In relation to national legislation, the GHG project under evaluation, it complies with Argentine Law No. 274013, which establishes the criminal liability regime applicable to private legal entities, whether with national or foreign capital, with or without state participation, for the following crimes:

- a) Bribery and influence peddling, national and transnational, provided for in articles 258 and 258 bis of the Penal Code;
- b) Negotiations incompatible with the exercise of public functions, provided for by article 265 of the Penal Code;
- c) Concussion, provided for by article 268 of the Penal Code;
- d) Illicit enrichment of officials and employees, provided for by articles 268 (1) and (2) of the Penal Code;
- e) Aggravated false balances and reports, provided for by article 300 bis of the Penal Code

## 4.5.1 Clarification requests (CLs)

During the validation exercise of the GHG project under evaluation, no CLs were reported.

### 4.5.2 Corrective actions request (CARs)

During the validation exercise of the GHG project under evaluation, no CARs were reported.

#### 4.5.3 Forward action request (FARs)

During the validation exercise of the GHG project under evaluation, no FARs were reported.

# 5 Validation findings

The ICONTEC audit team summarizes the compliance, in accordance with applicable validation requirements in the BCR Standard, version 3.4 /BCR1/ and the Project conformance to Validation and Verification manual Greenhouse Projects, version 2.4 /BCR2/, describing means of validation in the following sections.

## 5.1 Project description

Based on evidence-gathering activities (Documentary review, on-site visit, interviews, cross-checking), it is evident that the GHG project is in the geographical region of the province of Jujuy, Argentina. It uses solar energy through photovoltaic panels. Therefore,

<sup>&</sup>lt;sup>3</sup> https://www.argentina.gob.ar/normativa/nacional/ley-27401-296846/texto



it is evident that the GHG project consists of the installation of a Greenfield power plant, according to paragraph 5(a) of the Section 2.2 Applicability of the AMS-I.D methodology, version 18.0 /UN1/. It is evident that the GHG project does not involve or consider:

- Hydropower plant/Unit with or without reservoir.
- Combined heat and power (co-generation) systems.
- Landfill gas, waste gas, wastewater treatment and agro-industries.
- Switching from fossil fuels to renewable energy sources at the site of the project activity but involving switching from fossil fuels to renewable energy sources connected to an electrical grid.
- Biomass plants/units.
- Retrofits, rehabilitations, replacements, or capacity additions.

It is evident that GHG project consists of the installation of a Greenfield power plant (Solar photovoltaic plant), which supplies electricity to a grid (EJESA) whose distribution system is connected to the SADI (Argentine Interconnection System) with an installed nominal of the following way:

Chalican project: 7.5 MW (7,500 kW)Rodeito project: 3 MW (3,000 kW)

The emission factor is calculated for grid-connected power plants only. Therefore, the GHG project complies with the conditions of applicability of TOOLo7, version o7.0 /UN2/.

## 5.2 Project type and eligibility

Eligibility criteria	Evaluation by validation body	
Scope of the BCR Standard	Based on evidence-gathering activities (Documentary review and on-site visit), it is evident that the GHG project under evaluation includes carbon dioxide (CO <sub>2</sub> ) which is included in the Kyoto Protocol.  According to list of the CDM methodologies accepted from the energy sector under BCR	
	Standard with date on February 2024 (https://biocarbonstandard.com/wp-content/uploads/CDM_methodologies_Energy.p_df) /BCR4/, it is evident that GHG project under evaluation uses an approved methodology (AMS-I.D methodology).	
Project type	Based on evidence-gathering activities (Documentary review and on-site visit), it is evident that the GHG project under evaluation, it	



Eligibility criteria	Evaluation by validation body
	is in energy sector related to Non Conventional Renewable Energy Sources (NCRE) <sup>4</sup> /BCR6/. Based on the evidence-gathering activities (Documental review and on-site inspection) it is evident that the GHG project consists of the installation of a Greenfield power plant (Solar photovoltaic plant). Therefore, the energy obtained from that non-conventional source of renewable energy that consists of electromagnetic radiation from the sun.
Project activity(es)	Based on the evidence-gathering activities (Documental review and on-site inspection) it is evident that the GHG project consists of the installation of a Greenfield power plant (Solar photovoltaic plant), which the project activity supplies electricity to a grid (EJESA), whose distribution system is connected to the SADI (Argentine Interconnection System).
Project scale (if applicable)	According to paragraph 11.3 of the BCR Standard, version 3.4 /BCR1/, the GHG projects in sectors other than AFOLU are subdivided into large-scale and small-scale, following the definitions of the Clean Development Mechanism. Based on the evidence-gathering activities (Documental review and on-site inspection) it is evident that the GHG project has an installed nominal capacity of the following way:
	Chalican project: 7.5 MW (7,500 kW) Rodeito project: 3 MW (3,000 kW)

# 5.3 Grouped project (if applicable)

During evidence-gathering activities (Documentary review and on-site visit) it is evident that the GHG Project under evaluation is not a grouped project.

<sup>&</sup>lt;sup>4</sup> https://biocarbonstandard.com/wp-content/uploads/BCR\_energy-sector-guide.pdf



## 5.4 Other GHG program

The ICONTEC audit team validated the Registry of Clean GHG Projects such as CDM, VCS, GS and CSA and it was validated that the GHG project under evaluation is not registered in these GHG schemes, neither as an individual project nor within a project. grouped.

# 5.5 Quantification of GHG emission reductions and removals

The ICONTEC audit team assesses that the emission reductions quantification was in accordance with the applicable requirements in the applied methodology and the VVM, examining, among other aspects, the following:

- The project boundaries, including the risk of overlapping
- The appropriate use of the adequate methodology
- The uncertainty and the conservative approach
- The baseline scenario
- The mitigation results of the project
- The design of a monitoring plan that includes everything related to the quantification and follow-up of GHG emission reductions, in accordance with the applied methodology.

For the assessment, the audit team has applied the means of validation specified in the VVM, including but not limited to:

- Full review of the GHG project data and information.
- Cross-checking the information contained in the GHG project documents and other documentary sources used.
- Interviews with GHG project participants and those in charge of designing, implementing, and monitoring GHG activities
- Cross-checking the information, ratified with the participants in the interviews, to ensure that relevant information was not omitted
- Review of other sources of information related to the type of GHG project or sector in which it is located
- Evaluation of the application of the methodology selected by the GHG project, including the identification of the baseline
- Consideration of the appropriate and accurate use of models and parameters for the estimation of GHG reductions.

A detailed description of the procedures carried out to assess the quantification of baseline emissions, project emissions, leakage and GHG emission reductions, including relevant data, parameters and equations, assumptions or additional considerations used in accordance with the provisions of the applied methodology and any referenced tools is provided in section 5.5.8 of this report.



#### 5.5.1 Start date and quantification period

According to the definition of start date provided by the BCR Standard, version 3.4 /BCR1/, it is when activities that result in actual reductions of GHG emissions begin. That is when the implementation, construction, or real action of a GHG Project begins. Based on evidence-gathering activities (Documentary review) it is evident:

- Chalican project: The start date of construction was 13/08/2024.
- Rodeito project: The start date of construction was 13/11/2024.

According to paragraph 11.4 of the BCR Standard version 3.4 /BCRo1/, the start date of the quantification period shall be a date later than or equal to when the project generates the first GHG emission reductions. Based on evidence-gathering activities (Documentary review) the project holder determined the start of the first quantification period when the plant was enabled by EJESA, that is:

- Chalican project: the start date of the quantification period is 01/09/2024.
- Rodeito project: the start date of the quantification period is 01/12/2024.

According to paragraph 11.5 of the BCR Standard version 3.4 /BCR01/, for projects in sectors other than AFOLU, the quantification period of GHG emissions reduction is seven years which may be renewed at most two times, for a maximum total length of 21 years. Based on evidence-gathering activities (Documentary review), the project holder determined the quantification period of GHG emissions reduction of the following way:

- Chalican project: From 01/09/2024 to 31/08/2031 (both dates included). The operational time and lifespan of 30 years.
- Rodeito project: From 01/12/2024 to 30/11/2031 (both dates included). The operational time and lifespan of 30 years.

## 5.5.2 Application of the selected methodology and tools

# 5.5.2.1 Title and Reference

Based on evidence-gathering activities (Documentary review), it is evident that the Project holder and Project participants of the GHG project under evaluation uses the following methodologies and tools:

- AMS-I.D Grid connected renewable electricity generation, version 18.0 /UN1/.
- Toolo7 Tool to calculate the emission factor for an electricity system, version 07.0
  /UN2/.
- Tool21 Demonstration of additionality of small-scale project activities, version 13.1 /UN3/.
- Tool27 Investment analysis, version 12.0 /UN4/.

It is evident that project participants use valid and current versions of the methodology and methodological tools at the time of submission of the project record.



According to list of the CDM methodologies accepted from the energy sector under BCR Standard with date on February 2024 (<a href="https://biocarbonstandard.com/wpcontent/uploads/CDM">https://biocarbonstandard.com/wpcontent/uploads/CDM</a> methodologies Energy.pdf) /BCR4/, it is evident that GHG project under evaluation uses an approved methodology (AMS-I.D methodology).

# 5.5.2.2 Applicability

The project activity complies with the applicability criteria of the AMS-I.D methodology, version 18.0/UN1/ since it is a grid-connected renewable energy power generation project activity that installs a Greenfield power plant. ICONTEC validated this statement, as follows:

Assessment of the applicability of the AMS-I.D methodology, version 18.0 /UN1/

Requirement	Assessment
<ul> <li>4. This methodology is applicable to grid-connected renewable energy power generation project activities that: <ul> <li>(a) Install a Greenfield plant;</li> <li>(b) Involve a capacity addition in (an) existing plant(s);</li> <li>(c) Involve a retrofit of (an) existing plant(s);</li> <li>(d) Involve a rehabilitation of (an) existing plant(s)/unit(s); or</li> <li>(e) Involve a replacement of (an) existing plant(s).</li> </ul> </li> </ul>	Based on the evidence-gathering activities (Documentary review and on-site visit on) it is evident that the GHG project consists of the installation of a Greenfield power plant (Solar photovoltaic plant). Therefore, the project activity complies with this requirement (Paragraph (a)).
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/m²;	Based on the evidence-gathering activities (Documentary review and on-site visit) it is evident that the GHG project consists of the installation of a Greenfield power plant (Solar photovoltaic plant). Therefore, this requirement does not apply.
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.	Based on the evidence-gathering activities (Documentary review and on-site visit) it is evident that the GHG project consists of the installation of a Greenfield power plant (Solar photovoltaic plant).



7. Combined heat and power (co-generation) systems are not eligible under this category.	Therefore, this requirement does not apply.  Based on the evidence-gathering activities (Documentary review and on-site visit) it is evident that the GHG project consists of the installation of a Greenfield power plant (Solar photovoltaic plant) and does not involve combined heat and power (co-generation) systems.
8. In the case of project activities that involve the	Therefore, this requirement does not apply.  Based on the evidence-gathering activities (Documentary review and on-site visit) it is evident that 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.	GHG project consists of the installation of a Greenfield power plant (Solar photovoltaic plant) and does not involve the capacity addition of renewable energy generation units at an existing renewable power generation facility. Therefore, this requirement does not apply.
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.	Based on the evidence-gathering activities (Documentary review and on-site visit) it is evident that the GHG project consists of the installation of a Greenfield power plant (Solar photovoltaic plant) and does not involve retrofits, rehabilitations, replacements, or capacity additions. Therefore, this requirement does not apply.
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	Based on the evidence-gathering activities (Documentary review and on-site visit) it is evident that the GHG project consists of the installation of a Greenfield power plant (Solar photovoltaic plant) and does not involve landfill gas, waste gas, wastewater treatment and agroindustries projects and recovered



applicable Type-I methodologies such as "AMS-I.C.: Thermal energy production with or without electricity" shall be explored.	methane emissions . Therefore, this requirement does not apply.
11. In case biomass is sourced from dedicated plantations, the applicability criteria in the tool "Project emissions from cultivation of biomass" shall apply.	Based on the evidence-gathering activities (Documentary review and on-site visit) it is evident that the GHG project consists of the installation of a Greenfield power plant (Solar photovoltaic plant) and does not involve biomass. Therefore, this requirement does not apply.

Therefore, all applicability conditions are met, and the GHG project is eligible under this methodology.

Assessment of the applicability of the TOOLo7 Version o7.o /UN2/

Requirement	Assessment
3. This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity that substitutes grid electricity that is where a project activity supplies electricity to a grid or a project activity that results in savings of electricity that would have been provided by the grid (e.g., demand-side energy efficiency projects).	Based on the evidence-gathering activities (Documental review and on-site inspection) that the GHG project consists of the installation of a Greenfield power plant (Solar photovoltaic plant), which the project activity supplies electricity to a grid (EJESA) whose distribution system is connected to the SADI (Argentine Interconnection System). Therefore, the project activity complies with this requirement.
4. Under this tool, the emission factor for the project electricity system can be calculated either for grid power plants only or, as an option, can include off-grid power plants. In the latter case, two sub-options under the step 2 of the tool are	Based on the evidence-gathering activities (Documental review and on-site inspection) that the GHG project consists of the installation of a Greenfield power plant (Solar

for grid power plants only or, as an option, can include off-grid power plants. In the latter case, two sub-options under the step 2 of the tool are available to the project participants, i.e. option IIa and option IIb. If option IIa is chosen, the conditions specified in "Appendix 1: Procedures related to off-grid power generation" should be met. Namely, the total capacity of off-grid power plants (in MW) should be at least 10 per cent of the total capacity of grid power plants in the electricity system; or the total electricity generation by off-grid power plants (in MWh)

Based on the evidence-gathering activities (Documental review and on-site inspection) that the GHG project consists of the installation of a Greenfield power plant (Solar photovoltaic plant), which the project activity supplies electricity to a grid (EJESA) whose distribution system is connected to the SADI (Argentine Interconnection System). The emission factor is calculated for grid-connected power plants only.



should be at least 10 per cent of the total electricity generation by grid power plants in the electricity system; and that factors which negatively affect the reliability and stability of the grid are primarily due to constraints in generation and not to other aspects such as transmission capacity	Therefore, the project activity complies with this requirement.
5. In case of CDM projects the tool is not applicable if the project electricity system is located partially or totally in an Annex I country.	Based on the evidence-gathering activities (Documental review and on-site inspection) the GHG project consists of the installation of a Greenfield power plant (Solar photovoltaic plant), which is located totally in Argentina. Based in the evidence-gathering activities (Consult through a reliable source <sup>5</sup> ) that Argentina is not on the list Annex I country. Therefore, this requirement does not apply.
6. Under this tool, the value applied to the CO <sub>2</sub> emission factor of biofuels is zero.	Based on the evidence-gathering activities (Documental review and on-site inspection) it is evident that the GHG project does not involve biofuels at the site of the project activity, but involving switching from fossil fuels to renewable energy sources (Solar photovoltaic plant) connected to an electrical grid (EJESA) whose distribution system is connected to the SADI (Argentine Interconnection System). Therefore, this requirement does not apply.

<sup>5</sup>https://unfccc.int/process/parties-non-party-stakeholders/parties-convention-and-observer-states?field national communications target id%5B515%5D=515&field parties date of ratifivalue=All&field parties date of signature value=All&field parties date of signature value=All&combine=



Assessment of the applicability of the TOOL21 Version 13.1 /UN7/  $\,$ 

Requirement	Assessment
4. The use of the methodological tool "Demonstration of additionality of small-scale project activities" is not mandatory for project participants when proposing new methodologies. Project participants and coordinating/managing entities may propose alternative methods to demonstrate additionality for consideration by the Executive Board.	Based on the evidence-gathering activities (Documentary review and on-site visit) it is evident that the GHG project consists of the installation of a Greenfield power plant (Solar photovoltaic plant) and therefore, the GHG project complies with the paragraph 4(a) of Section 2.2 of the AMS-I.D methodology, version 18.0 /UN1/.
5. Project participants and coordinating/managing entities may also apply "TOOL19: Demonstration of additionality of microscale project activities" as applicable.	Based on the evidence-gathering activities (Documentary review and on-site visit) it is evident that the GHG project under evaluation does not meet the following requirements in accordance with paragraph 11 of TOOL19, version 10.0 /UN7/:  The geographic location is not in one of the least developed countries or the small island developing States (LDCs/SIDS) or in a SUZ of the host country; The geographic location of the GHG Project is Argentina.  The GHG project is not an off-grid activity supplying energy to
	households/communities (less than 12 hours' grid availability per 24 hours is also considered "offgrid" for this assessment). The GHG project supplies electricity to a grid (EJESA) whose distribution system is connected to the SADI (Argentine Interconnection System).



The GHG project consists of the installation of a Greenfield power plant (Solar photovoltaic plant) for distributed energy generation. However, the GHG project is connected to a national or regional grid (GHG project supplies electricity to a grid (EJESA) whose distribution system is connected to SADI (Argentine the Interconnection System)). Therefore, this requirement does

not apply.

Assessment of the applicability of the TOOL27 Version 12.0 /UN4/

Requirement	Assessment
2. This methodological tool is applicable to CDM project activities and programs of activities (PoAs) that conduct an investment analysis for the demonstration of additionality and/or the identification of the baseline scenario.	Based on the evidence-gathering activities (Documentary review and on-site visit) the GHG project consists of the installation of a Greenfield power plant (Solar photovoltaic plant) that applies "Tool 1: Tool for the demonstration and assessment of additionality, version 07.0.0", to demonstrate the additionality of the project activity.  According to paragraph 28 of Tool 1, project participants may select to complete steps 2 and 3 of the stepwise approach into Step 2 (Investment Analysis) or Step 3 (Barrier analysis). As per Step 2 (Investment Analysis) has been chosen to demonstrate additionality through "Tool 1: Tool for the demonstration and assessment of additionality, version 07.0.0. Therefore, this requirement is applicable.
3. In case the applied approved baseline and monitoring methodology contains requirements for the investment analysis that are different from	This additionality tool is included in the AMS-I.D approved



those described in this methodological tool, the	methodology	hence	this
requirements contained in the methodology shall	requirement is a	pplicable.	
prevail.			

# 5.5.2.3 Methodology deviations (if applicable)

Not applicable

# 5.5.3 Project boundary, sources and GHGs

Based on evidence-gathering activities (On-site visit) that GHG project does involve the installation of the Greenfield plant (Solar photovoltaic plant) connected to an electrical grid (EJESA) whose distribution system is connected to the SADI (Argentine Interconnection System) (See photo below).

# Chalican project:



# Rodeito project:

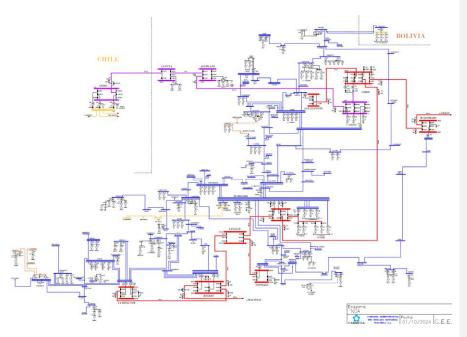




Based on evidence-gathering activities (Documentary review) that the GHG project does involve the installation of the Greenfield plant (Solar photovoltaic plant) connected to an electrical grid (EJESA) whose distribution system is connected to the SADI (Argentine Interconnection System) /10/.

The metering equipment is located at the GHG project, which is the point of interconnection with the electrical grid (EJESA), which is the Electrical Energy Distribution company, from the province of Jujuy, which is connected to the Argentine Interconnection System (SADI), which is managed by CAMMESA. This information was confirmed during the on-site visit. It is evident that Electrical Energy Distribution company, from the province of Jujuy is connected to the Argentine Interconnection System (SADI), which is managed by CAMMESA (See figure below) /10/.





It is evident by cross-checking that the Electrical Energy Distribution company is connected to the Argentine Interconnection System (SADI), which is managed by CAMMESA<sup>6</sup>.

Therefore, the spatial extent of the project boundary includes the project power plant and all power plants connected physically to the electricity system that the GHG project power plant is connected to, according to paragraph 18 of the Section 5.1 Project Boundary of the AMS-I.D, version 18.0 /UN1/. The spatial extent of the project boundary is the Argentine Interconnection System (SADI), which is which is managed by CAMMESA<sup>7</sup> /10/.

The greenhouse gases and emission sources included from this GHG project under evaluation are:

 $<sup>\</sup>frac{http://www.energia.gob.ar/contenidos/archivos/Reorganizacion/sig/mapastematicos/generacio}{n\_transporte\_nacional.pdf}$ 

<sup>&</sup>lt;sup>7</sup> https://cammesaweb.cammesa.com/



		T	T	T
Source		Gas	Included	Justification
	CO <sub>2</sub> emissions	CO <sub>2</sub>	Yes	Main emission source
	from electricity	CH <sub>4</sub>	No	Minor emission source
Baseline generation in fossil fuel fired power plants that are displaced due to the project activity		N <sub>2</sub> O	No	Minor emission source
	For dry or flash steam	CO <sub>2</sub>	No	Based on the evidence-
	geothermal power plants,	CH <sub>4</sub>	No	gathering activities (Documental review and on-
emissions of CH4 and CO2 from non-condensable gases contained in geothermal steam	N <sub>2</sub> O	No	site inspection) it is evident the GHG project does not flash steam geothermal power plant (installation of a Greenfield power plant (Solar photovoltaic plant).	
	For binary geothermal	CO <sub>2</sub>	No	Based on the evidence-
Project	power plants, fugitive	CH <sub>4</sub>	No	gathering activities (Documental review and on-
emissions of CH4 and CO2 from non-condensable gases contained in geothermal steam	N <sub>2</sub> O	No	site inspection) it is evident the GHG project does not binary geothermal power plant (installation of a Greenfield power plant (Solar photovoltaic plant).	
For binary geothermal power plants, fugitive emissions of hydrocarbons		Low GWP hydrocarbon /refrigerant	No	Based on the evidence- gathering activities (Documental review and on- site inspection) it is evident the GHG project does not binary geothermal power



such as n-butane and isopentane (working fluid) contained in the heat exchangers			plant (installation of a Greenfield power plant (Solar photovoltaic plant)
CO <sub>2</sub> emissions	CO <sub>2</sub>	No	Based on the evidence-
from combustion	CH <sub>4</sub>	No	gathering activities (Documental review and on-
of fossil fuels for electricity generation in solar thermal power plants and geothermal power plants	N₂O	No	site inspection) it is evident the GHG project does not solar thermal power plant and geothermal power plant (installation of a Greenfield power plant (Solar photovoltaic plant).
	CO <sub>2</sub>	No	Based on the evidence- gathering activities
For hydro power plants,	CH <sub>4</sub>	No	(Documental review and on- site inspection) it is evident
emissions of CH4 from the reservoir	N₂O	No	the GHG project does not hydroelectric power plant installation of a Greenfield power plant (Solar photovoltaic plant).
	CO <sub>2</sub>	No	Based on the evidence- gathering activities
Biomass from	CH <sub>4</sub>	No	(Documental review and onsite inspection) it is evident
dedicated plantations	N₂O	No	the GHG project consists of the installation of a solar power plant that does not involved biomass from dedicated plantations.
Utilization of electricity	CO <sub>2</sub>	No	Based on the evidence- gathering activities
from grid or from fossil	CH <sub>4</sub>	No	(Documental review and on- site inspection) it is evident
fuel generators by	N₂O	No	the GHG project consists of the installation of a Greenfield



PSP for	power plant (Solar
pumped	photovoltaic plant) that does
mode.	not consider a pumped
	storage project (PSP) in the
	plant.

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

Based on the evidence-gathering activities (Documental review and on-site inspection) it is evident the GHG project consists of the installation of a solar power plant (Solar photovoltaic plant). Therefore, it is not applicable.

### 5.5.4 Baseline or reference scenario

According to paragraph 19, Section 5.2 Baseline scenario for Greenfield power plant according to AMS-I.D Methodology, version 18.0 /UN1/ is: the electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources into the grid.

According to paragraph 22, Section 5.5 Baseline emissions of the AMS-I.D Methodology, version 18.0 /UN1/, the baseline emissions include only CO2 emissions from electricity generation in power plants that are displaced due to the project activity. The methodology assumes that all project electricity generation above baseline levels would have been generated by existing grid-connected power plants and the addition of new grid-connected power plants. Therefore, baseline emissions is the quantity of net energy generation that is produced and fed into the grid as a result of the implementation of the YUNGAS PV POWER PLANTS BUNDLE PROJECT in year y (in MWh/yr) multiplied by the Combined Margin CO2 emission factor for grid connected power generation in year y (tCO2/MWh) as is explained with details in section 5.5.8.1 of this report, where are described:

- a) Assumptions, methods, parameters, data sources, and factors are transparently applied, justified appropriately, and supported by adequate evidence.
- b) Uncertainty is considered and there are used prudential assumptions.
- Relevant national as also when applicable to sectoral policies and circumstances was considered and are listed in the project document.
- d) The procedures for identifying the baseline scenario maintain consistency with the emission factors, activity data, projection variables of GHG emissions, and the other relevant parameters.
- e) The implementation of procedures to ensure data quality under ISO 14064-2 and the requirements of the applied methodology.

The sources of information, about the baseline identification assessment and cross-check data used in the identified baseline scenario, was the website of the SIN operator



(CAMMESA) that allowed the determination of the grid-connected power plants displaced by the generation of the project for the vintage required by the tool o7. Therefore, the ICONTEC audit team confirms that the documentary evidence used in determining the baseline scenario is relevant and correctly justified.

## 5.5.5 Additionality

During to evidence-gathering activities (Documentary review) it is evident that the Project holder use the BCR baseline and additionality, version 1.3 /BCR3/ for the assessment of the additionality of the GHG Project under evaluation (Section 3.4 of GHG Project Document, version 3 /1/. According to BCR baseline and additionality, version 1.3 /BCR3/, the BCR Standard does not include activities that are automatically additional. Therefore, in BCR Standard are not considered "positive list" of eligible project types.

Therefore, the Project holder uses TOOL21, version 13.1 /UN3/ for the assessment of the additionality of the GHG Project under evaluation. It is evident that the GHG Project Document, version 3 /1/ uses the figure 1 of the TOOL21, version 13.1 /UN3/. It is evident that the Project holder performance the following steps:

**Is PA aggregate size** <=**SSC thresholds** (15MW, 6oGWh/y, 6oktCO2e/y)?: During to evidence-gathering activities (Documentary review and on-site visit) it is evident:

- Chalican project: it has a nominal capacity of 7.5 MW.
- Rodeito project: it has a nominal capacity of 3 MW.

Therefore, the GHG project under evaluation has a total power equal to 10.5 MW, which is less than 15 MW threshold. Therefore, the answer is affirmative.

Is PA/CPA comprised of one or more technologies from the positive list under TOOL32?: BCR Standard are not considered "positive list" of eligible project types. Therefore, the answer is negative.

Is PA/CPA aggregate size <= MSC thresholds (5MW, 2oGWh/y, 2oktCO2e/y) under Tool 19?: During to evidence-gathering activities (Documentary review and on-site visit) it is evident that the GHG Project under evaluation has a total power equal to 10.5 MW, which is greater than the 5 MW threshold. Therefore, the answer is negative and a regular additionality procedure must be carried out. It is evident that the Project holder uses the Investment barrier according to paragraph 1(a) of the Annex 34 "Non-binding best practice examples to demonstrate additionality for SSC project activities" /UN8/. It is evident that the Project holder uses the TOOL27, version 12.0 /UN4/, to evaluate financial status of the project activity to discuss the Investment barrier. For this purpose, the project owner uses the step 2 according to Section 4.3 of the TOOL01, version 07.0.0 /UN3/ for the investment analysis. It is evident that Project holder uses the paragraph 29 of TOOL01, version 07.0.0 /UN3/, specifically the option III (Benchmark analysis) according to Section 4.3.4 of the TOOL01, version 07.0.0 /UN3/.



**Sub-step 2b:** Option III. Apply benchmark analysis. It is evident that the owners of the project have considered the IRR after taxes for the analysis of the investment at the time of making the decision to carry out the project since their objective is the return that the project generates on the investment costs that they finance. in the form of 100 percent capital.

It is evident that the Project holder uses local commercial lending rate or WACC as appropriate benchmarks for the IRR of a project, for the selection and validation of the appropriate benchmark for the calculated IRR, in accordance with paragraph 15 of TOOL27, version 12.0 /UN4/.

It is evident that the owner carries out the investment analysis in nominal or real terms since no inflation adjustment is included in any of its variables and therefore, he does not consider it necessary to adjust the inflation reference rate, as stated above. proposed in paragraph 16 of Tool 27, version 12.0 /UN4/.

It is evident that the GHG project is not developed by an entity other than the Project holder and therefore, the paragraph 17 of Section 6 of the TOOL27, version 12.0 /UN4/, does not apply.

It is evident that the GHG project has a single proponent that finances 100 percent of the capital (Industrias Juan F. Secco SA) for transparency and simplicity and therefore it is considered that the reference point based on standard market conditions is a reasonable indicator to evaluate the IRR of the capital and therefore, the paragraph 18 of Section 6 of the TOOL27, version 12.0 /UN4/, does apply.

It is evident that the project owner uses the default value for the cost of capital (expected return on capital) according to paragraph 19 of Section 6 of the TOOL27, version 12.0 /UN4/, which is defined in the appendix of TOOL27, version 12.0 /UN4/, which is equal to 23.48% in real terms, corresponding to Argentina, Group 1.

**Sub-step 2c:** Calculation and comparison of financial indicators (only applicable to Options II and III). It is evident input values or relevant costs used in investment analysis /4/. It is evident that the Project holder presents the investment analysis in a transparent manner and provides all relevant assumptions in separate annexes /12/ to the GHG Document Project, version 3 /1/, which are validated by the ICONTEC audit team. All income and expense lines represented by the GHG project /12/, have been compared by the audit team through extensive supporting documentation provided by the Project holder. The calculations were validated and found to be correct by ICONTEC audit team, as well as the assumptions and information of the sources of data provided by the Project holder. It is evident that Project IRR has been calculated as follows:



Project holder	IRR with	out VCC	ROE Benchmark
	Chalican		
Project Developer			22 480%
Industrias Juan F.	9.47%	5.97%	23.48%
Secco			

Therefore, the GHG project cannot be considered financially attractive given that the project's IRR is lower than the benchmark ROE.

**Sub-step 2d:** Sensitivity analysis. According to paragraph 27 and 28 of Section 7 of TOOL27, version 12.0 /UN4/, it is evident that the following factors have been subject to sensitivity analysis: Plant Load Factor, Operation and Maintenance Cost, Project Cost, Rate.

Chalican project				
Factor	Equity IRR without Verified Carbon Credits		Ben	chmark (ROE)
Base case	9.47%			23.48%
Sensitivity Analysis		E	quity IRR	
Variation %	-10%	Normal	10%	Variation with respect to benchmark
Energy Production	8.12%	9.47%	10.78%	117.8%
O&M	9.56%	9.47%	9.39%	145.6%
Project Costs	10.83%	9.47%	8.32%	116.8%
Energy Price	8.12	9.47%	10.78%	117.8%

Rodeito project				
Factor	Equity IRR without Verified Carbon Credits		Ben	chmark (ROE)
Base case		5.97%		23.48%
Sensitivity Analysis	Equity IRR			
Variation %	-10%	Normal	10%	Variation with respect to benchmark
Energy Production	4.85%	5.97%	7.05%	233.0%
O&M	6.05%	5.97%	5.90%	288%
Project Costs	7.09%	5.97%	5.02%	231.1%



Energy Price	4.85%	5.97%	7.05%	233.0%

It is evident that the results of the sensitivity analysis show that even with a variation of +10% in project cost, operation and maintenance cost, energy production and energy price, the IRR of the equity is significantly lower than the reference rate. It is also evident from the results given above that the project remains additional even under the most favorable conditions.

Reference index	Probability of default		
Power Production	The PLF has been considered for financial analysis		
(Plant Load Factor)	according to the "Guidelines for Reporting and Validation		
	of Plant Load Factors" /UN6/.		
	It is highly unlikely that a variation in the PLF of more than		
	10% will occur since the energy production and its		
	reduction over the years was provided in the report of the		
	equipment supplier (third party not involved in the		
	project),		
O&M	The sensitivity analysis reveals that O&M costs are		
	irrelevant to the outcome of the IRR value. Furthermore, it		
	is known that these costs are subject to upward escalation		
	due to breakage and inflationary pressure. In short, their		
	reduction over time is highly unlikely.		
Project cost	The estimated project cost for the financial analysis is		
	considered from the GPD available at the time of decision		
	making. However, even if we consider actual project costs		
	that differ very little from the estimates, the benchmark is		
	not exceeded. In any case, the Sensitivity is analyzed for a		
	variation of +/-10%.		
Value of the fee	For the investment analysis, the tariff considered is 79,00		
	USD /kWh and is determined by the energy supply contract		
	to JEMSE S.A., which is fixed for the entire 20-year contract		
	period.		

The additionality of the project activity has been assessed in the above section through investment analysis and it is concluded that a financially more viable alternative to the project activity would have led to higher emissions. The GHG project is unlikely to be the most financially/economically attractive (the IRR for the project activity is lower than the benchmark ROE) as indicated in the TOOLo1, version o7.0.0 /UN3/.

Therefore, the GHG project under evaluation is not the most likely baseline scenario. Hence, the emission reductions occurring from the project are deemed additional to those that would occur in the absence of the project activity. Therefore, the GHG project is additional



# 5.5.6 Conservative approach and uncertainty management

As is explained in Section 5.5.8.1 of this GHG Report and according to equation 1 of paragraph 22 of Section 5.5 of the AMS-I.D Methodology, version 18.0 /UN1/, the baseline emissions include only CO2 emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity. Equation 1 indicates:

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

$BE_y$	Baseline emissions in year y (t CO <sub>2</sub> /yr)
$EG_{PJ,y}$	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/yr)
$EF_{grid,CM,y}$	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" (tCO <sub>2</sub> /MWh)

The quantity of net electricity generation that is produced for the GHG Project is directly monitored by bi-directional meters installed at the interconnection point of the project with the EJESA:

Chalican project	
Main meter	
Manufacturer:	Schneider Electric
Type:	ION8650
Serial number:	MW-2303A482-02
Energy accuracy:	o.2 Class
Backup meter	
Manufacturer:	Schneider Electric
Type:	PM9000
Serial number:	MZ-2301B297-01
Energy accuracy:	o.2 Class

Rodeito project		
Main meter	Main meter	
Manufacturer:	Schneider Electric	
Type:	ION8650	
Serial number:	MW-2403A973-02	
Energy accuracy:	o.2 Class	
Backup meter		
Manufacturer:	Schneider Electric	



Type:	PM9000
Serial number:	MZ-2303A043-01
Energy accuracy:	o.2 Class

Their information is read remotely by the PVSyst software, which is managed by the Project holder (Industrias Juan F. Secco SA). It is evident an agreement is evident between SECCO and EJESA /11/, related to the calibration frequency of generation energy meters. A calibration frequency is evident every four (4) years with type tests under IEC 62052-11 and IEC 62053-22 or equivalent IRAM (Argentine Institute of Standardization and Certification<sup>8</sup>) standards and it will be the responsibility of O&M for the GHG activity. It is evident that the net electricity generation is conducted with calibrated measurement equipment according to relevant industry standards. The Operation Center managed by the Project holder (Industrias Juan F. Secco SA) is responsible for reading the electricity generated by the project and processing the energy produced by the meters installed at the plant.

The Combined margin CO2 emission factor (CM) for grid connected power generation is based on the option (a) of paragraph 81 of section 6.6 of the TOOLo7, version o7.0 /UN2/. In accordance with the inclusion of the clarification in the version o6.0 of the ACM0002 methodology (Date:12-May-2006) /UN5/ and taking into account that paragraph 14 of Section 3 of the AMS.ID methodology, version 18.0 /UN1/, in which this methodology also refers to the last approved ACM0002 methodology, the use of data vintage (from previous years) is accepted for the determination of emission factors and the date that the choice between ex-ante and ex-post vintage for calculation of the build margin and the operating margin should be specified in the PDD and cannot be changed during the crediting period. Therefore, the Combined margin CO2 emission factor (CM) is obtained according to the information based on CAMMESA as administrator of the Argentine Interconnected System (SADI) which is a reliable source of information.

As is explained in Section 5.5.8.1, the ICONTEC audit team has reviewed that the GHG Project document, version 3/1/, it has applied the parameters, equations assumptions and additional considerations in accordance with the applied methodology and tool. Moreover, the ICONTEC audit team has reviewed that the correct values from the proper sources have been used in the applicable equations, reproducing the calculations to ensure that the quantification of the emission is correct. The ICONTEC audit team could verify the completeness and integrity of the data used by the Project holder for the emission

<sup>&</sup>lt;sup>8</sup> <u>https://www.iram.org.ar/</u>



reductions calculations. The ICONTEC audit team can confirm that the GHG emissions reductions are calculated without material misstatements.

### 5.5.7 Leakage and non-permanence

According to paragraph 42 of Section 5.7 Leakage of the AMS-I.D Methodology, version 18.0 /UN1/, the general guidance on leakage in biomass project activities shall be followed to quantify leakages pertaining to the use of biomass residues. Based on the evidence-gathering activities (Documentary review and on-site visit) it is evident that the GHG project consists of the installation of a Greenfield power plant (Solar photovoltaic plant) which the project activity supplies electricity to a grid (EJESA) whose distribution system is connected to the SADI (Argentine Interconnection System) and therefore, it does not involve landfill gas, waste gas, wastewater treatment and agro-industries projects and recovered methane emissions. Therefore, the leakage emissions are:

$$LE_{v} = 0 \ tCO_{2e}$$

Therefore, the assessment of risk of leakage is not applicable.

The GHG Project Owner ensures permanence of the project activities to quantify the GHG reduction, through verifications carried out by an accredited and independent third-party every year or every three years (Annual).

## 5.5.8 Mitigation results

In accordance with equation 9 of paragraph 43, Section 5.8 of the AMS-I.D Methodology, version 18.0 /UN1/, the emissions reductions are calculated as follows:

$$ER_{\nu} = BE_{\nu} - PE_{\nu} - LE_{\nu}$$

$ER_{\mathcal{Y}}$	Emission reductions in year y (t CO2e/yr)
$BE_{y}$	Baseline emissions in year y (t CO <sub>2</sub> /yr)
$PE_y$	Project emissions in year y (t CO2e/yr)
LE <sub>v</sub>	Leakage emissions in year y (t CO2e/yr)

Considering that the project emissions are zero and leakage emissions are zero, the emissions reduction is equal to:

$$ER_{\nu} = BE_{\nu}$$

# 5.5.8.1 GHG emissions reduction/removal in the baseline scenario

The baseline emissions are the quantity of net energy generation that is produced and fed into the grid as a result of the implementation of the "YUNGAS PV POWER PLANTS BUNDLE PROJECT" in year y (in MWh/yr) multiplied by the Combined Margin CO<sub>2</sub> emission factor for grid connected power generation in year y (tCO<sub>2</sub>/MWh). Therefore,



the equation  $\imath$  of the AMS-I.D Methodology, version  $\imath 8.o$  /UN $\imath$ /, is applied. Equation  $\imath \imath$  indicates:

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

$BE_{y}$	Baseline emissions in year y (t CO <sub>2</sub> /yr)
$EG_{PJ,y}$	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/yr)
$\mathit{EF}_{grid,y}$	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" (tCO <sub>2</sub> /MWh)

Regarding to the 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/y):

Based on evidence-gathering activities (Documentary review and on-site visit) the GHG Project under evaluation is the installation of a Greenfield power plant (Solar photovoltaic plant), therefore, the equation 2 of paragraph 26 of Section 5.5.1.1 of the AMS-I.D methodology, version 18.0 /UN1/, is applied. Equation 2 indicates:

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

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

Therefore,

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

Regarding to the combined margin (CM)  $CO_2$  emission factor for grid connected power generation in year y (in  $tCO_2e/MWh$ ):

During to evidence-gathering activities (Documental review) of the GHG report, it is evident that the baseline emissions factor is calculated in accordance with the latest TOOLo7, version o7.0 /UN2/ is used.

The calculation of the combined margin CO<sub>2</sub> emission factor is based on the option (a) of paragraph 81 of section 6.6 of the TOOLo<sub>7</sub>, version o<sub>7.0</sub> /UN<sub>2</sub>/. This option is related to the weighted average CM, which is used as the preferred option. According to paragraph 85 of Section 6.6.1 of the TOOLo<sub>7</sub>, version o<sub>7.0</sub> /UN<sub>2</sub>/, the weighted average CM is calculated as follows:



$$EF_{grid,CM,y} = EF_{grid,OM,y} \times w_{OM} + EF_{grid,BM,y} \times w_{BM}$$

## Where:

I	$EF_{grid,OM,y}$	Operating margin CO2 emission factor in year y (t CO2/MWh)
	$w_{OM}$	Weighting of operating margin emissions factor (per cent)
ſ	$EF_{grid,BM,y}$	Build margin CO2 emission factor in year y (t CO2/MWh)
ſ	$w_{BM}$	Weighting of build margin emissions factor (per cent)

According to option (a) of paragraph 86 of Section 6.6.1 of the TOOLo7, version o7.0 /UN2/, the following default values should be used for  $w_{OM}$ 

 $w_{BM}$  for solar power generation project activities for the first crediting period and for subsequent crediting periods:

$$w_{OM}=0.75$$

$$w_{BM} = 0.25$$

Therefore,

$$EF_{grid,CM,y} = EF_{grid,OM,y} \times 0.75 + EF_{grid,BM,y} \times 0.25$$

In accordance with the inclusion of the clarification in the version o6.0 of the ACMooo2 methodology (Date:12-May-2006) /UN5/, which the use of data vintage (from previous years) is accepted for the determination of emission factors and the date that the choice between ex-ante and ex-post vintage for calculation of the build margin and the operating margin should be specified in the PDD and cannot be changed during the crediting period.

It is evident that the Project holder applies the following steps:

**Step 1:** It is evident during the on-site visit that the relevant project electricity system is EJESA, which is the Electrical Energy Distribution company, from the province of Jujuy, which is connected to the Argentine Interconnection System (SADI), which is managed by CAMMESA. Therefore, according to paragraph 15 of Section 6.1 of the TOOLo7, version o7.0 /UN2/, the relevant project electricity system is identified and determined by Project holder.



**Step 2:** It is evident by cross-checking with a reliable source of information, that CAMMESA, as administrator of the Argentine Interconnected System (SADI), uses option 1 of paragraph 29 of Section 6.2.1 of the TOOLo7, version 07.0 /UN2/9.

Step 3: It is evident by cross-checking with a reliable source of information, that CAMMESA, as administrator of the Argentine Interconnected System (SADI), uses the Simple OM method for the Operating margin CO2 emission factor (OM), according to option (a) of paragraph 38 of Section 6.3 of the TOOLo7, version 07.0 /UN2/. It is evident that CAMMESA uses option (a) of paragraph 42 of Section 6.3 of the TOOLo7, version 07.0 /UN2/, which the Operating Margin Factor (OM) is determined once at the validation stage, thus no monitoring and recalculation of the emissions factor during the crediting period is required. For grid power plants, use a 3-year generation-weighted average, based on the most recent data available at the time of submission of the GHG report to the ICONTEC Audit team for validation. Based- on evidence-gathering activities (cross-checking information with reliable sources), It is evident that the weighted average by generation is related to the data for the years 2021, 2022, 2023.

**Step 4:** It is evident by cross-checking with a reliable source of information that CAMMESA, as administrator of the Argentine Interconnected System (SADI), uses the option (b) of paragraph 47 of Section 6.4.1 of the TOOLo7, version 07.0 /UN2/, which is based on the total net electricity generation of all power plants serving the system and the fuel types and total fuel consumption of the project electricity system, in this, the SADI. It is evident that the following data available at the time of submission of the GHG report to the ICONTEC audit team for validation is:

Year	Operating margin CO <sub>2</sub> emission factor in year y (t CO <sub>2</sub> /MWh) <sup>10</sup>
2021	0.4589
2022	0.4499
2023	0.4293

Year	Net electricity generated and delivered to the grid by all power
	sources serving the system, not including low-cost/must-run
	power plants/units, in year y (MWh) <sup>11</sup>
2021	90,893,000

http://datos.energia.gob.ar/dataset/7d47693a-c533-4e76-ae24-374c3205715a/archivo/898b40b3-c0f0-4d1b-971c-b1b88daa050d

http://datos.energia.gob.ar/dataset/7d47693a-c533-4e76-ae24-374c3205715a/archivo/898b40b3-c0f0-4d1b-971c-b1b88daa050d

http://datos.energia.gob.ar/dataset/7d47693a-c533-4e76-ae24-374c3205715a/archivo/898b40b3-c0f0-4d1b-971c-b1b88daa050d



2022	88,061,000
2023	79,261,000

Therefore,

$$Sum \ Product = (0.4589 \times 90,283,000) + (0.4499 \times 88,061,000) + (0.4293 \times 79,261,00) = 115,356,189$$

Therefore,

$$weighted\ average = \frac{115,356,189}{(90,893,000+88,061,000+79,261,000)} = 0.4467$$

In summary:

$$EF_{grid,OM,y} = 0.4467$$

Step 5: It is evident by cross-checking with a reliable source of information, that CAMMESA, as administrator of the Argentine Interconnected System (SADI), the Operating Margin Factor (OM) is determined for the first crediting period, based on the most recent information available on units already built for sample group m during the most recent year y for which electricity generation data is available, according to paragraph 77 of Section 6.5 of the TOOLo7, version 07.0 /UN2/. This option does not require monitoring the emission factor during the crediting period. Based on evidence-gathering activities (cross-checking information with reliable sources), it is evident that the electricity generation data corresponds to the year 2023. It is evident that the following data available at the time of submission of the GHG report to the ICONTEC audit team for validation is:

Year	Building margin CO <sub>2</sub> emission factor in year y (t CO <sub>2</sub> /MWh) <sup>12</sup>
2023	0.0860

In summary:

$$EF_{grid,BM,y} = 0.0860$$

**Step 6:** Therefore, the combined margin (CM) CO<sub>2</sub> emission factor for the first crediting period is equal to:



$$EF_{grid,CM,y} = 0.4467 \times 0.75 + 0.0860 \times 0.25 = 0.3566$$

With this, the combined margin (CM) CO<sub>2</sub> emission factor is fixed (ex-ante) for the first crediting period.

Therefore, the project adequately demonstrates and justifies that the use of data and parameters to estimate the reduction or removal of GHG emissions are consistent with the emission factors, activity data, projection of GHG emissions, and the other parameters, then it is unnecessary to apply a discount factor for managing uncertainty.

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

In accordance with paragraph 39 of Section 5.6 of the AMS-I.D Methodology, version 18.0 /UN1/, the project emissions for most renewable energy power generation project activities, PEy = 0. However, for the following categories of project activities, project emissions have to be considered following the procedure described in the most recent version of "ACM0002: Grid-connected electricity generation from renewable sources". These emissions shall be accounted as follows:

$$PE_y = PE_{FF,y} + PE_{GP,y} + PE_{HP,y} + PE_{BIOMASS,y}$$

$PE_y$	Project emissions in year y (t CO2e/yr)	
DF	Project emissions from on-site fossil fuel consumption in year y	
$PE_{FF,y}$	(t CO <sub>2</sub> /yr)	
	Project emissions from the operation of geothermal power plants	
$PE_{GP,y}$	(e.g. non condensable gases, electricity/fossil fuel consumption);	
	in year y (t CO2e/yr)	
DE	Project emissions from water reservoirs of hydro power plants in	
$PE_{HP,y}$	year y (t CO2e/yr)	
$PE_{BIOMASS,y}$	Project emissions of biomass from dedicated plantations in year	
	y (t CO2e/yr)	

However, the characteristics of the project are the following:

- The YUNGAS PV POWER PLANTS BUNDLE PROJECT is a solar power plant and emissions due to the use of fossil fuels for the backup generator can be neglected. Therefore:

$$PE_{FF,\nu} = 0$$

 The YUNGAS PV POWER PLANTS BUNDLE PROJECT does not geothermal power plants, therefore:



$$PE_{GP,y} = 0$$

- The YUNGAS PV POWER PLANTS BUNDLE PROJECT does not hydro power plant, therefore:

$$PE_{HP,y} = 0$$

- The YUNGAS PV POWER PLANTS BUNDLE PROJECT does not biomass from dedicated plantations, therefore:

$$PE_{BIOMASS,y} = 0$$

Therefore, the project emissions are:

$$PE_{v} = 0 \ tCO_{2e}$$

# 5.6 Monitoring plan

According to equation  $\scriptstyle 1$  of the AMS-I.D Methodology, version  $\scriptstyle 18.o$  /UN1/, is applied. Equation  $\scriptstyle 11$  indicates:

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

$BE_{y}$	Baseline emissions in year y (t CO <sub>2</sub> /yr)	
$EG_{PJ,y}$	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/yr)	
$\textit{EF}_{grid,\textit{CM},\textit{y}}$	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" (tCO <sub>2</sub> /MWh)	

Based on evidence-gathering activities (Documentary review and on-site visit) the GHG Project under evaluation is the installation of a Greenfield power plant (Solar photovoltaic plant), therefore, therefore, the equation 2 of paragraph 26 of Section 5.5.1.1 of the AMS-I.D methodology, version 18.0 /UN1/, is applied. Equation 2 indicates:

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

F. (16 114	Quantity of net electricity generation supplied by the project plant/unit to the grid in year y (MWh/yr)
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According to Section 6.1 of the AMS-I.D Methodology, version 18.0 /UN1/, the quantity of net electricity generation supplied by the project plant/unit to the grid in year y should be determined with the data/parameter table 2. Therefore:

Parameter	$EG_{facility,y}$	
Unit	MWh/year	
Description	Quantity of net electricity generation supplied by the project plant/unit to the grid in year y	
Source of data	Direct measurement:	
	Chalican project:	
	Main meter:	
	Schneider Electric / ION8650 / Serial number: MW-2303A482-02.	
	Backup meter:	
	Schneider Electric / PM9000 / Serial number: MZ-2301B297-01.	
	Rodeito project:	
	Main meter:	
	Schneider Electric / ION8650 / Serial number: MW-2403A973-02.	
	Backup meter:	
	Schneider Electric / PM9000 / Serial number: MZ-2303A043-01.	
Measurement	Use electricity meters installed at the grid interface for electricity	
procedures	export to grid which uses monitored using bi-directional energy	
	meter.	
Purpose of monitoring	Calculation of reference emissions.	
	Billing per MWh generated.	
QA/QC	It is evident an agreement is evident between SECCO and EJESA	
	/11/, related to the calibration frequency of generation energy	
	meters. A calibration frequency is evident every four (4) years	
	with type tests under IEC 62052-11 and IEC 62053-22 or equivalent	
	IRAM (Argentine Institute of Standardization and Certification <sup>13</sup> )	
	standards and it will be the responsibility of O&M for the GHG	
	activity	

During the evidence-gathering activities (On-site visit), it is evident that the Operation Center managed by the Project holder (Industrias Juan F. Secco SA) is responsible for reading the electricity generated by the project and processing the energy produced by the

<sup>13</sup> https://www.iram.org.ar/



meters installed at the plant. The Operation Center is located in Rosario that operates 24 hours a day, seven days a week. The Plan contains the following key scope:

- Roles and responsibilities of the COG operators
- Control and monitoring of all PV PS parameters.
- Reporting of alarms, events and faults.
- Presentation of reports on generation, performance and events that occur.

All meters will have records and generation data ready to be downloaded remotely, the information will be acquired at programmable intervals ranging from a minimum to a maximum of one hour. The information is supported by the SECCO operational team. Data is included in an Excel spreadsheet for emission reduction calculations on a monthly basis. All data collected as part of the monitoring process is archived electronically and retained for at least two years after the end of the last crediting period. After that period the information will be stored in backup copies that can be reconstructed if necessary.

The ICONTEC audit team has checked Data Unit, Description, Source of Data, Description of the Measurement Method, Frequency of Monitoring, Value Applied, Monitoring Equipment, QA/QC Procedures, and Calculation Method and all information has been found correctly indicated in the GHG Project Document, version 3 /1/, and that the list of parameters to be monitored is complete and consistent with AMS-I.D methodology /UN1/, and that the monitoring plan adheres to the monitoring methodology used.

During the evidence-gathering activities (Documentary review) it is evident that the Project holder monitors the SDGs defined in Section 5.15 in the following way:

Parameter	SDG 3	
Unit	training/year	
Description	Organize at least one annual on-site training with volunteer firefighters and generate an exchange of knowledge. Ensure that they are familiar with the facilities and promote efficient emergency response.	
Source	Safety and Environment Area of Industrias Juan F. Secco	
Purpose of monitoring	Fulfillment of SDG 3.d.1.	
Monitoring frequency	Annual	

Parameter	SDG 5 Gender equality	
Unit	% of women involved in the Chalican Project and Rodeito	
	project.	
Description	Searches for stable personnel without any clarification of	
	gender preference and the estimated salary for such functions	
	is defined independently of who occupies the position.	
Source	Human Resources of Juan F. Secco Industries	
Purpose of monitoring	Achieving SDG 5	



Monitoring frequency	Annual

Parameter	SDC 7: Affordable and clean energy	
	SDG 7: Affordable and clean energy	
Unit	MWh/year	
Description	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/yr).	
Source	Direct measurement:	
	Main meter:	
	Schneider Electric / ION8650 / Serial number: MW-2302A496-	
	02.	
	Backup meter:	
	Allen Bradley / PM5000 / Serial number: 217M4CA6BL	
Purpose of monitoring	Calculation of reference emissions.	
	Billing per MWh generated.	
Monitoring frequency	It is evident an agreement is evident between SECCO and	
	EJESA /11/, related to the calibration frequency of generation	
	energy meters. A calibration frequency is evident every four	
	(4) years with type tests under IEC 62052-11 and IEC 62053-22	
	or equivalent IRAM (Argentine Institute of Standardization	
	and Certification <sup>14</sup> ) standards and it will be the responsibility	
	of O&M for the GHG activity	

Parameter	SDG 8: Decent Work and Economic Growth	
Unit	Occupational injuries/year	
	Local People hired/year	
Description	Seeking zero fatal accidents.	
	Ensure that all employees hired by Secco and third parties are	
	under Argentine labour law.	
	Prioritize the hiring of local workers.	
Source	Human Resources of Juan F. Secco Industries	
Purpose of monitoring	Fulfillment of SDG 8.	
Monitoring frequency	Annual	

<sup>14</sup> https://www.iram.org.ar/



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Parameter	SDG 10 Reduced inequalities	
Unit	Meeting/year	
	Complaints/year	
Description	Hold an annual exchange meeting with the community and its	
	representatives.	
	Avoid causes for complaints and, in the event of receiving them,	
	give the treatment established in the procedure.	
Source	Human Resources of Industrias Juan F. Secco	
Purpose of monitoring	Fulfillment of SDG 10.	
Monitoring frequency	Annual	

Dayamastay	SDC to Climate Action	
Parameter	SDG 13: Climate Action	
Unit	tCO₂/year	
Description	Maintain photovoltaic generation following good operation and	
	maintenance practices.	
Source	Chief Operating Officer, Juan F. Secco Industries	
Purpose of monitoring	Fulfillment of SDG 13.	
Monitoring frequency	Annual	

Therefore, the GHG project adequately demonstrates and justifies that the use of data and parameters to estimate the reduction or removal of GHG emissions are consistent with the emission factors, activity data, projection of GHG emissions, and the other parameters, then it is unnecessary to apply a discount factor for managing uncertainty.

The ICONTEC Audit team confirms that the monitoring plan can be properly implemented, that all monitoring arrangements are feasible within the project design as per the inspections of the on-site visit, and that the means of implementation of the monitoring plan, including data management and QA/QC procedures, are sufficient to ensure that the emission reductions to be achieved by the project activity can be properly reported and verified through document review and interview with the Project holder.

## 5.7 Double counting avoidance

Based on evidence-gathering activities (Documentary review and cross-checking) and according to section 8 of the BCR Avoiding Double Counting (ADC) Tool /BCRo5/, the ICONTEC audit team carried out the assessment to avoid double counting of emissions reductions in the following way:

 It was validated that the GHG project under evaluation is not registered in other GHG schemes such as CDM, VCS, GS and CSA. It is evident that it is not registered in these GHG schemes, neither as an individual project nor within a grouped project.



- It was validated that as of the date of preparation of the GHG Project document for this GHG project under evaluation, no carbon credits have been issued. Therefore, none of the conditions mentioned in the ADC Tool apply for a double counting situation to be considered generated.
- It was validated that the Project holder do not wish to sell their carbon credits to the CORSIA program. Therefore, a Host Country Attestation (HCA) certifying that the host country is aware of what has happened with this project should not be submitted. It is evident that the sole owner of the carbon credits that will be issued for this GHG project will be the exclusive property of Industrias Juan F. Secco SA.

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

Based on evidence-gathering activities (Documentary review) it is evident that Industrias Juan F. Secco SA has traceability of all the information mentioned in this document and has a legal and administrative area that guarantees access to and knowledge of the relevant legislation and regulations and updates of these when they occur.

It is evident the compliance with Laws, Statutes and Other Regulatory Frameworks /10/:

- Provincial Framework Climate Change Law N° 6230 whose purpose is to establish
  the guidelines for the provincial public policy on climate change "Jujuy Verde:
  Carbon Neutral 2050".
- Argentinian law N°27401 de Responsabilidad Penal de Personas Jurídicas.
- Environmental Quality approved the Feasibility of the project under Resolution No. 193/2019-SCA.
- Resolution N° 97/2023-SCA.

It is evident that the Environmental Impact Assessment (EIA), which included an Environmental Sensitivity Analysis. This Analysis included native communities. It is evident that the GHG project does not involve activities in the territories of Indigenous Peoples and ILO Convention 169 on Indigenous Peoples.

The Project holder provides evidence of the implementation of a documented procedure (Document Management System) in which to identify and have access, on an ongoing basis, to relevant legislation and regulations, demonstrating that have a procedure in place to periodically review compliance with them.

### 5.9 Carbon ownership and rights

Based on evidence-gathering activities (Documentary review), it is evident that there is a transfer agreement with dated 28/12/2022 /9/, to ensure that the carbon ownership and rights were to Industrias Juan F. Secco SA. It is evident that the agreement includes the management, obtaining and assignment in favor of SECCO, so that it can proceed with the construction, operation and maintenance of the GHG project under evaluation for twenty (20) years.



It is evident that the Environmental Impact Assessment (EIA), which included an Environmental Sensitivity Analysis. This Analysis included native communities. It is evident that the GHG project does not involve activities in the territories of ethnic groups and/or local traditional communities.

Therefore, after the evaluation of the agreements and documents, the ICONTEC audit team ensures that the requirement is met and the carbon ownership of the project activity has belonged to the Project holder, which is Industrias Juan F. Secco SA, and it has been adequately justified.

#### 5.10 Risk management

Based on evidence-gathering activities (Documentary review) and accordance with the BCR Permanence and Risk Management version 1.1 /BCR9/, it is evident that the GHG project has conducted risk assessments and management to identify the environmental, financial, and social risks associated with the implementation of the project activity. This was done to justify the risk-management measures to ensure that greenhouse gas (GHG) emission reductions are maintained throughout the project quantification period. It is evident that the Environmental Impact Assessment (EIA) was carried out by independent experts and made it possible to analyze the type, magnitude, and complexity of the project and its relationship with the characteristics of the social, physical, and biological environment that could potentially be affected. The methodological analysis used complies with national, provincial, and municipal regulations.

The EIA was presented at the beginning of 2019 and involved the Identification and Characterization of Environmental Impacts, Risk Analysis and Environmental Sensitivity for the preparation, construction, and operation stages.

In May of the same year, the Secretariat of Environmental Quality approved the Feasibility of the project under Resolution No. 193/2019-SCA /6/. In January 2023, a rectification was presented regarding generation and area (Exp. 1101-103-J/2019) and it was approved under Resolution N° 97/2023-SCA /6/. Finally, in September 2023, the current scope of the project was approved by Resolution N°419/2023-SCA /6/.

The EIA contains the following aspects /6/:

- Section 3: Environmental and Social Baseline.
- Section 4: Project description.
- Section 5: Environmental Risk and Sensitivity Analysis.
- Section 6: Identification and Characterization of Environmental Impacts.
- Section 7: Measurement Plan.
- Section 8: Environmental Management Plan (EMP).
- Section 9: Legal regulations applicable to the GHG project.
- Section 10: Permits and authorizations.
- Section 11: Conclusions.



The EIA involved both in-house and survey tasks in the area. Regarding socio-economic aspects, the impact of the project was analyzed on: biodiversity and ecosystems, cultural heritage, involuntary resettlement, native communities and erosion risk. The area of Direct Influence was even taken into account (covering the area where the GHG project will be installed and the immediately adjacent areas) and the Area of Indirect Influence. It is evident that uses the methodology proposed by Hernández (2013) for the Risk Analysis /6/. It is evident that the Risk Analysis is directed mainly from the geological point. An Environmental Sensitivity Analysis is also evidenced. The importance of carrying out the Environmental Sensitivity Analysis is to predict said susceptibility and approximate with greater precision the way in which the environment will respond to the installation of solar panels on the property that makes up the GHG project, determining which sectors will require the application of environmental measures of a preventive, mitigating or corrective nature. The following results of the Sensitivity Analysis are evident:

Environmental sensitivity criteria	Qualification
Biodiversity and Ecosystems	1
Cultural heritage	1
Involuntary resettlement	2
Native communities	1
Erosion risks	2
Total	7

The qualifications of environmental sensitivity criteria is:

Environmental sensitivity	Qualification
High	From 12.6 to 15
Medium	From 8.6 to 12.5
Low	From 55 to 8.5
Total	7

Therefore, the rating for the GHG project under evaluation is low. The Yungas Project resulted in a low rating, without the need to implement mitigation measures or management plans. The project holder ensures the permanence of the project activity establishing mitigation measures to reduce the risk level of the risks identified, in accordance with the BCR Permanence and Risk Management, version 1.1/BCR9/. This was checked by the ICONTEC audit team during the desk review of the GHG Project Document, version 1/1/ and complementary evidence /6/, considering that the identification of risks is consistent with the requirements and the mitigation measures established are adequate to ensure the permanence of the project activity.

### 5.11 Sustainable development safeguards (SDSs)

During the evidence-gathering activities (Documentary review and on-site visit), it evident that the Project holder has carried out a Sustainable Development Safeguards



(SDSs) under Sustainable Development Safeguards Tool, version 1.1 /BCR8/ and Argentinian law  $N^{\circ}$ 27401<sup>15</sup>.

It is evident that the Environmental Impact Assessment (EIA) /7/, which included an Environmental Sensitivity Analysis. It is evident an Environmental Management Plan (EMP), which was prepared to ensure the correct environmental management of the different actions of the work during the construction, operation and closure or dismantling phases. In this way, the impact on the environmental quality of the receiving environment of the undertaking, in its natural and socioeconomic aspects, will be avoided.

The components: air, biotic, perceptual, soil, water resources, impacts on the Socio-Economic Environment and Territorial Development, road and service infrastructure. Therefore, the project holder has carried out an assessment according to the tables of Annex A of Sustainable Development Safeguards Tool, version 1.1 /BCR8/. It is evident:

Land Use			
Could the project/initiative activities potentially entail or result in:	Response	Mitigation and/or preventive actions	
Land degradation or soil erosion, leading to the loss of productive land?	No	Currently the sites are not productive land, and the project will not affect land characteristics.	
Contaminating soils and aquifers with pollutants, chemicals, or hazardous materials?	No	A photovoltaic plant erection, operation maintenance and closed doesn't involve pollutants, chemicals, or hazardous materials	
Air and water pollution resulting from project-related emissions, discharges, or improper waste disposal practices?	No	Not applicable.	
Detrimental excess of nutrients caused by the use of fertilizers and/or pesticides?	No	Not applicable.	
Inadequate waste management practices, leading to the improper disposal of project- related waste and potential environmental harm?	Potentially	All waste will be handled according to the regulations in force in the Jujuy province.	

<sup>&</sup>lt;sup>15</sup> https://www.argentina.gob.ar/normativa/nacional/ley-27401-296846/texto



Inefficient resource use, including energy, water, and raw materials, leading to increased environmental footprint?	No	The project will generat photovoltaic energy.		
Losing productive agricultural land to urban expansion, impacting local food production, rural livelihoods, and overall food security?	No	Not applicable.		
Urbanization, leading to the urban heat island effect, impacting local climates and potentially contributing to higher energy consumption for cooling?	No	The project takes place in rural area.		
Disrupting natural drainage systems, leading to increased vulnerability to floods, soil erosion, or other hydrological issues?	No	This risk was not detected in the EIA.		
Inadequate recycling and reuse of project-related resources, leading to unnecessary waste and environmental impact?	No	This risk was not detected in the EIA.		
Deforestation or degradation of forested areas impacting carbon sequestration, biodiversity, and ecosystem services?	No	This risk was not detected in the EIA.		
Changes in agricultural practices, such as intensive monoculture, leading to soil degradation, loss of biodiversity, and increased vulnerability to pests?	No	This risk was not detected in the EIA.		
Urbanization or infrastructure development leading to changes in land use patterns and potential habitat fragmentation?	No	This risk was not detected in the EIA.		

Water			
Could the project/initiative activities potentially entail or result in:	Response	Mitigation and/or preventive actions	
Exacerbating water scarcity or depleting water resources?	No	A photovoltaic plant erection, operation maintenance and closed doesn't involve intensive water use.	



Water pollution, including contamination of rivers, lakes, oceans, or aquifers as a result of project-related activities such as emissions, spills, or waste disposal?	No	Not applicable.	
Disrupting aquatic ecosystems, including marine life, river ecosystems, or wetlands, due to changes in water quality, temperature, or flow patterns?	No	Not applicable.	
Altering coastal dynamics, including	No	Not applicable.	
Displacing or negatively impacting wetland habitats, affecting the unique biodiversity and ecosystem services provided by wetlands?	No	The project is not located is wetland areas.	
Altering river flow patterns, potentially	No	This risk was not detected in the EIA	
Depleting aquifers and groundwater resources as a result of the project's activities, impacting local water supplies and ecosystem sustainability?	No	A photovoltaic plant erectio operation maintenance ar closed doesn't involve intensiv water use.	
Mountainous terrains, including changes in snowmelt patterns, glacier dynamics, or alterations in water runoff?	No	Not applicable.	
Disrupting lake ecosystems, including changes in water quality, nutrient levels, or habitat disturbance?	No	Not applicable.	
Contributing to ocean acidification, with potential consequences for marine life and coral reef ecosystems?	No	Not applicable.	

Biodiversity and ecosystems			
Could the project/initiative activities potentially entail or result in:		Mitigation and/or preventive actions	
Habitat destruction or Fragmentation, impacting Biodiversity by reducing	No	This risk was not detected in the EIA.	



	T	T.
available habitats for various		
species?		
Introducing invasive species, which		
could negatively affect native flora	No	Not applicable.
and fauna and disrupt local	140	Not applicable.
ecosystems? *		
Altering ecosystem dynamics,		
including changes in species		This risk was not detected in the
composition, trophic interactions,	No	EIA.
or nutrient cycles on the		EIA.
environment?		
Disrupting migration patterns for		
wildlife species, such as birds,	No	Not applicable.
mammals, or aquatic organisms?		
Chemical contamination or		This risk was not detected in the
pollution negatively impacting	No	
biodiversity in soil, water, or air?		EIA.
Overexploitingnatural resources,		
such as timber, water, or other	N.T	This risk was not detected in the
materials, leading to declines in	No	EIA.
biodiversity and ecological balance?		
Overharvesting species at rates		
faster than they can actually sustain	No	Not applicable.
themselves in the wild?		
Climate change-induced impacts on		
biodiversity, including shifts in		
species distributions, changes in	N.T	This risk was not detected in the
phenology, or increased	No	EIA.
vulnerability to extreme weather		
events?		
Negatively impacting		
endangered or threatened species		This wish are a set detected 1.1.
within the project area, either	No	This risk was not detected in the
directly or indirectly through habitat		EIA.
changes or other disturbances?		
Reducing genetic diversity within		
populations, potentially leading to		
decreased resilience and	No	Not applicable.
adaptability of species in the face of		**
environmental changes?		
Inadequate monitoring and		The EIA did not recommend
assessment of biodiversity within	No	biodiversity monitoring and
		assessment activities since it was
the project area, making it		assessment activities since it was



Challenging to identify and address		not detected as a potential
changes over time?		impact.
Pressure	No	Not applicable.

Climate Change				
Could the project/initiative activities potentially entail or result in:	Response	Mitigation and/or preventive actions		
Increasing greenhouse gas emissions?	No	The project avoids GHG		
changes in habitat suitability for species due to climate change impacts, leading to shifts in species distributions or loss of critical habitat?	No	This risk was not detected in the EIA.		
disrupt ecosystem services provided by biodiversity, such as pollination, water purification, and carbon sequestration, affecting overall ecosystem functioning?	No	This risk was not detected in the EIA.		
the spread of invasive species, leading to competition with native species and alteration of ecosystem dynamics?	No	Not applicable.		
increased frequency or intensity of extreme weather events, such as storms, droughts, or floods, which can damage habitats and threaten species survival?	No	This risk was not detected in the EIA.		
alteration of the phenology and behavior of species, affecting reproductive cycles, migration patterns, and interactions with other species, disrupting ecosystem dynamics?	No	This risk was not detected in the EIA.		
reducing genetic diversity within species populations due to climate change-induced habitat loss or fragmentation, compromising the adaptive capacity of populations to environmental stressors?	No	This risk was not detected in th		
exacerbation the prevalence of diseases and pathogens among	No	This risk was not detected in the EIA.		



wildlife populations, leading to population declines and ecosystem destabilization?		
weakening the resilience of ecosystems to disturbances, making them more susceptible to collapse or regime shifts, with cascading effects on biodiversity and ecosystem function?	No	This risk was not detected in the EIA.
new challenges in effectively incorporating climate change considerations into biodiversity conservation planning, such as identifying climate-resilient habitats and prioritizing species and ecosystems for conservation action?	No	This risk was not detected in the EIA.
habitat loss, pollution, and overexploitation, amplifying the impacts on biodiversity and complicating	No	This risk was not detected in the EIA.

Labor and Working Conditions			
Could the project/initiative activities potentially entail or result in:	Response	Mitigation and/or preventive actions	
forced labor, or human trafficked labor	No	Secco has the commitment and responsibility to hire personnel under Argentine labor laws	
child labor or forced labor practices during the project, either directly or within the	No	Secco has the commitment and responsibility to hire personnel under Argentine labor laws and ensure that third parties do the same.	
project's supply chain?	No	Secco is committed and responsible for ensuring safe working conditions and complying with current legislation.	
unsafe working conditions, exposing project stakeholders to potential hazards or accidents before, during and after the implementation of the activities?	No	Secco is committed and responsible for ensuring safe working conditions and complying with current legislation.	



discrimination in employment, including unequal opportunities, biased hiring practices, or unfair treatment based on factors such as gender, ethnicity, or other characteristics?	No	Secco is responsible working complying legislation.	committed and for ensuring safe conditions and with current
violating workers' rights, including issues related to freedom of association, collective bargaining, or other fundamental labor rights during the project's activities?	No	Secco is responsible working complying legislation.	committed and for ensuring safe conditions and with current
unfair treatment, exploitation, or inadequate protections for contractual workers or migrant laborers?	No	Secco is responsible working complying legislation.	committed and for ensuring safe conditions and with current
Inadequate insufficient social welfare support, such as healthcare, insurance, or other benefits for workers engaged in project activities?	No	Secco is responsible working complying legislation.	committed and for ensuring safe conditions and with current
insufficient social welfare support, such as healthcare, insurance, or other benefits for workers engaged in project activities?	No	Secco is responsible working complying legislation.	committed and for ensuring safe conditions and with current
displacement or negative impacts on local communities due to labor-related issues, including challenges related to employment opportunities and livelihoods?	No	Secco is responsible working complying legislation.	committed and for ensuring safe conditions and with current
lack of training	No	Secco is responsible working complying legislation.	committed and for ensuring safe conditions and with current

Gender equality and Women empowerment					
Could the project/initiative activities potentially entail or result in:			Response	Mitigation and/or preventive actions	
gender-based employment	discrimination ir opportunities	-	No	Secco has an internal procedure protecting gender inequalities.	



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recruitment processes, or access to leadership positions, hindering women's participation and advancement?		
unequal access to project benefits, resources, or decision- making processes, resulting in disparities between men and women in the distribution of project-related opportunities and rewards?	No	Secco has an internal procedure protecting gender inequalities.
limited participation and representation of women in project activities, consultations, or community engagements, potentially marginalizing their voices and perspectives?	No	Secco prioritizes women's hiring even during execution phase. And include one meeting per year with the community and its representatives to record the needs raised, which will be considered internally and incorporated into SECCO's budget to be executed in the following year.
increasing unpaid care work burden on women, such as caregiving responsibilities or household chores, due to changes in community dynamics or time constraints resulting from project activities?	No	Not applicable.
limited access to education, training, or capacity-building opportunities for women and girls, inhibiting their ability to develop skills and pursue leadership roles within the project or related industries?	No	Not applicable.
gender-based violence or harassment occurring within project settings or project- affected communities, affecting women's safety, well-being, and ability to participate fully?	No	Secco has an internal procedure protecting gender inequalities.
inequitable access to land, natural resources, or economic opportunities, particularly disadvantaging women in rural or indigenous communities affected by land use changes?	No	Not applicable.



underrepresentation of women in decision-making processes, including planning, governance structures, or stakeholder consultations, leading to less inclusive and effective outcomes?	No	Secco has an internal procedure protecting gender inequalities.
gender-blind policies, interventions, or project designs that fail to consider the specific needs, priorities, and capacities of women and men, resulting in unintended negative consequences for gender equality and women empowerment?	No	Not applicable.
limited economic empowerment and livelihood opportunities for women, such as access to credit, entrepreneurship support, or income-generating activities, within	No	Not applicable.
health and safety risks that disproportionately affect specific genders within the community, potentially leading to disparate impacts on men and women?	No	Secco has an internal procedure protecting gender inequalities.
cultural and social barriers that may hinder the advancement of gender equality and women empowerment within project settings or affected communities, such as stereotypes, norms, or traditional roles and expectations?	No	Secco has an internal procedure protecting gender inequalities.
inadequate gender analysis and monitoring mechanisms, resulting in a lack of understanding of gender dynamics and missed opportunities for promoting gender equality and women empowerment?	No	Secco has an internal procedure protecting gender inequalities.

Land Acquisition, Restrictions on Land Use, Displacement, and Involuntary			
Resettlement			
Could the project/initiative activities potentially entail or result in:	Response	Mitigation and/or preventive actions	



conflict over land resources and/or rights, such as competition for space between different land uses, communities, or stakeholders affected by the project?	No	The land is property of Jujuy province.
land acquisition, leading to changes in land ownership patterns and potential conflicts with local communities and landholders?	No	The land is property of Jujuy province, and the stakeholders meeting was successful.
imposing restrictions on traditional land use practices, affecting the livelihoods and cultural practices of communities in the project area?	No	The sites were not occupied
displacing communities or residents from their homes and lands, leading to social, economic, and cultural disruptions?	No	The sites were not occupied
involuntary resettlement or relocation of communities, impacting their access to resources, services, and community networks?	No	The sites were not occupied
communities losing their livelihoods and agricultural productivity as a result of land acquisition or restriction on land use?	No	The land is property of Jujuy province and was not occupied. The stakeholders' meeting was successful. This risk was not detected in the EIA
insufficient compensation and benefits for affected communities and individuals, leading to economic hardships and social discontent?	No	Not applicable.
lack of free, prior, and informed consent from affected communities, potentially resulting in conflict and challenges to project implementation?	No	Not applicable.
social and cultural disintegration within displaced communities, leading to the erosion of social cohesion and cultural practices?	No	Not applicable.
communities losing access to common resources, such as forests, water bodies, or grazing lands, due	No	Not applicable.



to land acquisition or use		
restrictions?		
inadequate resettlement plans,		
potentially leading to insufficient		
support, services, and	No	Not applicable.
infrastructure for resettled		
communities?		

Indigenous Peo	ural Heritage	
Could the project/initiative activities potentially entail or result in:	Response	Mitigation and/or preventive actions
violating the right of indigenous peoples, including their right to land, resources, and self- determination?	No	The land is property of Jujuy province and was not occupied. The stakeholders meeting was successful. This risk was not detected in the EIA
impacts on indigenous lands and territories, potentially leading to the displacement of indigenous communities and disruption and loss of livelihoods?	No	The land is property of Jujuy province and was not occupied. The stakeholders meeting was successful. This risk was not detected in the EIA
negatively impacting the traditional livelihoods, such as hunting, fishing, or gathering, due to changes in land use or environmental conditions?	No	The land is property of Jujuy province and was not occupied. The stakeholders meeting was successful. This risk was not detected in the EIA
losing sacred sites and cultural heritage, impacting the spiritual and cultural identity of indigenous communities?	No	The land is property of Jujuy province and was not occupied. The stakeholders meeting was successful. This risk was not detected in the EIA
the lack of free, prior and informed consent from indigenous communities (FPIC), potentially resulting in conflicts and challenges to project implementation? *	No	The land is property of Jujuy province and was not occupied. The stakeholders meeting was successful. This risk was not detected in the EIA
inadequate cultural impact assessments, potentially leading to insufficient understanding of the project's impact on indigenous cultures and traditions?	No	The land is property of Jujuy province and was not occupied. The stakeholders meeting was successful. This risk was not detected in the EIA



losing indigenous knowledge and practices related to land management, resource utilization, and traditional ecological knowledge?	No	The land is property of Jujuy province and was not occupied. The stakeholders meeting was successful. This risk was not detected in the EIA
cultural disintegration and the erosion of social cohesion within indigenous communities?	No	The land is property of Jujuy province and was not occupied. The stakeholders meeting was successful. This risk was not detected in the EIA
inadequate recognition and respect for indigenous governance systems, potentially leading to conflicts over land and resource management?	No	The land is property of Jujuy province and was not occupied. The stakeholders meeting was successful. This risk was not detected in the EIA
insufficient benefit-sharing mechanisms, resulting in the unequal distribution of benefits derived from the project among indigenous communities?	No	The land is property of Jujuy province and was not occupied. The stakeholders meeting was successful. This risk was not detected in the EIA

Community health and safety			
Could the project/initiative activities potentially entail or result in:	Response	Mitigation and/or preventive actions	
exposure to hazardous materials, chemicals, or pollutants, potentially leading to adverse health effects or life-threatening risks?	No	This risk was not detected in the EIA	
degrading air quality in the project area due to emissions, dust, or other airborne pollutants?	No	This risk was not detected in the EIA	
water contamination, including pollution of water sources or reduced access to clean water, affecting community health and well-being?	No	This risk was not detected in the EIA	
increased noise levels or vibrations resulting from project operations, potentially causing disturbances and health impacts for nearby communities?	No	This risk was not detected in the EIA	



traffic accidents or road safety hazards associated with increased traffic flow or transportation activities related to the project?	No	This risk was not detected in the EIA
workers exposure to hazardous conditions, physical attacks or inadequate safety measures?	No	This risk was not detected in the EIA
increased prevalence of vector- borne diseases or pest infestations as a result of changes in environmental conditions or habitat disruption?	No	This risk was not detected in the EIA
community displacement or involuntary resettlement, leading to social disruption, stress, and negative health outcomes?	No	This risk was not detected in the EIA
community mental health and well- being, including stress, anxiety, and social isolation resulting from changes in living conditions or community dynamics?	No	Not applicable.
inadequate emergency preparedness and response mechanisms, leading to challenges in managing and mitigating potential health and safety emergencies?	No	This risk was not detected in the EIA
changes in land use patterns, such as increased exposure to disease vectors or decreased access to natural resources essential for health?	No	This risk was not detected in the EIA
inadequate health infrastructure and services in the project area, leading to challenges in addressing community health needs and emergencies?	No	Not applicable.

Corruption					
Could the project/initiative activities potentially entail or result in:				Response	Mitigation and/or preventive actions
funds project/i	allocated initiative	for being	the	No	Not applicable.



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misappropriated or embezzled		
through fraudulent practices or		
kickbacks?		
bribery or kickbacks being solicited		
or offered to secure contracts,	No	Not applicable
permits, or other project-related	NO	Not applicable.
approvals?		
nepotism or favoritism in the		
selection of contractors, suppliers,		
or project personnel, compromising	No	Not applicable.
the integrity and fairness of		
procurement processes?		
fraudulent reporting or		
manipulation of project data, such as		
inflating project costs or overstating		
achievements, to obtain additional	No	Not applicable.
funding or meet performance		
targets?		
conflicts of interest among project		
stakeholders or personnel, such as		
individuals with financial interests in		
project outcomes or decision-	No	Not applicable.
makers with personal connections to		
project contractors?		
lack of transparency in project		
decision-making processes, budget		
0 1	No	Not applicable
allocations, or contract awards,	INO	Not applicable.
leading to suspicions of corruption		
or malpractice?		
weak regulatory oversight or		
enforcement mechanisms,		
allowing for corrupt practices to go	No	Not applicable.
undetected or unaddressed within		
project/initiative activities?		
undue influence or pressure exerted		
by external parties, such as political		
figures or industry lobbyists, to sway	No	Not applicable.
project decisions or gain unfair		
advantages?		
inadequate accountability		
mechanisms or whistleblower		
protection, discouraging individuals	No	Not applicable.
from reporting instances of		
corruption or unethical behavior?		



corruption in the environmental permitting process, such as officials accepting bribes to overlook environmental violations or grant permits unlawfully?	No	Not applicable.
corruption within subcontracting relationships, such as subcontractors paying bribes to secure favorable terms or win subcontracting opportunities?	No	Not applicable.

Economic Impact			
Could the project/initiative activities potentially entail or result in:	Response	Mitigation and/or preventive actions	
compromising healthy competition, resulting in unhealthy rivalry and undermining collaboration and cooperation essential for achieving project goals?	No	Not applicable.	
loss of employment opportunities, particularly for vulnerable populations, as a result of changes in economic activities or restructuring?	No	Not applicable.	
creating economic dependence, such as tourism or conservation initiatives, leading to ulnerability to fluctuations in project funding or market conditions?	No	Not applicable.	
market distortions or increased competition, such as changes in land use patterns or shifts in supply and demand dynamics within local economies?	No	Not applicable.	
increasing the cost of living for local communities as a consequence of project-related developments, such as infrastructure projects or influxes of external workers?	No	Not applicable.	
inequitable distribution of benefits, leading to disparities in wealth, income, or access to resources	No	Not applicable.	



among different segments of the		
population?		
losing traditional economic		
practices and knowledge systems,		
potentially undermining	No	Not applicable.
cultural heritage and resilience to		
economic shocks in communities?		
negatively impacting small-scale		
enterprises or informal economies	No	Not applicable.
that rely on natural resources or	NO	Not applicable.
ecosystem services?		
financial uncertainties, such as		
project delays, budget overruns, or		
changes in funding sources,	No	Not applicable.
affecting investment confidence and		
economic stability?		
limited access to financial resources,		
such as credit or microfinance		
services, for entrepreneurs or	No	Not applicable.
smallholders affected by project-	140	Not applicable.
related changes in land use or		
economic activities?		
inadequate compensation or		
mitigation measures for		
economic impacts, such as loss of	No	Not applicable.
assets or disruptions to income	110	Tot applicable.
streams, experienced by individuals		
or communities?		

Governance and Compliance			
Could the project/initiative activities potentially entail or result in:	Response	Mitigation and/or preventive actions	
insufficient institutional capacity within project/initiative implementing agencies or partner organizations, leading to challenges in effective governance and project management?	No	Not applicable.	
weak governance structures and mechanisms within the project/initiative, such as unclear roles and responsibilities,	No	Not applicable.	



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inadequate decision-making		
processes, and limited transparency		
and accountability?		
inadequate stakeholder		
engagement and participation in		
project/initiative decision- making	NI.	Nist sunling bills
processes, leading to governance	No	Not applicable.
gaps and reduced project		
legitimacy?		
ineffective or inadequate regulatory		
frameworks governing project		
activities, resulting in loopholes,		
inconsistencies, or gaps in	No	Not applicable.
environmental protection and		
governance standards?		
delays or challenges in obtaining		
necessary permits, licenses, and		
approvals for project activities due	No	Not applicable.
to regulatory complexities,		
bureaucratic inefficiencies, or legal		
requirements?		
political interference in		
project/initiative decision-		
making processes, such as pressure		
to prioritize certain projects or	No	Not applicable.
interventions based on political		
agendas rather than scientific or		
environmental considerations?		
non-compliance with relevant laws,		
regulations, permits, and		
international agreements		
governing GHG emissions,	NT	N. 1. 1.
biodiversity conservation,	No	Not applicable.
environmental protection and land		
use management, leading to legal		
challenges and reputational risks?		
conflicts of interest among project		
stakeholders or decision- makers,		
such as individuals with personal or		
financial interests that may	No	Not applicable.
influence project outcomes or		
decision-making processes?		
, , , , , , , , , , , , , , , , , , , ,	No	Not applicable.
communities affected by project		^ ^



activities, such as barriers to legal recourse or remedies for grievances related to land rights, environmental harm, or social impacts?		
insufficient monitoring and evaluation mechanisms to assess project performance, impacts, and compliance with governance standards, leading to gaps in accountability and learning?	No	Not applicable.
inadequate capacity building and training for project stakeholders, such as government officials, local communities, and civil society organizations, to effectively participate in project governance and decision-making processes?	No	Not applicable.

## 5.12 Stakeholder engagement and consultation

Based on evidence-gathering activities (Documentary review) it is evident that the stakeholders meeting was conducting on November 3 2023 where the "Distributed Solar Photovoltaic Project of the Province of Jujuy" and specific details of the Yungas project were described.

The consultation process is described below:

- The scope of stakeholder consultations: local authorities, media, schools educational authorities in the area and the community.
- The number of stakeholders consulted: 71 people attended the meeting
- The means used to invite interested parties to participate in the consultations; The invitation was sent to the Mayor (Intendente) of the municipality of El Perico and was published in the local newspaper "El Tribuno" and "El Pregón" on 10/27/23, 10/28/23 and 10/30/23. It was also published on social networks such as Facebook, JEMSE's website and Linkedin, Facebook of the Government of Jujuy and the graphic invitation was also placed in the House of Culture, Arturo Zabala Hospital and the Revenue Department.
- The information that was made available to stakeholders during the consultation process: The project presentation (characteristics, execution deadlines, generation), its coherence with the provincial objectives, the EIA and its results. It was also communicated that the project would apply to obtain carbon credits, and a general explanation about this.



- The meetings, workshops and other processes developed in the framework of the stakeholder consultation: The contact email contacto@secco.com.ar was made available during the stakeholders meeting diffusion where they could send questions or doubts about the project.

Therefore, the ICONTEC audit team considers that the Environmental Impact Assessment (EIA), and the information included in the GHG Project Document, version 3 /1/ are in accordance with the Project conformance to Validation and Verification manual Greenhouse Projects, version 2.4 /BCR2/.

#### 5.13 Socioeconomic aspects

Based on evidence-gathering activities (Documentary review) it is evident that the Environmental Impact Assessment (EIA) include an Environmental Management Plan (EMP), which included a community communication program /6/, to ensure the correct socioeconomic management of the GHG project under evaluation.

It is evident that the community communication program /6/ contains:

- The dissemination, amplification and management of information with relevant actors, during the construction and implementation phases of the GHG project.
- Reduction in social conflict and maintaining effective communication channels with affected populations.
- Provide information on security measures.
- Minimize impacts and/or damages on productive infrastructure.
- Report on the project's contribution to Sustainable Development Goal 7: "Affordable and clean energy".

It is evident that the community supports the initiative in terms of its socioeconomic effects. The GHG project was seen by the local population as having a favorable social-economic impact. Several local individuals are employed by the GHG project, supporting the local economy.

Therefore, the ICONTEC audit team considers that the Environmental Impact Assessment (EIA), and the information included in the GHG Project Document, version 3 /1/ are in accordance with the Project conformance to Validation and Verification manual Greenhouse Projects, version 2.4 /BCR2/.

# 5.14 Stakeholders' Consultation

Based on evidence-gathering activities (Documentary review) it is evident:

- Opinion surveys /6/.
- JEMSE Report Diffusion of Call for proposals for the GHG Project /6/.
- Attendance records /6/.

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- Consultation photographic records /6/.
- Publications in the local newspaper /6/.

It is evident that the stakeholders meeting was conducting on November 3 2023 where the "Distributed Solar Photovoltaic Project of the Province of Jujuy" and specific details of the Yungas project were described. The consultation process is described below:

- The scope of stakeholder consultations: local authorities, media, schools educational authorities in the area and the community.
- The number of stakeholders consulted: 71 people attended the meeting
- The means used to invite interested parties to participate in the consultations; The invitation was sent to the Mayor (Intendente) of the municipality of El Perico and was published in the local newspaper "El Tribuno" and "El Pregón" on 10/27/23, 10/28/23 and 10/30/23. It was also published on social networks such as Facebook, JEMSE's website and Linkedin, Facebook of the Government of Jujuy and the graphic invitation was also placed in the House of Culture, Arturo Zabala Hospital and the Revenue Department.
- The information that was made available to stakeholders during the consultation process: The project presentation (characteristics, execution deadlines, generation), its coherence with the provincial objectives, the EIA and its results.
   It was also communicated that the project would apply to obtain carbon credits, and a general explanation about this.
- The meetings, workshops and other processes developed in the framework of the stakeholder consultation: The contact email contacto@secco.com.ar was made available during the stakeholders meeting diffusion where they could send questions or doubts about the project.

The ICONTEC audit team reviewed different documentation provided by the Project holder related to the different stages of the stakeholder consultation, such as the meeting reports of the different socialization meetings conducted prior construction stage and during construction stage, crosschecking that all comments/questions received and provide the responses of them.

Therefore, the ICONTEC audit team considers that the stakeholder consultation conducted, and the information included in the GHG Project Document, version 3 /1/ are in accordance with the Project conformance to Validation and Verification manual Greenhouse Projects, version 2.4 /BCR2/.

# 5.14.1 Public Consultation

During the public comments period of the project, from o7/10/2024 to o6/11/2024 no comments have been received and uploaded in the "Project Documents" of the website of GlobalCarbonTrace (See figure below; <a href="https://globalcarbontrace.io/public-consultation-form/95">https://globalcarbontrace.io/public-consultation-form/95</a>).





## 5.15 Sustainable Development Goals (SDG)

Based on evidence-gathering activities (Documentary review) and according to BCR Sustainable Development Goals (SDG), version 1.0 /BCR7/ and SDG Tool available at <a href="https://biocarbonstandard.com/en/sdg/">https://biocarbonstandard.com/en/sdg/</a>, the Project holder provides the following set of SDGs:

- SDG 3 (Good Health and well-being) / SDG 3.d / SDG 3.d.: Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks. The project owner establishes capacity and preparedness for health emergencies in accordance with the International Health Regulations (IHR).
- SDG 5 (Gender equality) / SDG 5.1 / SDG 5.1.: Whether or not legal frameworks are in place to promote, enforce and monitor equality and non-discrimination on the basis of sex. The Project holder searches for permanent personnel will not have any clarification on gender preference and the estimated salary for such functions is defined independently of who occupies the position.
- SDG 7 (Affordable and clean energy) / SDG 7.2 / SDG 7.2.1: Renewable energy share in the total final energy consumption. The GHG project generates up to 36.879 GWh/year that are incorporated into the country's energy matrix.
- SDG 8 (Decent Work and Economic Growth) / SDG 8.8 / SDG 8.8.1: Frequency rates of fatal and non-fatal occupational injuries, by sex and migrant status. The Project holder to apply procedures on workplace safety, seeking a rate of zero fatal accidents.
- SDG 8 (Decent Work and Economic Growth) / SDG 8.8 / SDG 8.8.2: Increase in National compliance of labour rights (freedom of association and collective bargaining) based on International Labour Organization (ILO) textual sources and national legislation, by sex and migrant status. The Project holder monitors and ensures that all employees hired by Secco and third parties are under Argentine labour law.



- SDG 10 (Reduced inequalities) / SDG 10.3 / SDG 10.3.1: Proportion of the population reporting having personally felt discriminated against or harassed within the previous 12 months on the basis of a ground of discrimination prohibited under international human rights law. The Project holder ensure compliance with the REGULATIVE MANAGEMENT SYSTEM and that the reporting channels opere properly.
- SDG 13 (Climate Action) / SDG 13.2 / SDG 13.2.1: Number of countries that have communicated the establishment or operationalization of an integrated policy/strategy/plan which increases their ability adapt to the adverse impacts of climate change, and foster climate resilience a low greenhouse gas emissions development in a manner that does not threaten food production. The ICONTEC audit team checked and confirmed that the GHG project will naturally play an important role in global climate change mitigation activities through preventing emissions of CO2 that would otherwise be released to the atmosphere in the baseline conditions. Project annually achieves 13,150 tCO2 emission reduction

The ICONTEC audit team checked and confirmed that the latest version of the tool "SDG Tool" has been used to determine the different SDGs properly.

5.16 REDD+ safequards (if applicable)

The project activity is not a REDD+ project; thus, this section is not applicable

#### 5.17 Climate change adaptation

Many environmental benefits result from the implementation of the project "YUNGAS PV POWER PLANTS BUNDLE PROJECT", with Project ID # BCR-131-1-003, located in Argentina that collaborate in the climate change adaptation of the national policies indicated in the "the Second Adaptation Communication of the Argentine Republic" 16:

- Increased availability of electricity generated from clean and renewable sources:
   Greenfield power plant (Solar photovoltaic plant) is an energy source that
   generates electricity. The GHG project reduces the reliance on fossil fuels,
   significantly contributing to greenhouse gas emissions. Greenfield power plant
   (Solar photovoltaic plant) provides a clean and sustainable energy source, essential
   in mitigating climate change impacts.
- Reduced Reliance on Fossil Fuels replacing fossil fuels: The GHG project helps reduce the reliance on fossil fuels for electricity generation. Greenfield power plant (Solar photovoltaic plant) can provide a stable and sustainable energy supply as Argentina transitions from fossil fuel-based power generation to cleaner

<sup>16</sup> https://www.argentina.gob.ar/sites/default/files/segunda\_contribucion\_nacional\_final\_ok.pdf



- alternatives. This transition helps decrease the overall carbon footprint of the energy sector.
- Stabilizing energy supply with a diversification in the energy production: Hydroelectricity can provide a stable and sustainable energy supply and broadens the range of technologies used to produce energy.

#### 5.18 Special categories related to co-benefits.

The project does not intend to achieve one of the special categories: "co-benefits can be divided into three additional benefits: biodiversity conservation, community benefits, and gender equity"; therefore, this section is not applicable.

# 6 Internal quality control

This report includes the validation that underwent a technical review before being submitted to BioCarbon Standard. The technical review and the quality control process was performed by an internal technical reviewer team in accordance with the ICONTEC's internal procedures for carrying out validation, verification, and certification audits of GHG projects. After this step, the submission for requesting for issuance has been conducted. The technical reviewers are qualified in accordance with the ICONTEC's professional qualification for BioCarbon Standard.

## 7 Validation opinion

ICONTEC has been commissioned by "Sustainable and Carbon Finance LLC" to perform an independent validation of the GHG project "YUNGAS PV POWER PLANTS BUNDLE PROJECT", with Project ID # BCR-131-1-003, located in Argentina, for the first quantification period of GHG emissions reduction of the following way:

- Chalican Project: 01/09/2024 to 31/08/2031 (both dates included)
- Rodeito Project: 1/12/2024 to 30/11/2031 (both dates included)

The validation was performed based on BCR Standard, version 3.4 /BCR1/and CDM requirements, in particular, according to with the AMS-I.D methodology, version 18.0 /UN1/.

ICONTEC hereby confirms that the GHG Project "YUNGAS PV POWER PLANTS BUNDLE PROJECT" with Project ID # BCR-131-1-003 and located in Argentina, applied all relevant EB-guidance as the selected baseline and monitoring methodologies and the associated methodological tools have been applied correctly. Validation of the GHG statement was conducted in accordance with ISO 14064-3; 2019. The total emission reductions from the GHG project are estimated of 54,844 t CO2e for the first quantification period average (Seven years) and estimated average annual GHG emission reduction of 7,835 tCO2e.



As a result, the validation team assigned by ICONTEC concludes that the GHG Project "YUNGAS PV POWER PLANTS BUNDLE PROJECT" with Project ID # BCR-131-1-003 and located in Argentina, as described in the GHG Project Document (version 4 dated 23/01/2025):

- Meet with all relevant Host Country criteria.
- Meet with all relevant requirements of the BCR Standard, version 3.4 /BCR1/.
- Applies correctly the baseline and monitoring methodology of the AMS-I.D methodology, version 18.0 /UN1/.
- Its additionality is sufficiently justified in the PD.
- Is likely to achieve estimated emission reductions.
- The validated GHG emission reductions over the entire quantification period of the GHG project:

Year	GHG emission reduction in the Baseline emissions (tCO <sub>2</sub> e)	GHG emission reduction in the Project emissions (tCO <sub>2</sub> e)	reduction in	Estimated Net GHG Reduction (tCO <sub>2</sub> e)
From 01/09/2024 to 31/12/2024	2,110	o	o	2,110
From 01/01/2025 to 31/12/2025	7,949	О	o	7,949
From 01/01/2026 to 31/12/2026	7,914	О	o	7,914
From 01/01/2027 to 31/12/2027	7,876	О	o	7,876
From 01/01/2028 to 31/12/2028	7,833	o	o	7,833
From 01/01/2029 to 31/12/2029	7,785	o	o	7,785
From 01/01/2030 to 31/12/2030	7,729	o	o	7,729
From 01/01/2031 to 30/11/2031	5,648	О	o	5,648
Total	54,844	0	0	54,844



Therefore, ICONTEC requests the registration of the GHG Project as a BCR project activity.

## 8 Validation statement

Once completed the validation, ICONTEC confirms that:

- a) Carbon ownership of the GHG Project has belonged to the project owner, which is the Industrias Juan F. Secco SA.
- b) The level of assurance of the validation is reasonable, which is no less than 95%, according to paragraph 22.3(a) of the BCR Standard, version 3.4 /BCR1/.
- c) Materiality or material discrepancy in the data supporting the GHG Project baseline and the estimate of GHG emission reductions or removals may be up to ± 5%, according to paragraph 22.3(b) of the BCR Standard, version 3.4 /BCR1/.
- d) The scope of this validation exercise is to assess the estimated total GHG emission reductions of 54,844 t CO2e of the following way:
  - ✓ Chalican Project: 01/09/2024 to 31/08/2031 (both dates included)
  - ✓ Rodeito Project: 01/12/2024 to 30/11/2031 (both dates included)
- e) The estimated average annual GHG emission reduction is 10,889 tCO2e.
- f) The purpose of this validation exercise is to confirm the compliance of the GHG project with the BCR standard, version 3.4 /BCR1/ and AMS-I.D methodology, version 18.0 /UN1/ and its related tools. Therefore, there is sufficient and appropriate evidence to support material emissions
- g) The data and information supporting the GHG declaration are hypothetical based on studies developed previously to the construction of the project, and historical data to determine the emission factor of the grid.
- h) The ICONTEC Audit Team confirms that the GHG Project "YUNGAS PV POWER PLANTS BUNDLE PROJECT" with Project ID # BCR-131-1-003 and located in Argentina, applied all relevant EB-guidance as the selected baseline and monitoring methodology and the associated methodological tools have been applied correctly. Validation of the GHG statement was conducted in accordance with ISO 14064-3; 2019. The estimated total GHG emission reductions of 54,844 t CO2e for the first quantification period of the following way:
  - ✓ Chalican Project: 01/09/2024 to 31/08/2031 (both dates included)
  - ✓ Rodeito Project: 01/12/2024 to 30/11/2031 (both dates included)
- i) ICONTEC confirms that the project is implemented as described in the GHG project document, version 3 /1/ and the identification of the baseline, the use of data and parameters for the estimation of the mitigation results, the GHG emission reductions and the monitoring plan were determined applying the selected methodology. Based on the information we have assessed; we confirm that the GHG emission reductions are calculated without material misstatements in a conservative and appropriate manner. The project's contribution to sustainable development objectives is:
  - ✓ SDG 3: Good Health and well-being



- ✓ SDG 5: Gender equality.
- ✓ SDG 7: Affordable and clean energy.
- ✓ SDG 8: Decent Work and Economic Growth.
- ✓ SDG 10 Reduced inequalities.
- ✓ SDG 13: Climate Action.
- j) The ICONTEC audit team conclusion on criteria and indicators related to special categories, related to co-benefits: Not Applicable.
- k) ICONTEC's opinion applies to the project's GHG emissions, and the resulting GHG emission reductions reported and related to the validated and registered baseline, as well as the monitoring plan and its associated documents. ICONTEC confirms the following statements:

Project Title	YUNGAS PV POWER PLANTS BUNDLE PROJECT
Quantification period:	Chalican project: From o1-September-2024 to 31-August-2031 (Both dates included) Rodeito project: From o1-December-2024 to 30-November-2031 (Both dates included)
Opinion according to Table 1 of ISO/IEC 14064-3:2019	Unmodified (Positive)
Net emissions:	54,844 tCO₂e

1) The table below shows the amount of GHG reduction obtained by the project:

Year		GHG emission reduction in the Project emissions (tCO <sub>2</sub> e)	GHG emission reduction in the Leakage emissions (tCO <sub>2</sub> e)	Estimated Net GHG Reduction (tCO <sub>2</sub> e)
From				
01/09/2024 to	2,110	0	0	2,110
31/12/2024				
From				
01/01/2025 to	7,949	0	0	7,949
31/12/2025				
From				
01/01/2026 to	7,914	0	0	7,914
31/12/2026				
From				
01/01/2027 to	7,876	0	О	7,876
31/12/2027				
From				
01/01/2028 to	7,833	0	О	7,833
31/12/2028				

# Validation Report template Version 1.3



From 01/01/2029 to 31/12/2029	7,785	О	О	7,785
From 01/01/2030 to 31/12/2030	7,729	О	o	7,729
From 01/01/2031 to 30/11/2031	5,648	О	О	5,648
Total	54,844	0	0	54,844

Norberto Ardila Rodríguez ICONTEC

Lead Auditor and Technical Expert Issued: 03/02/2025



#### 9 Annexes



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

#### Norberto Ardila Lead Auditor and Technical Expert MAIN PROFESSIONAL EDUCATION

- Project Management Specialist; Universidad Metropolitana de Educación Ciencia y Tecnología (UMECIT), Panama, 2021.
- Internal Auditor ISO/IEC 17025:2017; ASOSEC, Colombia, 2018.
- Internal Auditor ISO 9001 2015; SENA, Colombia, 2017
- Electronic Engineer; Universidad Industrial de Santander (UIS), Colombia, 2006. PROFESSIONAL EXPERIENCE:
  - ICONTEC (2022 Present):
    - o Position: Team Leader and Technical Expert
    - Type of resource: External Individual
    - Responsibilities:
      - Lead Auditor and Technical Expert for the verification service of the GHG mitigation project "SANTA TERESA HYDROPOWER PLANT", under the CDM Standard. Scope: 1 – Energy industries (renewable - / non-renewable sources)
      - Lead Auditor and Technical Expert for the verification service of the GHG mitigation project "PROGRAM OF PHOTOVOLTAIC INCENTIVES OF COLOMBIA", under the ColCX Standard and ISO 14064-2. Scope: 1 – Energy industries (renewable - / non-renewable sources).
      - Lead Auditor for the verification service of the GHG mitigation project "VEOLIA LFG PTA ANTANAS LANDFILL", under the CERCARBONO Standard and ISO 14064-2. Scope: 13 – Waste handling and disposal.
      - Lead Auditor for the validation and verification service of the GHG mitigation project "PRIMER PROYECTO AGRUPADO DE HELIOS S.A. E.S.P PARA LA ENERGIZACIÓN DE HOGARES EN ZONAS NO INTERCONECTADAS EN COLOMBIA", under the CERCARBONO Standard and ISO 14064-2. Scope: 1 Energy industries (renewable / non-renewable sources).
      - Lead Auditor for the validation service of the GHG mitigation project "ELECTRIC FORKLIFTS AND TRUCKS NIGERIA", under the VERRA Standard and ISO 14064-2. Scope: 7 – Transport.
      - Lead Auditor and Technical Expert for the verification service of the GHG mitigation project "PROGRAMA DE INCENTIVOS PARA ENERGIA RENOVABLE", under the ColCX Standard and ISO 14064-2. Scope: 1 – Energy industries (renewable - / non-renewable sources).



 Lead Auditor and Technical Expert for the verification service of the GHG mitigation project "CARLOS LLERAS RESTREPO HYDROELECTRIC POWER PLANT", under the CSA and ISO 14064-2. Scope: 1 – Energy industries (renewable - / non-renewable sources).

#### Ana Isabel Aubad

#### MAIN PROFESSIONAL EDUCATION

With 25 years of experience in Project Management in areas of innovation, climate change and sustainability in Central and South America. Lead auditor/verifier, consultant and teacher of sustainability and climate change. Ana has been an independent reviewer of more than 50 GHG inventories under ISO and GHG Protocol and more than 60 GHG emissions reduction projects in different national and international carbon market standards (mainly CDM, energy and waste sectors). Environmental Engineer from the Antioquia School of Engineering, with a Master's degree in Circular Economy (Material and Energy Flow Management) at the University of Trier, Germany. Likewise, he is part of the Subject Matter Experts of ICVCM and a member of the list of "Roast Experts" of the "United Nations Climate Change Article 6.4 mechanism and of the Technical Word Group of GHG procotol in Actions and Market Instruments.

#### PROFESSIONAL EXPERIENCE:

- ICONTEC:
  - o Position: Team Leader, Technical Expert and Technical Reviewer
  - o Type of resource: External
  - Responsibilities:
    - Bioenergy in General Deheza Electric Powwer Generation from Peanut Hull and Sunflower Husk project. Client: Aceitera General Deheza S.A., Argentina.
    - La Joya Hydroelectric Project. Client: UNIÓN Fenosa Generadora La Joya S. A, Costa Rica.
    - Cururos Wind Farm Project. Client: Parque Eólico Los Cururos LTDA Chile
    - Validation of the Second Crediting Period for Providencia I: 1.8MW Small Hydro Power Generation Plant.
    - Verification of three periods for "Agua Fresca Multipurpose and Environmental Services Project"
    - Validation of "Fuel Switching through change of furnaces at Imusa S.A."
    - Validation of "Pirgua Landfill Gas Recovery and Flaring"
    - Validation of "Installation of a high-pressure/high-efficiency bagasse boiler to cogenerate heat and power"
    - Validation of "Methane Gas Capture and Fuel Switching at Compañía Argentina de Levaduras S.A.I.C. Plant Project"
    - Validation of "Cueva Maria Hydroelectric Expansion Project"



- Validation of "Montenegro Landfill Gas Recovery and Flaring"
- Validation of "La Vegona Hydroelectric project"
- Validation of "Chamalecón 280 Hydroelectric project"
- Validation of "Metaldom Fossil fuel switch from reheat furnace"
- Verification of five periods for "Doña Juana Landfill gas-to-energy project"
- Verification of "La Vuelta and la Herradura hydroelectric project"
- Validation "Pardos Small Hydro Plant and LOGICarbon CDM Project"
- Validation "Pequi and Sucupira SHPs and LOGICarbon CDM Project"
- Validation "Cambará and Embaúba SHPs and LOGICarbon CDM Project"
- Validation "Rio Bonito and Baitaca SHPs and LOGICarbon CDM Project" Verification of "Landfill Gas to Energy Facility at the Nejapa Landfill Site, El Salvador"
- Verification of "Co-composting of EFB and POME project"
- Verification of "Biogas Project, Olmeca III, Tecun Uman"
- Verification of "Los Algarrobos hydroelectric project"
- Verification of "La Venta II Project2
- Valitation of "Toachi Pilaton Hydroelectric Project"
- Validation "EMGEA Small Hydropower (SHP) Run-of-the-River CDM Project Bundle"
- Validation "Marañon Hydroelectric Project" Verification "Los Algarrobos hydroelectric project"
- Verification "Bio energy in General Deheza –Electric power generation from peanut hull and sunflower husk-"
- Verification of VCS Scheme "Fuel-Switching Project from Fossil Fuels to Biomass in La Providencia, Arcor"
- Verification "BRASCARBON Methane Recovery Project BCA-BRAo2, Brazil"
- Verification "BRASCARBON Methane Recovery Project BCA-BRAo3, Brazil"
- Validation and Verification VCS "BRASCARBON Methane Recovery Project BCA-BRA-02, Brazil"
- Validation and Verification VCS "BRASCARBON Methane Recovery Project BCA-BRA-03, Brazil"
- Validation of "CTR Teresina landfill gas project"
- Validation of "CTR Maceio landfill gas project"
- Validation of "Santa Rita Hydroelectric Plant"
- Validation "Biogas Recovery And Heat Generation From Palm Oil Mill Effluent (Pome), Coopeagropal"
- Verification CDM "BK Energia Itacoatiara Project"
- Verification Gold Standard "BK Energia Itacoatiara Project"



- Validation Gold Standard "Cururos Wind Power Project-Chile" (Sustainability expert)
- Validation "Nuevo Mondoñedo Landfill Gas Recovery, Flaring and Energy Production"
- PRC and validation (new credit period) for: "BRASCARBON Methane Recovery Project
- BCA-BRA-o5, Brazil" and "BRASCARBON Methane Recovery Project BCA-BRA-o8, Brazil"
- Verification of the 5th period and 1st period of the new credit period: Ciudad Juarez Landfill Gas to Energy Project
- Verification "DOÑA JUANA LANDFILL GAS-TO-ENERGY PROJECT" (Several periods)
- Post Registration Change BRASCARBON Methane Recovery Project BCA-BRA-o8
- Post Registration Change BRASCARBON Methane Recovery Project BCA-BRA-05
- Renewal of Crediting Period BRASCARBON Methane Recovery Project BCA-BRA-o8
- Renewal of Crediting Period BRASCARBON Methane Recovery Project BCA-BRA-05
- Verification BRASCARBON Methane Recovery Project BCA-BRA-14
- Verification BRASCARBON Methane Recovery Project BCA-BRA-13
- Verification Ciudad Juarez
- Verification BRASCARBON Methane Recovery Project BCA-BRAo4A, Brazil.
- Verification BRASCARBON Methane Recovery Project BCA-BRAog, Brazil
- Verification BRASCARBON Methane Recovery Project BCA-BRA-15 Brazil
- Verification BRASCARBON Methane Recovery Project BCA-BRA-
- Verification BRASCARBON Methane Recovery Project BCA-BRA-13
- Verification DOÑA JUANA LANDFILL GAS-TO-ENERGY PROJECT
- Verification of two periods "Biogas energy plant from palm oil mill effluent"
- Validation "Los Angeles Landfill Gas Flaring Project"
- Verification of two periods "Doña Juana Landfill gas-to-energy project"
- Verification "Landfill Gas to Energy Facility at the Nejapa Landfill Site, El Salvador"
- Verification "La Joya hydroelectric project" Verification "Hydroelectric Santa Ana"



- Verification "Biogas Project, Olmeca III, Tecún Uman"
- Displacement of the electricity of the national electric grid by the auto-generation of renewable energy in the Cañaveralejo Wastewater Treatment Plant in Cali, Colombia
- Verification "BRASCARBON Methane Recovery Project BCA-BRAos, Brazil"
- Verification "BRASCARBON Methane Recovery Project BCA-BRAo7, Brazil"
- Verification "BRASCARBON Methane Recovery Project BCA-BRAo8. Brazil"
- Verification "BRASCARBON Methane Recovery Project BCA-BRAo4. Brazil"
- Verification "BRASCARBON Methane Recovery Project BCA-BRAog, Brazil"
- Verification "BRASCARBON Methane Recovery Project BCA-BRA-15, Brazil"
- Verification "BRASCARBON Methane Recovery Project BCA-BRA-13, Brazil", three verifications
- Verification "BRASCARBON Methane Recovery Project BCA-BRA-14, Brazil", three verifications
- Validation "Biogas Project, Olmeca I, Santa Rosa"
- Verification "Co-composting of EFB and POME project"
- Validation "CTR Rosario Landfill Gas Project"
- Validation "CTR Feira de Santana Landfill Gas Project"
- Validation "SHP Itaguaçu CDM project (JUN 1146), Brazil"
- Verification "Doña Juana Landfill gas-to-energy project", two periods
- Verification of two periods for "Biogas Project, Olmeca III, Tecún Uman"
- Verification "Methane recovery and effective use of power generation project Norte III-B Landfill"
- Introduction of the recovery and combustion of Methane in the existing sludge treatment system of the Cañaveralejo Wastewater Treatment Plant in Cali, Colombia (Post registration change PDD and three Verifications)
- Assessment Report for CDM proposed standardized baseline: "Standardized baseline for the sector of brick production in Colombia". Client: Climate Change Division of the Ministry of Environment and Sustainable Development of Colombia.
- Post Registration Changes (PRC) for PDDs "BRASCARBON Methane Recovery Project BCA-BRA-04A, Brazil", BRASCARBON Methane Recovery Project BCA-BRA-13, Brazil" and BRASCARBON Methane Recovery Project BCA-BRA-14, Brazil"



- Verification and Post Registration Change Ciudad Juarez Landfill Gas to Energy Project
- Validation and verification of VCS "BRASCARBON Methane Recovery Project BCA-BRAo5, Brazil"
- Validation and verification of VCS "BRASCARBON Methane Recovery Project BCA-BRA07, Brazil"
- Validation and verification of VCS "BRASCARBON Methane Recovery Project BCA-BRAo8, Brazil"
- Verification VCS of "Montañitas hydroelectric project"



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

Finding ID	1	Type finding	of	Clarification / Corrective/ Forward action	Date DD/MM/YY
Section No.					
	Indicate the section number of the validation report to which each CL, CAR or FAR corresponds.				each CL, CAR or FAR
Description	n of finding				
Not applical	Not applicable				
Project holder response (dd/mm/yyyy)					
Not applicable					
Documentation provided by the project holder					
Not applicable					
CAB assess	CAB assessment (dd/mm/yyyy)				
Not applical	Not applicable				



### Annex 3. Documentation review

Document Title / Version	Author	Organization	Document provider (if applicable)
/1/ GHG Project document Version 1 Issue: 07-Oct-2024 Version 2 Issue: 18-Nov-2024 Version 3 Issue: 04-Dec-2024 Version 4	Sustainable and Carbon Finance LLC	Industrias Juan F. Secco SA	Sustainable and Carbon Finance LLC
Issue: 23-Jan-2025 /2/ ER spreadsheet Version 1 Issue: 07-Oct-2024 Version 2 Issue: 18-Nov-2024 Version 3 Issue: 04-Dec-2024 Version 4 Issue: 23-Jan-2025	Sustainable and Carbon Finance LLC	Industrias Juan F. Secco SA	Sustainable and Carbon Finance LLC
/3/ Spreadsheet related with calculations of the combined margin emissions factor	CAMMESA	CAMMESA	Sustainable and Carbon Finance LLC
/4/ Evidence related to information related to additionality	Sustainable and Carbon Finance LLC	Industrias Juan F. Secco SA	Sustainable and Carbon Finance LLC



	T	T	
/5/ Evidence related to technical information of the GHG Project	Sustainable and Carbon Finance LLC	Industrias Juan F. Secco SA	Sustainable and Carbon Finance LLC
/6/ Evidence related to Stakeholder engagement and consultation	Sustainable and Carbon Finance LLC	Industrias Juan F. Secco SA	Sustainable and Carbon Finance LLC
/7/ Evidence related to Sustainable development safeguards (SDSs)	Sustainable and Carbon Finance LLC	Industrias Juan F. Secco SA	Sustainable and Carbon Finance LLC
/8/ Tool for Determining the Contributions of GHG Projects to Achieving the Sustainable Development Goals (SDGs)	Sustainable and Carbon Finance LLC	Industrias Juan F. Secco SA	Sustainable and Carbon Finance LLC
/9/ Evidence related to Carbon ownership and rights	Sustainable and Carbon Finance LLC	Industrias Juan F. Secco SA	Sustainable and Carbon Finance LLC
/10/ Evidence related to Spatial of the project boundary is the Argentine Interconnection System (SADI)	CAMMESA	CAMMESA	Sustainable and Carbon Finance LLC
/10/ Evidence related to Compliance with Laws, Statutes and Other Regulatory Frameworks	Sustainable and Carbon Finance LLC	Industrias Juan F. Secco SA	Sustainable and Carbon Finance LLC
/11/ Agreement of calibration	Sustainable and Carbon Finance LLC	Industrias Juan F. Secco SA	Sustainable and Carbon Finance LLC



between SECCO and EJESA			
/12/ Chalican - Adicionalidad _ Cash Flow  Rodeito - Adicionalidad _ Cash Flow	Sustainable and Carbon Finance LLC	Industrias Juan F. Secco SA	Sustainable and Carbon Finance LLC
/BCR1/ BCR Standard, version 3.4	BioCarbon Standard	BioCarbon Standard	https://biocarbonstand ard.com/wp- content/uploads/BCR Standard.pdf
/BCR2/ Project conformance to Validation and Verification manual Greenhouse Projects, version 2.4	BioCarbon Standard	BioCarbon Standard	https://biocarbonstand ard.com/wp- content/uploads/BCR validation-and- verification- manual.pdf
/BCR3/ BCR baseline and additionality, version 1.3	BioCarbon Standard	BioCarbon Standard	https://biocarbonstand ard.com/wp- content/uploads/BCR additionality.pdf
/BCR4/ List of the CDM methodologies accepted from the energy sector under BCR Standard, February 2024	BioCarbon Standard	BioCarbon Standard	https://biocarbonstand ard.com/wp- content/uploads/CDM _methodologies_Energ y.pdf
/BCR5/ BCR Avoiding Double Counting (ADC) Tool, version 2.0	BioCarbon Standard	BioCarbon Standard	https://biocarbonstand ard.com/wp- content/uploads/BCR avoiding-double- counting.pdf
/BCR6/ Energy Sector Non-Conventional	BioCarbon Standard	BioCarbon Standard	https://biocarbonstand ard.com/wp- content/uploads/BCR



Danguahla Engar			an army goater
Renewable Energy			energy-sector-
sources, version 1.1			guide.pdf
/BCR7/ BCR Sustainable Development Goals (SDG), version 1.0	BioCarbon Standard	BioCarbon Standard	https://biocarbonstand ard.com/wp- content/uploads/BCR_ SDG-tool.pdf
/BCR8/ Sustainable Development Safeguards, version 1.1	BioCarbon Standard	BioCarbon Standard	https://biocarbonstand ard.com/wp- content/uploads/BCR Sustainable developme nt_safeguards.pdf
/BCR9/ BCR Permanent and Risk Management, version 1.1	BioCarbon Standard	BioCarbon Standard	https://biocarbonstand ard.com/wp- content/uploads/BCR risk-and- permanence.pdf
/UN1/ Small-scale Methodology AMS-I.D: Grid connected renewable electricity generation; Sectoral Scope (s): 01 Version 18.0 Issue: 28-Nov-2014		UNFCCC	https://cdm.unfccc.int /UserManagement/Fil eStorage/RoIJIX9LQ7 W2GOYHSMBFCPE3V KZ685
/UN2/ Methodological tool TOOL07: Tool to calculate the emission factor for an electricity system Version: 07.0 Issue: 31-Aug-2018		UNFCCC	https://cdm.unfccc.int /methodologies/PAmet hodologies/tools/am- tool-07-v7.o.pdf
/UN3/ Methodological Tool TOOL21: Demonstration of additionality of small scale project		UNFCCC	https://cdm.unfccc.int /methodologies/PAmet hodologies/tools/am- tool-21-V13.1.pdf



activities		
Version: 13.1		
Issue: 01-Sept-2020		
/UN4/		
Methodological		
tool TOOL27:		https://cdm.unfccc.int
Investment	 UNFCCC	/methodologies/PAmet
analysis		hodologies/tools/am-
Version: 12.0		<u>tool-27-v12.pdf</u>
Issue: 02-Nov-2022		
/UN5/		
Clarification on		
vintage data if OM		https://cdm.unfccc.int
or BM emission		/UserManagement/Fil
coefficient is	 UNFCCC	eStorage/AM_CLAR_L
monitored ex-post		LFG2UEJWSG9BNLLR
(ACM0002 ver.		DO4TUXTD91WG9
6)/AM_CLA_0038		
/UN6/		
Annex 11		
GUIDELINES FOR		
THE REPORTING		1 // 1
AND	LINECCC	https://cdm.unfccc.int
VALIDATION OF	 UNFCCC	/EB/048/eb48 repanii.
PLANT LOAD		<u>pdf</u>
FACTORS		
Version: 01		
Issue: 17-Jul-2009		
/UN <sub>7</sub> /		
Methodological		
Tool TOOL19:		
Demonstration of		https://cdm.unfccc.int
additionality of	UNFCCC	/methodologies/PAmet
microscale	 UNITECE	hodologies/tools/am-
project activities		<u>tool-19-v10.0.pdf</u>
Version: 10.0		
Issue: 08-Sept-		
2022		
/UN8/		https://cdm.unfccc.int
Non-binding best		/Reference/Guidclarif/
practice examples	 UNFCCC	ssc/methSSC quid15 v
to demonstrate		o1.pdf
additionality for		<u>01.puj</u>





SSC	proiect		
bbc	project		
activities			



## Annex 4. Abbreviations

Abbreviations	Full texts		
BCR	BioCarbon Registry		
	COMPAÑÍA ADMINISTRADORA DEL MERCADO MAYORISTA		
CAMMESA	ELECTRICO SOCIEDAD ANÓNIMA (Acronym in Spanish)		
CAR	Corrective Action Request		
CDM	Clean Development Mechanism		
CER(s)	Certified Emission Reduction(s)		
CL	Clarification request		
CM	Combined Margin		
CO <sub>2</sub>	Carbon dioxide		
CO2e	Carbon dioxide equivalent		
DNA	Designated National Authority		
DOE	Designated Operational Entity		
DR	Document Review		
EF	Emission Factor		
EIA	Environmental Impact Assessment		
ER	Emission Reductions		
FAR	Forward Action Request		
GHG	Greenhouse gas(es)		
ICONTEC	INSTITUTO COLOMBIANO DE NORMAS TÉCNICAS Y		
CERTIFICACIÓN (Acronym in Spanish)			
IRR	Internal Rate of Return		
MW	Mega Watt		
MWh	Mega Watt Hour		
ReNaMi	Registro Nacional de Proyectos de Mitigación del Cambio		
	Climático (Acronym in Spanish)		
SADI	Sistema Argentino de Interconexión (Acronym in Spanish)		
SDG's	Sustainable Development Goals		
VCC	Verified Carbon Credits		
WACC	weighted average costs of capital		