


PROYECTO SOLAR CASA LA CALERA SAN LUIS



Document prepared by Colombian Institute for Technical Standards and Certification (ICONTEC)

Report Title	Validation report of Proyecto Solar CASA La Calera San Luis
Version number and completion date of the PDD to which this report applies	Version 4 16/05/2023
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Audit criteria	- ISO 14064-2:2019 - BCR Standard, version 3.0 - Approved consolidated methodology ACM0002: Grid-connected electricity generation from renewable sources, version 20.0, and its related tools.
Validated period	01/07/2023 to 30/06/2030
Estimated amount of average GHG emission reductions	22.638 tCO ₂ e per year. 158.463 tCO ₂ e during whole crediting period.
GHG project holder	Industrias Juan F Secco S. A.
Pages	49
Audit Carried Out by :	Francy Ramírez. Lead auditor, technical-financial expert.
Lead Auditor Signature	
Technical Review Carried Out by:	Ana Isabel Aubad. Lead auditor, technical-financial expert.

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VALIDATION REPORT FOR GHG MITIGATION PROJECT



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Summary:

ICONTEC was contracted for the validation of Proyecto solar CASA La Calera en San Luis, this validation process was performed under BCR standard version 3.0. Proyecto solar CASA La Calera en San Luis is in the province of San Luis, Argentina, this project activity is developed close to Cementos Avellaneda facility, in La Calera town. The opening meeting between ICONTEC and Industrias Juan F Secco S. A. (May 3rd/2023) was carried out after the project was listed in the BioCarbon Registry for a period of 30 calendar days.

Proyecto solar CASA La Calera en San Luis consists of the construction of a new solar power plant with an installed capacity of 20 MW (AC) and a projected annual average generation of 55 GWh. The purpose of the project is the electricity generation using renewable energy sources to supply the Argentinean National Interconnected Electric System (SADI). The expected impact on emission reductions from the project is 22.638 tCO₂e per year.

This project proposes to apply baseline and monitoring methodology identified as ACM0002, version 20.0 of Approved methodologies for large scale CDM project activities by the CDM Executive Board. This methodology has been accepted to be used by the BCR standard.

The purpose of this validation process is to confirm the compliance of the project with the BCR standard (version 3.0), based on the PDD version 4 of May 16th/2023, and the proper application of the monitoring methodology ACM0002 (Version 20.0) and its related CDM tools and guidelines.

During this validation process, 6 findings occurred to be classified as 4 corrective actions request and 2 clarifications actions request, which were treated by the project holder and clarified in a new version of the PDD version 4. Upon review of the documentation and explanations provided by the project holder, all findings were closed out in a clear and transparent manner.

ICONTEC validated the project design and the implementation status through the documental review and onsite visit (it was conducted between May 3rd/2023 to May 5th/2023), addressing conservatively the restrictions and uncertainties associated to this validation process.

ICONTEC confirms that it achieved a reasonable level of assurance during validation; see Section 1.3 on this report.

The validation team was able to conclude that as it was described in the version 4 of the project description, it meets all relevant BCR requirements and correctly applies the baseline and monitoring methodology ACM0002, version 20.0. Hence, ICONTEC requests the registration of the project.

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1. INTRODUCTION

The validation audit corresponds to an objective evaluation with the purpose of assessing the design of a project to reduce emissions or increase the removal of Greenhouse Gas Effects - GHG, including its baseline scenario, its monitoring plan and compliance of GHG project with the relevant requirements of BCR Standard to which it is applying.

1.1. Objective

By BCR Standard, 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 mitigation project will increase removals or 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 mitigation project.
- Assess compliance in the implementation of the mitigation project activities, including those associated with the methodology selected for the project holder.
- Evaluate and verify compliance with the monitoring, verification, and reporting system principles necessary to comply with current legislation.

1.2. Scope and Criteria

The validation scope involves an independent and objective review to determine that the project design meets the following BCR criteria:

- BCR Standard, version 3.0.
- BCR validation and verification manual, version 2.1.
- ISO 14064-2:2019: Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements.
- Approved Consolidated Baseline and Monitoring Methodology ACM0002, Version 20.0

ICONTEC 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.

1.3. Level of assurance

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The information sources used are deemed reliable, these are: PDD, on-site visit to the project facility, on-site interviews, document review and secondary sources for confirmation.

All the revisions of the validation report before being submitted to the client were subjected to an independent internal technical review to confirm that all validation activities had been completed according to the pertinent ICONTEC instructions.

The technical review was performed by a technical reviewer(s) qualified in accordance with ICONTEC’s qualification scheme BCR validation and verification. The validation team and the technical reviewers consist of the following personnel:

Table 1. Validation team

ROLE/ QUALIFICATION	LAST NAME	FIRST NAME
Lead Auditor and Technical-financial Expert	Ramirez	Francy
Lead Technical Reviewer and Technical-financial Expert Reviewer	Aubad	Ana Isabel

Besides the above mentioned, during the validation ICONTEC ensured to fulfill the requirements additional to ISO 14064-3:2019 and ISO 14065:2013, set in BCR standard version 3.0, which are as follows:

- The level of assurance is reasonable for validation. In accordance with section 22.3 of BCR standard this validation has a level of assurance of 95%;
- The criteria is VCS standard version 3.0 or other GHG Program as approved under the BCR Program;
- The objective is in conformance with the VCS standard version 3.0 requirements and BCR program methodologies as applicable to the specific project.

1.4. Materiality threshold

In accordance with section 22.3 of BCR standard version 3.0, the material discrepancy in the data supporting the GHG baseline and the estimation of GHG emissions reduction was set up at 5% for this validation.

1.5. Summary Description of the mitigation GHG Project

The purpose of the project activity is the installation, commissioning and operation of new large scale solar power plant located close to Cementos Avellaneda facility, in La Calera town, in the province of San Luis, Argentina. The total installed capacity of the project activity is 20 MW (AC)

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and a projected annual average generation of 55 Gigawatt hour (GWh). The purpose of the solar power plant is the energy generation using renewable energy sources to supply the Argentinean National Interconnected Electric System (SADI by its acronym in Spanish). Proyecto solar CASA La Calera en San Luis uses the methodology ACM0002, version 20.0. The average expected impact on emission reductions from the project is 22.638 tCO₂e average per year. It is expected that Proyecto solar CASA La Calera en San Luis will start its commercial operation on July 1st/2023.

The project activity will reduce the carbon dioxide emissions in the atmosphere that were occurring prior to the usage of renewable energy technologies. Proyecto solar CASA La Calera en San Luis results in reductions of CO₂ emissions that are real, measurable and give long-term benefits to the mitigation of climate change. It is demonstrated that the project activity is not a likely baseline scenario. Emission reductions attributable to the project activity are hence additional to any that would occur in its absence, in accordance with the BCR requirements.

2. VALIDATION PROCESS

2.1 Method and criteria

The validation consists of the following three phases:

- i) A desk review of the project design documents,
- ii) On site inspection and Follow up interviews with project stakeholders,
- iii) Resolution of outstanding issues and the issuance of a final validation report and opinion.

As mentioned in clause 1.2 of this report ICONTEC, based on its ethics code and internal procedures, carries out validation, verification and certification audits of BCR project activities (which, in turn, are based on the BCR standard) focused on the identification of significant risks for GHG emissions reduction generation and the verification of the contribution to climate change mitigation.

All documentation reviewed during the validation process has been including in section 2.2 – Documental Review.

Findings established during the validation can be seen as:

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

The findings could take the form of a Corrective Action Request (CAR), Forward Action Request (FAR) or a Clarifications Request (CL).

Corrective Action Requests (CAR) are issued where:

- i) The project participants have made mistakes which directly influence the ability of the project activity to achieve real, measurable and additional emission reductions;
- ii) The VCS requirements have not been met; or
- iii) There is a risk that emission reductions cannot be monitored or calculated

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A Forward Action Request (FAR) is made to highlight issues related to project implementation that will require review during the next verification of the project activity.

A Clarification Request (CL) is required when information is insufficient or not clear enough to establish whether a requirement has been met.

ICONTEC resolve or “close out” CARs and CLs only if the project participants modify the project description, rectify the PDD or provide additional explanations or evidence that satisfy the ICONTEC’s concerns.

This validation report explains the issues raised, the responses provided by the project proponent, the means of validation of such responses and references to any resulting changes in the PDD or supporting annexes..

2.2 Documental review

PDD submitted by Industrias Juan F Secco S. A. and Sustainable and Carbon Finance LLC and the additional background documents related to the project design and baseline were assessed during the validation.

Main documents reviewed are:

- /1/ Project Description Document version 2 (issued on March 21st/2023), version 03 (issued on May 10th/2023), and version 4 (issued on May 16th/2023).
- /2/ Spreadsheet used for emissions reduction calculation (file: Secco calculo de emisiones 16May23.xlsx)
- /3/ Spreadsheet used for investment analysis (file: Solar CASA - Adicionalidad.xlsx)
- /4/ PVsyst Simulation report, grid connected system. Project: 50641 Cementos Avellaneda S.A. La Calera San Luis, Argentina. Dated on September 27th/2009
- /5/ Line Diagrams: ING-50641-E-EU-31083, version 2 which outlines the connection of GHG project activity to SADI; and ING-50641-E-EU-31083, version 3 which outlines the connection inside Proyecto solar CASA La Calera en San Luis.
- /6/ Argentinean Law 27191: Modifications to Law 26.190, "National Promotion Regime for the Use of Renewable Energy Sources Destined for Electricity Production". Issued on September 23rd/2015
- /7/ Contract for the production and supply of renewable electricity in La Calera, San Luis signed between Industrias Juan F. Secco and Cementos Avellaneda. Dated on December 17th/2021.

- /8/ Commercial authorization certificates (H-S-23-032 and H-S-23-033) issued by CAMMESA on May 9th/2023 for measurement equipment located in Cementos Avellaneda electrical substation which belong to SADI (power meters MW-2210A127-02 and MW-2210A128-02).
- /9/ Argentinean Law 24.065: "Regimen of electric energy". Issued on December 19th/1991.
- /10/ Argentinean Law 25.675: "General law of the environment". Issued on November 6th/2002.
- /11/ Argentinean Law 27.520: "Minimum Budgets for Adaptation and Mitigation to Global Climate Change". Issued on November 11th/2019.
- /12/ Environmental impact report for construction of the photovoltaic solar power plant CASA - La Calera, dated on August 2019.
- /13/ Readjustment Environmental impact report for construction of the photovoltaic solar power plant CASA - La Calera, dated on April 2022.
- /14/ Resolution 231 – PCyMA – 2022 issued on August 31st/2022 granted by Secretary of State for the Environment of San Luis.
- /15/ Press announcements in the Official and judicial bulletins N° 15.451 on August 3rd/2022 and N° 15.452 on August 5th/2023.
- /16/ Edicts in local newspaper called the Diario de la República published on August 2nd/2022 and Augst 23rd/2023.
- /17/ Decree DNU 863 / 2022 extension of public emergency in sanitary matters.
- /18/ Execution schedule for CASA – La Calera solar power plan updated in April 26th/2023.
- /19/ Renewable Power Generation Costs in 2021, issued by IRENA¹, dated in January 2019.
- /20/ Annual report and Financial statements issued in accordance with International Financial Reporting Standards (IFRS) for Industrias Juan F.Secco S.A. corresponding to the fiscal year Nr. 74 started on January 1st/2021 and ended on December 31st/2021, compared to December 31st/2020.

¹ https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2022/Jul/IRENA_Power_Generation_Costs_2021.pdf?rev=34c22a4b244d434da0accde7de7c73d8

- /21/ Product due diligence for Huawei Smart PV solution in Chilean market, prepared for Huawei Technologies CO., LTD. On July 1st/2021.
- /22/ Monthly cost by employee, prepared by Juan F. Secco. January 2023. (file: "ECL Tecnico y Supervisor CASA Feb 23.xlsx").
- /23/ Annual Tax Law for Fiscal Year 2022, enacted by the Senate and Chamber of Deputies of the province of San Luis.
- /24/ Law of competitiveness 25.413 promulgated by the Congress of the Argentine Nation dated on March 26th/2003.
- /25/ Decree 824/2019 Income tax issued on December 5th/2019.
- /26/ PV Solar Power Plant Monitoring and Control Procedure, prepared by Industrias Juan F. Secco S.A. and Cementos Avellaneda. Version C dated on March 27th/2023.

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

- /UN1/ Approved Consolidated Methodology ACM0002: Grid-connected electricity generation from renewable sources, version 20.0.
- /UN2/ Methodological Tool to calculate the emission factor for an electricity system, version 07.0
- /UN3/ Methodological Tool for the demonstration and assessment of additionality, version 07.0
- /UN4/ Methodological tool on investment analysis, version 11.0
- /UN5/ Guidelines for the reporting and validation of plant load factors, version 01.0
- /UN6/ Methodological tool on common practice, version 03.1
- /UN7/ Methodological tool for Baseline, project and/or leakage emissions from electricity consumption and monitoring of electricity generation, version 03.0

[2.3 Risk analysis, sampling plan or evidence - gathering plan, and validation plan.](#)

During the documental review stage, the audit team studied the PDD that the GHG mitigation project holder sent to ICONTEC together with the spreadsheet containing the estimate of the

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emissions reduction for the crediting period to be evaluated and the spreadsheet with the investment analysis to demonstrate the additionality of the GHG mitigation project; and proceeds to carry out a risk analysis with the information received, covering the aspects in version 3.0 of BCR standard and the guidelines of the ISO 14064-3 and ISO 14064-2 standards. The result of the risk analysis is summarized in the following table:

No.	Risk that could lead to material errors, omissions or misstatements	Assessment of the risk		Response to the risk in the validation plan and/or sampling plan
		Risk Level	Justification	
1.	Differences between the technical characteristics described in the PDD and actual technical characteristics implemented in the solar power plant	Low	The GHG mitigation activity is already implemented; it is only missing the permission granted by CAMMESA to start the delivery of electricity generation to the Argentinean electrical interconnected grid.	A tour by the facilities of solar power plant was included in the audit plan.
2	In versión 2 of PDD is not clear if the electricity generation by the GHG mitigation project will be delivered to a identified consumer (Cementos Avellaneda) or Argentinean electrical interconnected grid.	Medium	The writing of PDD version 2 could confuse to the reader	A tour by the facility of electricity generation delivery point was included in the audit plan. Likewise, if the electricity generation will be delivered to the Argentinean electrical interconnected grid, the commercial frontier shall be identified in the unifilar diagram of SADI.
3.	It was not follow properly the provision of methodological tool on common practice for additionality assessment.	High	It was chosen San Luis province as geographical area for the analysis instead of Argentina	Discuss the SADI characteristics; maybe San Luis province has its transmission system.
4.	The data vintage used for the Argentinean electrical grid emission factor	Medium	It was used 2019 data vintage for Argentinean electrical grid emission factor calculation	Review together with the project holder the last information available in CAMMESA.

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No.	Risk that could lead to material errors, omissions or misstatements	Assessment of the risk		Response to the risk in the validation plan and/or sampling plan
		Risk Level	Justification	
	calculation is outdated			

The audit plan is included in Annex 2 on this report. Likewise, the type of the project allows to assess a 100% of the information related to baseline emissions; hence GHG emissions reduction.

2.4 Interviews

The following table outlines the persons having been directly in contact with ICONTEC within the validation process:

Table 2. Follow up interviews

Date	Interview Delegate	Role and Organization	Interview Topics
May 3 rd /2023	Emanuel Rodríguez	Head of engineering Secco	<ul style="list-style-type: none"> • Project description, • Tour by the ghg project facilities, • Baseline and monitoring methodology, • Monitoring plan, • Sustainable development, • Local stakeholder consultation, • Environmental impacts, and • Argentinean regulatory framework.
	Hernan Juri	Administration and Finance Manager Secco	
	Virginia Rivaioli	Communications Secco	
	José Blanco	Generation Assitant Manager Secco	
	Alejandra Camara	Consultant	
	Laura Garzon	Sustainable and Carbon Finance LLC	
	Leandro Falenzo	Plant Manager Cementos Avellaneda	<ul style="list-style-type: none"> • Local staholder Consultation • Social - economic aspects
	Ciro López	Quarry TPM Leader	

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Date	Interview Delegate	Role and Organization	Interview Topics	
	Natalia Soria	Cementos Avellaneda Mirasoles Employee		
May 4 th /2023	Emanuel Rodríguez	Head of engineering Secco	<ul style="list-style-type: none"> • Project description • Applicability conditions of the methodology • Project boundary • Description and explanations about quantification period (project start date) • Description and explanations about methodology, baseline and emission reductions calculations • Description and explanations about monitoring plan 	
	Hernan Juri	Administration and Finance Manager Secco		
	Pablo Giacosa	Works manager Secco		
	José Blanco	Generation Assitant Manager Secco		
	Georgina Balan	Director Secco		
	Alejandra Camara	Consultant		
	Laura Garzon	Sustainable and Carbon Finance LLC		
	Hernan Juri	Administration and Finance Manager Secco		Description and explanations about timing of the investment decision of the project activity and additionality analysis.
	Diego Tartufoli	Finance Professional Secco		
	Andrea Perucchi	Head of management Secco		
Alejandra Camara	Consultant			

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Date	Interview Delegate	Role and Organization	Interview Topics
	Roberto Beducci	Sustainable and Carbon Finance LLC	
	Laura Garzon		
May 5 th /2023	María Victoria Sosa	Regulatory affairs Secco	Description about regulatory framework applicable for the project activity.
	Hernan Juri	Administration and Finance Manager Secco	<ul style="list-style-type: none"> • Description about regulatory framework applicable for the project activity. • Carbon ownership and rights. • Risk management.
	Alejandra Taylor	SMA manager Secco	<ul style="list-style-type: none"> • Environmental aspects • Social aspects • Sustainable development goals
	Virginia Rivaioli	Communications Secco	
	Alejandra Camara	Consultant Sustainable and Carbon Finance LLC	<ul style="list-style-type: none"> • Description about regulatory framework applicable for the project activity. • Carbon ownership and rights. • Environmental aspects. • Social aspects. • Sustainable development goals.
	Roberto Beducci		
	Laura Garzon		
	Juan Ignacio Bussi	Compliance Officer	Local stakeholder consultation

2.5 Site inspections

An onsite visit was carried out by the lead auditor in May 3rd/2023. This visit included a tour by the facilities of Proyecto solar CASA La Calera en San Luis; as well as the visit to the delivery point of electrical energy generation by the project, so it was visit the electrical substation named Cementos Avellaneda wichs belongs to Argentinean electrical interconnected grid (SADI). The purpose of this visit was to resolve questions and issues identified during offsite review of documents and to gain additional information regarding the compliance of the project with the

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relevant criteria applicable for BCR Standard. The assessment team has carried out interviews between May 3th/2023 and May 5th/2023 with operational staff and project proponents to assess the information included in the project documentation.

2.6 Resolution of findings

Annex 1 of this report describes the results and responses given by the project holder to each of the requests for corrective actions, requests for clarification and requests for future actions, generated by the audit team during validation, as well as as the conclusion responses provided by the project holder to these inquiries.

Those findings detected by ICONTEC (4 CAR and 2 CL) were presented to the person in charge of the project and were resolved through communications or meetings between the two parties. ICONTEC satisfactorily closes a finding only if the person responsible or holder of the GHG mitigation initiative modifies or rectifies the PDD, or provides additional information or evidence that the responses comply with the identified finding.

2.6.1 Forward action request

There are no forward action requests raised during this validation process.

3. VALIDATION FINDINGS

3.1 GHG Mitigation Project Details

ICONTEC had the opportunity to validate by on-site inspection, interviews and documental review the following description:

Title of project activity:	Proyecto solar CASA La Calera en San Luis
Project Holder:	Industrias Juan F. Secco S. A. Juan Pablo II 5665, Rosario, Santa Fe, Argentina
GHG Mitigation Project Start Date:	It is expected that Proyecto solar CASA La Calera en San Luis will start commercial operations on July 1st/2023.
Project's crediting period:	7 years, renewable.
Project Scale:	Since the installed capacity of the GHG mitigation project is higher than 15 MW (see section 1.5 in this report); then the project is calified as a large scale project in accordance with the provisions of section 10.3 of BCR Standard.

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Estimated amount of GHG emission reductions over the chosen crediting period : 158.463 tonnes CO₂e

Location of the grouped project: The project activity is located at La Calera town, close to Cementos Avellaneda facility in the province of San Luis, Argentina.

Audit team has checked the location of project activity instance described in the PDD version 4 during physical site visit and by documental review (Google Earth).

Methodologies : ACM0002, Approved Consolidated baseline methodology for grid-connected electricity generation from renewable sources, version 20.0/UN1/.

This methodology is used in combination with the “Methodological Tool to calculate the emission factor for an electricity system” version 07.0 /UN2/, the “Methodological Tool for the demonstration and assessment of additionality” version 07.0. /UN3//UN4//UN6/; and “Methodological tool for Baseline, project and/or leakage emissions from electricity consumption and monitoring of electricity generation” version 03.0 /UN7/; “Methodological tool on investment analysis, version 10.0 /UN4/; “Methodological tool on common practice, version 03.1 /UN6/.

Project scope, type, technologies and measures implemented, and eligibility of the project

The Project consists of a solar power plant close to Cementos Avellaneda facility in La calera town, in the province of San Luis, Argentina. The project activity comprises 20 MW (AC) of installed capacity and 55 GWh per year of electrical energy production /4/ Proyecto solar CASA La Calera en San Luis will be connected to Argentinean Interconnected electric system (SADI) /8/ by a 6,6 kV transmission line to Cementos Avellaneda electrical substation 6,6/13,2 kV transformer Station /4//5/

It is worth to mention that the implementation of this solar power plant is made inside the regulatory framework stated in Law 27191 /6/, Chapter IV article 8th which states: *“It is established that all users of electrical energy in the Argentine Republic must contribute to the fulfillment of the objectives established in Law 26,190, as amended hereby, and in Chapter II of this law, in the manner provided in this Chapter.*

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For such purposes, each obligated subject must achieve the minimum incorporation of eight percent (8%) of the total own consumption of electrical energy, with energy from renewable sources, as of December 31, 2017, and twenty percent (20%) as of December 31, 2025.”

Hence, Cementos Avellaneda, as user of electrical energy, has entered into a contract with Industrias Juan F. Secco to buy the electrical energy produced by Proyecto solar CASA La Calera en San Luis with the purpose to comply with the Argentinean law, however, Industrias Juan F. Secco will be in charge of the implementation, operation and maintenance of the solar power plant. Nevertheless, the electrical energy produced by Proyecto solar CASA La Calera en San Luis will be delivered to Argentinean Interconnected electric system (SADI) /8/.

The technical description given in the BCR PDD /1/ has been verified by the audit team during the site visit as well as review of supporting documents /4//5//7/.

The GHG project assessed can be classified as a BCR project in the Energy sector as Non-conventionl and Renewable energy Sources (“NCRE”) with solar energy, according to the Project types defined in BCR standard section 10.

Proyecto solar CASA La Calera en San Luis will be considered operational since July 1st/2023 and this date was defined as the starting date of the crediting period.

Conditions prior to project initiation

As the audit team could verified by means of the onsite visit and by documental review /4//7/, there was no power plant in the location described for this project activity.

Proyecto solar CASA La Calera en San Luis is a Greenfield activity and it involves the installation of 20 MW (AC) of solar based power plant for electricity generation. In the absence of the project activity, the equivalent power generation would have taken place from the fossil fuel in the electrical interconnected Argentinean grid (SADI). Prior to the implementation of this solar power plant, there were no project activities by the project holder at the location where the solar power plant is located. Same amount of electricity was generated from other grid connected power plants. This was confirmed based on the review of BCR PDD /1/ and technical documentation /4//5//7/.

Project compliance with applicable laws, statutes and other regulatory frameworks

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As described in Section 4 of the PDD version 4, the project activity is in compliance with applicable Argentinean laws. In order to validate this statement the lead auditor reviewed the Argentinean regulatory framework for energy issues and it was concluded that Proyecto solar CASA La Calera en San Luis by Industrias Juan F. Secco S.A. met this regulatory framework /6/9/→/11/.

In the framework of the certified management systems in Industrias Juan F. Secco S.A. (ISO 9001 and ISO 14001); the audit team by means of interviews could validate the project holder capacity to monitor if the regulatory framework applicable to GHG mitigation project has been outdated.

Ownership and Right of use

ICONTEC reviewed the contract signed between Cementos Avellaneda and Industrias Juan F. Secco /7/ clauses 7.2.3 and 14.3, in order to validate the unconditional, undisputed and unencumbered Industrias Juan F. Secco ability to claim the GHG emission reduction that Proyecto solar CASA La Calera en San Luis will generate or cause, since this document describe an enforceable and irrevocable agreement with the holder of the statutory, property or contractual right in the power plant (Industrias Juan F. Secco). ICONTEC considered these documental evidences as credible and reliable.

At the moment to write this validation report, project activity does not apply to other emission trading programs (CDM, Gold Standard, VCS, CERCARBONO, CSA GHG Clean projects registry and Climate Action Reserve) or other forms of environmental credit and it is not part of any compliance scheme (binding limits). The audit team reviewed the Web pages of each mentioned GHG programs in fact, this is the first time that this project applies to some greenhouse gas scheme.

Sustainable development contributions

Regarding to sustainable development contributions, the project holder argued in PDD version 4 as the project activity involves to deliver a clean energy (energy source: sun), that will help to avoid releasing GHG emissions to atmosphere and reduce dependence on fossil fuels. Likewise, the PP described as social contributions the generation of direct and indirect jobs. Since one of the objectives of this assessment process carried out by ICONTEC is to identify GHG assertion by this project activity, the assessment regarding the sustainable development contribution will be developed along this report.

Likewise, Industrias Juan F Secco S.A. has decided to include in the monitoring plan, the monitoring of the following indicators:

Percentage of women involved in the CASA Project; related to SDG 5.

Amount of net electricity generation supplied by the solar power plant to the grid in the year; related to SDG 7.

Develop 1 annual meeting with the Director of the zonal school and Cementos Avellaneda to join efforts and develop a common strategy according to the needs of the interested parties - Prioritize the hiring of local workers; related with SDG 8.

Carry out an annual exchange meeting with the community and its referents - Organize 2 visits per year to the generation plant, from the last academic years of high school for training and motivation of young people; related with SDG 10.

Maintain photovoltaic electrical generation following good practices in operation and maintenance; related with SDG 13.

Organize with the volunteer firefighters of La Calera at least one annual training in the place and generate an exchange of knowledge. Ensure that they know the facilities in order to promote an efficient response in case of emergency - Prepare a list of references in the community and neighboring organizations in order to evaluate the synergies with CASA Project and the agreements that could be generated; related with SDG 17.

The PDD has a detailed description of the monitoring management regarding the contribution to SDGs. The audit team deemed the project holder and Proyecto solar CASA La Calera en San Luis have an operational and management structure to be put in place to implement the monitoring plan in accordance with the regulatory framework of Argentina and the BCR requirements related to contributions to sustainable development goals, as it was validated by the lead auditor in the onsite inspection and interviews. In summary, the validation team is convinced that the monitoring plan reflects good monitoring practice appropriate to the project type and the project holder is able to implement the monitoring plan.

ICONTEC confirms that PDD version 4 depicts in an accurate and complete way the project description, and it complies with the relevant form and guidance². This PDD provides an understanding of the nature of the project. At the moment to write the first version of this validation report, the project holder has written all versions of PDD in Spanish.

² Latest version of Project Document Template BCR.

3.2 Safeguards

3.2.1 Mitigation of environmental and social impacts

As a responsibility outlined in the contract signed with Industrias Juan F. Secco /7/; Cementos Avellaneda carried out an environmental impact assessment (EIA) for Proyecto solar CASA La Calera en San Luis /12//13/ in order to identify potential negative environmental and socio-economic impacts along the different stages of the implementation of solar power plant (construction and operation), a detail of these impacts and their corrective action to mitigate them as described by the project holder in PDD version 4 in sections 8 and 9.

The following environmental topics were identified to be impacted by the solar power plant development at construction phase (already ended) and operational phase:

- Alteration of air quality due to the emission of particles.
- Alteration of air quality due to the emission of combustion gases.
- Soil contamination due to oil or fuel spills.
- Pollution by waste generation.
- Surface water pollution.
- Contamination of groundwater by erosion.
- Temporary increase in noise and dust level.

The EIA contracted by the Cementos Avellaneda was approved by the Argentinean authorities /14/. The audit team deemed the list provided by the project holder in Sections 8 and 9 of PD version 4 as complete and it is coherent with project activity nature. Regarding the action plans to mitigate such impacts are reasonable and all of the identified impacts have a monitoring plan in order to supervise continuously how the proposed action plans contribute to mitigate the identified impact.

3.2.2 Local stakeholder consultation

The validation team assessed the adequacy of the local stakeholder consultation as follows:

Identification of local stakeholders

The local stakeholders involved with the solar power plant have been appropriately identified. They are the population in La Calera town, in the province of San Luis, Argentina. Likewise is also identified as stakeholder the legal authorities at national and province level in Argentina.

Timing of stakeholder consultation process

In accordance with Argentinean regulatory framework in force, the calls to participate/opine regarding to the solar power plant were done by press announcements /15//16/ on August 2022. the local stakeholder with the intention of knowing and giving an opinion about the project should address to Environmental Monitoring and control program of he Secretary od State for the Environment of San Luis and enquire about file of the solar power plant.

The audit team reviewed the press announcement /15//16/ and also ask about if some face-to-face meeting was held with the local stakeholders and the interviwees mentioned the restrictions due to Covid 19 pandemic; the audit team validate this information by means of documental review /17/, hence this information provided by the interviwees was reliable and traceable.

Summary of comments provided

During the period of time when the file about the environment impact assessment of Proyecto solar CASA La Calera en San Luis was available to the local stakeholders no comments were received.

Mechanism for on-going communication with local stakeholders

The PP has established in its management system a procedure to handle petitions and complaints for the communities affected by the development of the solar power plant, hence the audit team can confirm that PP has established a continuous communication channel with the aim to response any input received by the local stakeholder at any time.

3.2.3 Public comments

During the public comment period no comments were submitted.

3.2.4 Specific safeguards for AFOLU projects

Not applicable for this type of GHG mitigation Project.

3.3 Application of Methodology

3.3.1 Title and reference

The approved UNFCCC baseline and monitoring methodology ACM0002 “Consolidated baseline methodology for grid-connected electricity generation from renewable sources” (version 20.0) /UN1/ has been applied by the GHG mitigation project.

In addition, the project activity also uses the following tools:

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- Guidelines for the reporting and validation of plant load factors, version 01.0 /UN5/
- Methodological Tool to calculate the emission factor for an electricity system, version 07.0 /UN2/
- Methodological Tool for the demonstration and assessment of additionality, version 07.0 /UN3/
- Methodological tool on investment analysis, version 11.0 /UN4/
- Methodological tool on common practice, version 03.1 /UN6/
- Methodological tool for Baseline, project and/or leakage emissions from electricity consumption and monitoring of electricity generation, version 03.0 /UN7/.

3.3.2 Applicability

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

Table 3. Applied methodology applicability conditions analysis

Applicability condition	Means of validation
<p>This methodology is applicable to grid-connected renewable power generation project activities that:</p> <ul style="list-style-type: none"> (a) Install a Greenfield power plant; (b) Involve a capacity addition to (an) existing plant(s); (c) Involve a retrofit of (an) existing operating plants/units; (d) Involve a rehabilitation of (an) existing plant(s)/unit(s); or (e) Involve a replacement of (an) existing plant(s)/unit(s). 	<p>Proyecto solar CASA La Calera en San Luis consists of installation of new solar power plant at a site where no renewable power plant was operated prior to the implementation of the project activity (Greenfield plant). ICONTEC verified this statement by means of:</p> <ul style="list-style-type: none"> • Onsite visit • Documental review: <ul style="list-style-type: none"> - PVSyst Simulation report, grid connected system. Project: 50641 Cementos Avellaneda S.A. La Calera San Luis, Argentina /4/
<p>The methodology is applicable under the following conditions:</p> <ul style="list-style-type: none"> (a) The project activity may include renewable energy power plant/unit of one of the following types: hydro power plant/unit with or without reservoir, wind power plant/unit, geothermal power plant/unit, solar power plant/unit, wave power plant/unit or tidal power plant/unit; 	<p>Proyecto solar CASA La Calera en San Luis consist of installation of new solar power plant. ICONTEC verified this statement by means of:</p> <ul style="list-style-type: none"> • Onsite visit • Documental review:

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Applicability condition	Means of validation
<p>b) In the case of capacity additions, retrofits, rehabilitations or replacements (except for wind, solar, wave or tidal power capacity addition projects the existing plant/unit started commercial operation prior to the start of a minimum historical reference period of five years, used for the calculation of baseline emissions and defined in the baseline emission section, and no capacity expansion, retrofit, or rehabilitation of the plant/unit has been undertaken between the start of this minimum historical reference period and the implementation of the project activity.</p>	<p>- PVsyst Simulation report, grid connected system. Project: 50641 Cementos Avellaneda S.A. La Calera San Luis, Argentina /4/</p>
<p>In case of hydro power plants one of the following conditions must apply:</p> <p>(a) The project activity is implemented in existing single or multiple reservoirs, with no change in the volume of any of the reservoirs; or</p> <p>(b) The project activity is implemented in existing single or multiple reservoirs, where the volume of the reservoir(s) is increased and the power density calculated using equation (3), is greater than 4 W/m²; or</p> <p>(c) The project activity results in new single or multiple reservoirs and the power density, calculated using equation (3), is greater than 4 W/m²; or</p> <p>(d) The project activity is an integrated hydro power project involving multiple reservoirs, where the power density for any of the reservoirs, calculated using equation (3), is lower than or equal to 4 W/m², all of the following conditions shall apply:</p> <p>(i) The power density calculated using the total installed capacity of the integrated project, as per equation (4), is greater than 4 W/m²;</p> <p>(ii) Water flow between reservoirs is not used by any other hydropower unit which is not a part of the project activity;</p>	<p>As it was stated above, Proyecto solar CASA La Calera en San Luis consist of installation of new solar power plant. Hence, this condition does not apply.</p>

Applicability condition	Means of validation
<p>In the case of integrated hydro power projects, project proponent shall:</p> <p>(a) Demonstrate that water flow from upstream power plants/units spill directly to the downstream reservoir and that collectively constitute to the generation capacity of the integrated hydro power project; or</p> <p>(b) Provide an analysis of the water balance covering the water fed to power units, with all possible combinations of reservoirs and without the construction of reservoirs. The purpose of water balance is to demonstrate the requirement of specific combination of reservoirs constructed under CDM project activity for the optimization of power output. This demonstration has to be carried out in the specific scenario of water availability in different seasons to optimize the water flow at the inlet of power units. Therefore this water balance will take into account seasonal flows from river, tributaries (if any), and rainfall for minimum five years prior to implementation of CDM project activity.</p>	<p>As it was stated above, Proyecto solar CASA La Calera en San Luis consist of installation of new solar power plant. Hence, this condition does not apply.</p>
<p>The methodology is not applicable to:</p> <ul style="list-style-type: none"> • Project activities that involve switching from fossil fuels to renewable energy sources at the site of the project activity, since in this case the baseline may be the continued use of fossil fuels at the site; • Biomass fired power plants. 	<p>As it was stated above, Proyecto solar CASA La Calera en San Luis consist of installation of new solar power plant. Hence, this condition does not apply.</p>
<p>In the case of retrofits, rehabilitations, replacements, or capacity additions, this methodology is only applicable if the most plausible baseline scenario, as a result of the identification of baseline scenario, is “the continuation of the current situation, that is to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance”.</p>	<p>As it was stated above, Proyecto solar CASA La Calera en San Luis consist of installation of new solar power plant. Hence, this condition does not apply.</p>

The applicability conditions of this project activity regarding to tool to calculate the emission factor for an electricity system /UN2/ will be discussed on Sections 3.3.4, 3.3.6 and 3.3.8 on this report. As well as for tool for the demonstration and assessment of additionality /UN3//UN4//UN6/, the applicability conditions will be discussed on Section 3.3.5 on this report.

In summary, ICONTEC assessed the proposed project activity and agrees with the application of the approved consolidated methodology ACM0002 Grid-connected electricity generation from renewable sources, version 20.0, since project holder correctly addressed the determination of the applicability conditions used to determine the emissions reduction. Hence it is ICONTEC’s opinion that the proposed project activity is in compliance with the rules and requirements set out for the CDM and BCR GHG mitigation projects.

3.3.3 GHG mitigation Project boundary

In accordance with paragraph 20 of the methodology ACM0002, version 20.0/UN1/, the project boundary “includes the project power plant/unit and all power plants/units connected physically to the electricity system that the VCS project power plant is connected to.” This statement was verified by ICONTEC by means of onsite inspection and documental review of technical description /4//5/ for Proyecto solar CASA La Calera en San Luis and the Argentinean Interconnected electrical grid map³ and the Connection concept issued by CAMMESA /8/ regarding to the connection of this solar power plant to Argentinean Interconnected Electrical System (SADI).

The sources of greenhouse gas identified in the BCR PDD are deemed to be appropriate.

Table 4. Emission sources included from the grouped project boundary

	GHG involved	Means of Validation
Baseline emissions	CO ₂	Emissions from the generation of electrical power by fossil power plants in Argentinean National Power Grid. (Section 3.1 and 3.3.2 in this report)
Project emissions	-	Considered to be neglected as per section 5.4.1 of ACM0002 (version 20.0) /UN1/
Leakage	-	Considered to be neglected as per section 5.6 of ACM0002 (version 20.0) /UN1/

In accordance with the project activity nature and the applied methodology /UN1/, the emission sources are properly described in the PDD version 4. The greenhouse gas emissions occurring

³ https://cammesaweb.cammesa.com/esquemas-unifilares/?doing_wp_cron=1685079140.0041890144348144531250#

within the project boundary as a result of its implementation are all addressed by the applied methodologies, therefore there are not greenhouse gas emissions within the project boundary caused by the implementation of the project activity which contribute to more than 1% of the expected annual emission reductions and which are not addressed in by the applied methodology. This was verified by ICONTEC by means of the documental review related to the project's works and their nature /4//5//8/.

3.3.4 Baseline scenario

The project activity comprises the installation of a new grid-connected renewable power plant. Consequently, according to the applied methodology /UN1/, the baseline scenario is: *“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, as reflected in the combined margin (CM) calculations described in the Tool to calculate the emission factor for an electricity system”*./UN2/

The PDD version 4 correctly identifies the baseline scenario as presented above. The relevant grid is the Argentinean National Interconnected Electricity System² /4//5//8/.

As methodology ACM0002 (version 20.0) prescribes the baseline scenario and no further analysis is required, there is no need to take steps to identify the baseline scenarios.

3.3.5 Additionality

To demonstrate the additionality of the Project, the PDD has correctly applied the “Tool for the demonstration and assessment of additionality” (Version 07.0.0) /UN3/. PP used an investment analysis to determine that the project is additional. No Barrier Analysis was presented. The details of ICONTEC’s assessment on the project additionality are described below:

Step 0: Demonstration whether the proposed project activity is the first-of-its-kind

Since in the “Tool for the demonstration and assessment of additionality” /UN3/ clause 14 states that this step is optional, and the project holder did not used this analysis, hence it is considered that the proposed project activity is not the first-of-its-kind.

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

In the “Tool for the demonstration and assessment of additionality /UN3/” clause 8 states that for project activities that apply this tool in context of approved consolidated methodology ACM0002, only need to identify that there is at least one credible and feasible alternative that would be more attractive than the proposed project activity; however the project holder has presented in the PDD version 4 two alternatives:

Table 5. Analysis of Alternatives

Alternatives	Assessment	Means of Validation of Alternatives	Conclusion
1. Undertake Proyecto solar CASA La Calera en San Luis as a power generation project without being registered as a BCR (CDM) project activity.	In accordance with the tool for demonstration and assessment of additionality /UN3/ clause 20 (a)	All the alternatives comply with all applicable and enforced legislation from Argentina. Besides that, ICONTEC could confirmed by means of the lead auditor's knowledge of the sector and documental review of the regulatory framework from Argentinean Republic ⁴ that alternatives are credible and realistic in the National scenario.	<ul style="list-style-type: none"> • The Identification of alternatives is realistic and credible. • The alternatives are consistent with mandatory laws and regulations.
2. Not to undertake the proposed project activity.	It corresponds to current situation, that is, the electricity will continue to be generated by the existing generation mix operating in the grid and by the addition of new generating sources. Besides, this alternative is the baseline prescribed in the applied methodology /UN1/		

Step 2: Investment Analysis

The additionality was demonstrated according to “Tool for the demonstration and assessment of additionality” /UN3/ and the Methodological tool on the assessment of investment analysis /UN4/.

For this project activity, benchmark analysis (Option III) was selected for the investment analysis. In accordance with the type of this project activity it is expected that incomes other than BCR (CDM) inputs will be generated, regarding energy sales to the market, so ICONTEC agreed that simple cost analysis is not suitable. On the other hand, taking into account that Industrias Juan F. Secco S.A. has no intention in building a power station, different to solar power plant in the area of the project activity as demonstrated in the PDD and related documentation /4//5//7/, an investment

⁴ <https://www.argentina.gob.ar/enre/normativa>
<https://www.argentina.gob.ar/energia/energia-electrica/renovables/leyes-version-en-ingles>

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comparison analysis is not appropriate and a benchmark analysis was used to determine the profitability of the investment.

The benchmark was chosen in accordance with the Appendix in the Methodological tool on the assessment of investment analysis /UN4/ which provides default values for the expected return on equity for different project activities, the relevant benchmark for energy projects in Argentina (Group 1 as given in the guidelines /UN4/) is 18,77%. It is worth to mention that project holder used the version 11.0 of the “Methodological tool on investment analysis/UN4/”, despite there is an updated version of that methodological tool; however, the audit team deemed this as conservative since: the time of the investment decision was on December 2021, when version 11.0 of the methodological tool /UN4/ was in force. On the other hand the benchmark in version 11.0 of the methodological tool /UN4/ is lower than the benchmark presented in versión 12.0 of “Methodological tool on investment analysis” and the audit team deemed this approach as conservative in additionality issues.

The inflation in Argentina has a very particular behavior during last years, as the audit team validated by means of documental review⁵; hence the impact of the inflation in the cashflow used for investment analysis could lead to missinterpretation of the outcomes. So, the audit team considered appropriate the decision of project holder to performed the cashflow in American dollars as the exchange rate to Argentinean peso could reflect the inflation rates.

The audit team reviewed the file “Solar CASA - Adicionalidad.xlsx”/3/ and confirmed that it was included the relevant cost and revenues. The period of assessment was 21 years, the operation stage will take 20 years and the construction stage (12 months) /18/, the audit team deemed appropriate to undertake the investment analysis for 21 years. The depreciation for this GHG mitigation project has been done in accordance with Argentinean regulatory framework (file: Solar CASA - Adicionalidad.xlsx; sheet “Inversion”) and they are aligned with Methodological Tool on the assessment of investment analysis /UN4/; and sheet: “FCF” row 49).

In accordance with the contract signed between Cementos Avellaneda and Juan F. Secco S.A. /7/ clause 12.1, there is no fair value at the end of the assessment period (year 21).

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

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The input values used in all investment analysis are those final values taking into account that most of the expenses are already executed.

In addition, the project holder PP has assumed the investment of this GHG mitigation project with its own equity.

The following tables show how the audit team assessed the main parameters used in the cash flow:

Table 6. Input values used in the cash flow for Proyecto solar CASA La Calera en San Luis

Parameter	Value	Source	Validation Analysis
Installed capacity	20 MW (AC)	- Contract for the production and supply of renewable electricity in La Calera, San Luis signed between Industrias Juan F. Secco and Cementos Avellaneda /7/ Annex I Clause III. - PVsyst Simulation report, grid connected system. Project: 50641 Cementos Avellaneda S.A. La Calera San Luis, Argentina /4/	In assessing whether the energy generation has correctly been defined, ICONTEC used the onsite inspection and documental review of the sources mentioned in the previous column. In accordance with the clause 3 (a) of the mentioned Guidelines /UN5/, ICONTEC deemed this value as credible and reliable.
Net generation	Sheet: "Producción" File: "Solar CASA - Adicionalidad.xlsx"		
Energy tariff	USD\$ 67,95/MWh	Contract for the production and supply of renewable electricity in La Calera, San Luis signed between Industrias Juan F. Secco and Cementos Avellaneda /7/ Clause 14.2.1	In order to assess the reliability of this values, ICONTEC reviewed the mentioned contract for the supply of renewable electricity/7, which states the price described in the previous column.
Capital Expenditures	USD \$ 22.139.178	GHG mitigation project budget and its evidences of every purchase done at the moment of the	ICONTEC reviewed the information source used by Industrias Juan F. Secco S.A. in order to verify the investment costs reported in the cash flow file /3/. The information source includes capex values which includes: studies,

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VALIDATION REPORT FOR GHG MITIGATION PROJECT



Parameter	Value	Source	Validation Analysis
		interviews performed on May 4 th 2023.	transmission line, equipments, EPC, and others. The price per kW installed is USD\$ 1.106,96. This unit cost was cross checked by ICONTEC with the one reported in “Renewable power generation costs in 2021”/19/, issued by IRENA, page 86, it is mentioned: “During 2021, the 5 th and 95 th percentile range for all projects fell within a range of USD \$571/kW to USD \$1.982/kW”, hence the Investment cost reported for Proyecto solar CASA La Calera en San Luis is credible in accordance with the range described by the mentioned IRENA report, therefore ICONTEC deems that values of investment in the power electricity plant are suitable and reliable.
O&M Expenses and Overhead expenses	See spreadsheet used for investment analysis /3/ Sheet “O&M” and Annual report. Labor cost USD\$58.212 per year Overhead expenses: 11,54%	– Product due diligence for Huawei Smart PV solution in Chilean market /21/ table 3.10. – Monthly cost by employee/22/ – Financial statements for Industrias Juan F.Secco S.A. /20/	In order to carry out the crosscheck, ICONTEC deems that as a common practice, O&M costs are usually given in terms of energy generation, so this ratio is: $\frac{\text{O\&M Costs}}{\text{Energy generation}} == \text{USD\$0.0085 per kWh}$ ICONTEC could verify that the O&M costs reported by project holder (USD\$0.0085 per kWh) are inside the range reported in “Renewable power generation costs in 2021”/19/, issued by IRENA, page 95 ICONTEC deems the value used as conservative, credible and reliable.
Gross income tax from Province od San luis	2,8%	In accordance with Argentinean regulatory framework/23//24//25/	
Tax law 25.143 for credits	0,4%		
Tax law 25.143 for debits	0,4%		
Income tax	35%		

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ICONTEC could confirm that the assumptions used are appropriate and the financial calculations made in the file “Solar CASA - Adicionalidad.xlsx” are correct.

With a benchmark of 18,77%, the financial analysis for this project activity states that the IRR of the project without BCR revenues is 8,48% for Proyecto solar CASA La Calera en San Luis.

Regarding to sensitivity analysis, the PP has correctly chosen the Investment cost, the energy generation and the O&M costs as variables for this purpose, with a variation of $\pm 10\%$. The outcome of this sensitivity analysis is described in pages 28 and 29 of PDD version 4, as well as in the spreadsheets used for financial analysis /2/ (Sheets: ‘Sens ‘X’).

As can be seen, in all of scenarios the project IRR is less than benchmark IRR. Therefore, in the view of ICONTEC, the sensitivity analysis demonstrates that the project is highly probable not to be financially attractive without the BCR incomes.

Having regard to the assessment of conformity of additionality demonstration and benchmark selection to version 11.0 of the guidance issued by CDM EB on the assessment of investment analysis /UN4/, plausibility and appropriateness of parameters used and correctness of financial calculations, Validation Team concludes that the project scenario is not economically feasible without benefits from verified carbon units sales.

Step 3: Barrier Analysis

No Barrier analysis is presented in the PDD version 4.

Step 4: Common Practice Analysis

Step 4 of the additionality analysis in the PDD version 4 has been prepared according to section 4.5.1 of the latest version of the Tool for demonstration and assessment of additionality /UN3/, which applies the “Methodological tool on Common Practice” /UN6/.

The geographical scope for the common practice analysis is Argentina. Considering that the GHG mitigation project (Proyecto solar CASA La Calera en San Luis) is connected to the Argentinean Electric Interconnected System/4//5//8/, ICONTEC confirmed that it is justified to select Argentina as the geographical scope in accordance with the Guidance /UN6/.

Proyecto solar CASA La Calera en San Luis has an installed capacity of 20 MW (AC). The PDD version 4 correctly defines the applicable range as 10 MW – 30 MW (+/-50% of the installed capacity of the PV farm).

The additionality tool defines output as “good/services produced by the project activity including, among other things, heat steam, electricity, methane, and biogas unless otherwise specified in the applied methodology.” Therefore, in the case of this project, the output considered is the electricity generated by grid-connected power plants.

Likewise the common practice tool /UN6/ defines measure, in the project activity context, as the switch of technology with or without change of energy source including energy efficiency improvement as well as use of renewable energies (example: energy efficiency improvements, power generation based on renewable energy)

According to the PDD version 4, N_{all} is 8 (The project holder named this parameter as N_{solar} in PDD). ICONTEC verified this information by means of accessing the CAMMESA's⁶ service information, and also the Website of CDM, Gold Standard, VCS, CERCARBONO, CSA GHG Clean projects registry, and Climate Action Reserve; in order to verify if the registered project activities, project activities submitted for registration and project activities undergoing validation were excluded. ICONTEC verified that the information provided by the PP regarding $N_{all} = N_{solar}$ is traceable, reliable and credible.

Then project holder identified the power plants which deliver the same output and differ by at least one of the issues listed in the methodological tool /UN6/ paragraph 12. The audit team carried out documental review in Camessa Website⁶ in order to validate the date on which the projects listed in N_{all} estimation started commercial operation, the energy source/fuel, the size of the power plants and the investment climate on the date of investment decision. Therefore, ICONTEC could confirmed the estimation of $N_{diff} = 7$ presented by the project holder in the PDD version 4 is traceable, reliable and credible, and it is aligned with the methodological tool's requirements /UN6/.

Hence: $N_{all} - N_{diff} = 8 - 7 = 1$; and

$$F = 1 - \frac{N_{diff}}{N_{all}} = 1 - \frac{7}{8} = 0.125$$

Consequently, Proyecto solar CASA La Calera en San Luis is not a common practice in Argentina since F is lower than 0.2 and $N_{all} - N_{diff}$ is lower than 3.

Additionality Conclusion

⁶ <https://cammesaweb.cammesa.com/informe-anual/#hrep>

In conclusion, it was verified that the project activity, Proyecto solar CASA La Calera en San Luis 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.

3.3.6 Quantification ex ante of GHG Emission Reductions and Removals

The steps taken, the equations and parameters applied in the BCR PDD version 4 to calculate baseline emissions, project emissions, leakage and emission reductions comply with the requirements of the selected methodology /UN1/ including applicable tool(s)/UN2/.

Baseline emissions need to be calculated in accordance with the Equation (11) of the methodology ACM002, version 20.0 /UN1/.

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

Where:

BE_y = Baseline emissions in year y (t_{CO_2}/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 BCR (CDM) project activity in year y (MWh/yr)

$EF_{grid,CM,y}$ = Combined margin CO_2 emission factor for grid connected power generation in year y calculated using the latest version of the “Tool to calculate the emission factor for an electricity system” (t_{CO_2}/MWh) /UN2/.

In the spreadsheet used for emissions reduction calculation (Secco calculo de emisiones 16May23.xlsx) Sheet: “Factor de Emisión” /2/ and in the PDD version 03, PP took $EG_{PJ,y}$ as the expected net electricity generation supplied by the GHG mitigation program/4/.

The baseline emission factor ($EF_{grid,CM,y}$) was calculated by the Argentinean Secretariat for energy issues using the Tool to calculate the emission factor for an electricity system /UN2/ as a combined margin (CM), consisting of the combination of operating margin (OM) and build margin (BM) factors, according to the following steps:

Step 1. Identify the relevant electricity systems:

The Argentinean Secretariat for energy issues⁷ used the Argentinean transmission system as the project electricity system, which is operated and maintained by CAMMESA. ICONTEC agreed with this identification done by the PP.

⁷ <https://datos.gob.ar/el/dataset/energia-calculo-factor-emision-co2-red-argentina-energia-electrica>

Step 2. Choose whether to include off-grid power plants in the project electricity system (optional).

In step 2, the Argentinean Secretariat for energy issues chose option I, only grid power plants are included in the calculation.

Step 3. Select a method to determine the operating margin (OM).

In the step 3, simple OM was chosen by the Argentinean Secretariat for energy issues to calculate the operating margin emission factor, using ex-ante data vintage taking into account that in the Argentina electric system, the low-cost/must-run resources constitute less than 50% of total grid generation, hence the Simple OM method can be used as it was verified by ICONTEC by means of reviewing the generation average of the five most recent years⁸. This reviewing allowed to the audit team to verify that low-cost/must-run resources constitute more than 50 per cent of total grid generation. ICONTEC validated this choice.

Step 4. Calculate the operating margin emission factor according to the selected method.

Calculations of OM emission factor (step 4) were made as illustrated in the PDD version 4, which is according to the tool specifications/UN2/. Since it is available the total amount of fuel and electricity generated in the system; it was chosen option B to calculate the simple operating margin CO₂ emission factor in year y.

Regarding to the values used for NCV_i and $EF_{CO_2,i,y}$, the audit team verified the truthfulness of the sources used by the Argentinean Secretariat of Energy issues in the calculation of OM emission factor⁸ (see Sheet: "Datos factores de emisión"), and it was concluded the information used is traceable, verifiable and credible.

After the comparison, ICONTEC deemed reliable and appropriate the values used. The OM calculated was 0.4439 tCO₂/MWh, hence ICONTEC deemed the obtained value as reliable and credible.

Step 5. Calculate the build margin (BM) emission factor.

In order to calculate the BM emission factor (step 5) option 1 (ex-ante) for the first crediting period was adopted, the build margin emission factor is calculated based on the most recent information available (2021) on units already built for sample group m at the time of BCR PDD submission to the DOE for validation. The Argentinean Secretariat of Energy issues took the information from the latest official CAMMESA statistics⁹.

⁸

http://www.energia.gob.ar/contenidos/archivos/Reorganizacion/informacion_del_mercado/publicaciones/mercado_electrico/factor_emision/factor_de_emision_cm_2021.xlsx Sheet: "3 Selección Metodo OM"

⁹

http://www.energia.gob.ar/contenidos/archivos/Reorganizacion/informacion_del_mercado/publicaciones/mercado_electrico/factor_emision/factor_de_emision_cm_2021.xlsx Sheet: "5 Margen de Construcción 2021"

ICONTEC agreed with the data collection used for the PP to calculate the BM, hence the BM is confirmed as reliable and credible. The BM calculated was 0.3277 tCO₂/MWh, hence ICONTEC deemed the obtained value as reliable and credible.

Step 6. Calculate the combined margin (CM) emission factor.

Finally, combined margin was correctly calculated by weighted average method, as it is explained below:

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

Where:

$$EF_{\text{grid,OM,y}} = 0.4439 \text{ tCO}_2/\text{MWh}$$

$$EF_{\text{grid,BM,y}} = 0.3277 \text{ tCO}_2/\text{MWh}$$

$$W_{\text{OM}} = 0.75$$

$$W_{\text{BM}} = 0.25$$

Obtaining a result for the $EF_{\text{grid,CM,y}} = 0.4149 \text{ tCO}_2/\text{MWh}$

In conclusion, ICONTEC confirmed that the values included in the the spreadsheet used for emission reductions calculation /2/ (Sheet “SECCO” between rows 18 and 25) has been justified adequately.

Hence ICONTEC deemed the obtained value by the PP as reliable.

According to the previous description ICONTEC found that the project holder has correctly applied the selected methodology /UN1/ with respect to the Baseline determination. All estimates of the baseline emissions can be replicated using the data and parameter values provided in the PDD version 4.

Regarding to project emissions, the applied methodology /UN1/ consider the project emissions due to the operation of a solar power plant as to be neglected.

Therefore, for this GHG mitigation project, the project emissions are:

$$PE_y = 0 \text{ tCO}_2\text{e}$$

Regarding to the leakage, the applied methodology /UN1/ consider the leakage due to the operation of a solar power plant as to be neglected.

Therefore, for this grouped project, the leakage are:

$$L_y = 0 \text{ tCO}_2\text{e}$$

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Emission reductions are calculated in accordance with: equation (17) of the methodology ACM002, version 20.0/UN1/. Taking into the account the considerations explained above, the emissions reduction for this GHG mitigation project is:

$$ER_y = BE_y$$

Where:

ER_y = Emission reductions in year y (tCO₂e/yr)

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

In conclusion, ICONTEC confirmed that the value included in in the the spreadsheet used for emission reductions calculation /2/ (Sheet “SECCO” between rows 32 and 39) has been justified adequately.

The audit team confirms that the applied methodology /UN1/and the referenced tools /UN2/ have been applied correctly to calculate baseline emissions and net GHG emission reductions for the project crediting period.

3.3.7 Methodology deviations

The GHG mitigation pro’s implementation is fully in accordance with ACM0002 “Consolidated baseline methodology for grid-connected electricity generation from renewable sources” version 20.0 /UN1/ and hence deviation of methodology is not applicable.

3.3.8 Monitoring plan

The audit team hereby confirms that the monitoring plan complies with the requirements of the methodology ACM002, version 20.0/UN1/ and the applicable tools/UN2//UN7/.

The steps taken to assess whether the monitoring arrangements described in the monitoring plan are feasible within the project design are described below:

Data and Parameters Available at Validation:

In PDD version 4, the PP has fixed for the first crediting period

The combined margin CO₂ emission factor for Argentinean electrical grid, its value: 0.4149 tCO₂/MWh as it was described in section 3.3.6 on this report.

Data and Parameters Monitored:

$EG_{P,y}$ = In accordance with the monitoring plan, the main parameter that will be monitored is the quantity of net electricity generation supplied by Proyecto solar CASA La Calera en San Luis in year y, measured continuously by the power plant’s meters installed in accordance with the

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Argentinean Regulatory Framework¹⁰. The measurement will be continuously done and recorded monthly.

Management system and quality assurance

The monitoring arrangement for the project has been described in the BCR PDD:

- The accuracy of electric meters (0.2S) and record frequency have been identified appropriately.
- The operation and management structure of the monitoring have been described appropriately.
- The electric meters will be calibrated according to the Argentinean regulation¹¹.

The PDD has a detailed description of the monitoring management system/26/. The audit team deemed the project holder and the GHG mitigation project have an operational and management structure to be put in place to implement the monitoring plan in accordance with the regulatory framework of Argentina and the BCR requirements, as it was verified by the lead auditor in the onsite inspection. In summary, the validation team is convinced that the monitoring plan reflects good monitoring practice appropriate to the project type and the project holder is able to implement the monitoring plan.

Likewise, Industrias Juan F Secco S.A. has decided to include in the monitoring plan, the monitoring of the following indicators:

- Percentage of women involved in the CASA Project; related to SDG 5.
- Amount of net electricity generation supplied by the solar power plant to the grid in the year; related to SDG 7.
- Develop 1 annual meeting with the Director of the zonal school and Cementos Avellaneda to join efforts and develop a common strategy according to the needs of the interested parties - Prioritize the hiring of local workers; related with SDG 8.
- Carry out an annual exchange meeting with the community and its referents - Organize 2 visits per year to the generation plant, from the last academic years of high school for training and motivation of young people; related with SDG 10.
- Maintain photovoltaic electrical generation following good practices in operation and maintenance; related with SDG 13.
- Organize with the volunteer firefighters of La Calera at least one annual training in the place and generate an exchange of knowledge. Ensure that they know the facilities in order to promote an efficient response in case of emergency - Prepare a list of references in the community and neighboring organizations in order to evaluate the synergies with CASA Project and the agreements that could be generated; related with SDG 17.

¹⁰ <https://www.argentina.gob.ar/enre/normativa>
<https://www.argentina.gob.ar/energia/energia-electrica/renovables/leyes-version-en-ingles>
<http://portalweb.cammesa.com/Pages/BackupBotoneraAneriorIzquierda/Normativa/procedimientos.aspx>

¹¹

The PDD has a detailed description of the monitoring management regarding the contribution to SDGs. The audit team deemed the project holder and Proyecto solar CASA La Calera en San Luis have an operational and management structure to be put in place to implement the monitoring plan in accordance with the regulatory framework of Argentina and the BCR requirements related to contributions to sustainable development goals, as it was validated by the lead auditor in the onsite inspection and interviews. In summary, the validation team is convinced that the monitoring plan reflects good monitoring practice appropriate to the project type and the project holder is able to implement the monitoring plan.

3.4 Non-permanence risk analysis.

Not applicable for this type of project.

4. VALIDATION CONCLUSION AND OPINION

ICONTEC performed the validation of Proyecto solar CASA La Calera en San Luis, in Argentina, the validation was performed on the basis of BCR Standard, version 3.0 and all relevant BCR requirements, as well as criteria given to provide for consistent project operations, monitoring and reporting.

The review of the Project Description and the subsequent follow up interviews has provided ICONTEC sufficient evidence to determine the fulfilment of the stated criteria.

The GHG mitigation project is being proposed by *Industrias Juan F. Secco S.A.* and correctly applies the methodology: ACM0002: Consolidated baseline methodology for grid-connected electricity generation from renewable sources, Version 20.0.

The project consist of the installation, commissioning and operation of new large scale solar power plant located close to Cementos Avellaneda facility, in La Calera town, in the province of San Luis, Argentina. The total installed capacity of the project activity is 20 MW (AC) and a projected annual average generation of 55 Gigawatt hour (GWh). The purpose of the solar power plant is the energy generation using renewable energy sources to supply the Argentinean National Interconnected Electric System (SADI by its acronym in Spanish). Proyecto solar CASA La Calera en San Luis uses the methodology ACM0002, version 20.0. The average expected impact on emission reductions from the project is 22.638 tCO₂e average per year. It is demonstrated that the GHG mitigation project is not a likely baseline scenario. Emission reductions attributable to the GHG mitigation project are hence additional to any that would occur in the absence of the GHG mitigation project.

The total emission reductions from the project are estimated to be 158.463 tCO₂e over the selected 7 years crediting period. The emission reduction forecast has been checked and it is

VALIDATION REPORT FOR GHG MITIGATION PROJECT



deemed likely that the stated amount is achieved because the underlying assumptions do not change.

In summary, it is ICONTEC's opinion that the Proyecto solar CASA La Calera en San Luis in Argentina, as described in the PDD version 4 meets all relevant BCR requirements and correctly applies the baseline and monitoring methodology ACM0002: Consolidated baseline methodology for grid-connected electricity generation from renewable sources, Version 20.0. ICONTEC thus requests the registration of the project as a BCR GHG mitigation project.

ANNEX 1: CLARIFICATION REQUESTS, CORRECTIVE ACTION REQUESTS AND FORWARD ACTION REQUESTS

The following tables outline how ICONTEC has treated the Corrective Action Request - CAR, Clarification Request - CL or Forward Action Request -FAR describing how the project holder has modified the design of the GHG mitigation initiative, corrected the PDD or provided additional information or evidence that satisfied ICONTEC's requests.

These tables also explains the issues related to the findings, the responses provided by the holder of the GHG mitigation initiative, the means of validation of such responses and their documentary references, as well as the changes that resulted in the PDD or its attached documents:

CL ID	1	Requirement	Instructions for completing PDD form	Date: 05-05-2023
Description of CL.				
Along version 2 of the PDD issued in March 21 st /2023 some sections have to follow the Instructions for completing PDD form; to mention few examples: <ul style="list-style-type: none"> • In sections 2.2, 2.3, 2.5 the Instructions for completing those section shall not appear when the section is written. • The name of the project must be the same coherent with the name which appers in the BCR Web Page, like wise must be the same along PDD. • The dates mentioned along the PDD shall be written in the format DD/MM/YYYY. 				
Project holder response.				Date: 11-05-2023
<ul style="list-style-type: none"> • In sections 2.2, 2.3, 2.5 the instructions do not appear on the new version. • The name of the project is now the same along the whole document and in the BCR Web page. • All dates have been changed to the following format DD/MM/YYYY. 				
Documentation provided by project responsible.				
N/A				
Audit team assessment.				Date: 15-05-2023
Version 3 of PDD dated on May 11 th /2023 has follow the instructions for completing PDD form.				
Audit team conclusion: Closed				

CL ID	2	Requirement	Section 2.2 of applied methodology ACM0002 version 20.0	Date: 05-05-2023
Description of CL.				
The assessment of all applicability conditions must be described in section 3.1.1 of PDD.				
Project holder response.				Date: 11-05-2023

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The assessment of all applicability conditions have been described in section 3.1.1 of PDD.	
Documentation provided by project responsible.	
N/A	
Audit team assessment.	Date: 15-05-2023
In section 3.1.1 of PDD version 3 it was included all applicability conditions of methodology ACM0002, version 20.0.	
Audit team conclusion: Closed.	

CAR ID	1	Requirement	Paragraphs 42 and 72 of Methodological tool to calculate the emission factor for an electricity system, version 07.0	Date: 05-05-2023
Description of CAR.				
The data vintage used to calculate the emission factor of Argentinean electrical system shall follow the provision described in the Methodological tool to calculate the emission factor for an electricity system, version 07.0.				
Project holder response.				Date: 11-05-2023
The data vintage of the emission factor of Argentinean electrical system follows the provision described in the Methodological tool to calculate the emission factor for an electricity system, version 07.0				
Documentation provided by project responsible.				
See drive file name: "" "factor-de emision_cm_2021.xlsx"				
Audit team assessment.				Date: 15-05-2023
In the spreadsheet used to calculate the emission reductions, sheet "Factor de Emisión" cell N9 does not follow the provision to calculate the build emission factor in accordance with paragraph 72 of Methodological tool to calculate the emission factor for an electricity system, version 07.0.				
Project holder response.				Date: 16-05-2023
The action has already been corrected in the new version of the PDD.				
Documentation provided by project responsible.				
In the Step 5: Calculate the build margin (BM) emission factor of PDD version 4 and on the sheet "Factor de Emisión" the BM is in accordance with the Methodological tool to calculate the emission factor for an electricity system, version 07.0				
Audit team assessment.				Date: 23-05-2023

In the updated spreadsheet used to calculate the emission reductions (file: "Secco calculo de emisiones 16May23.xlsx"), sheet "Factor de Emisión", the project holder followed the provision to calculate the build emission factor in accordance with paragraph 72 of Methodological tool to calculate the emission factor for an electricity system, version 07.0.

Audit team conclusion:
Closed

CAR ID	2	Requirement	Paragraph 9 of Methodological tool on common practice, version 03.1.	Date: 05-05-2023
Description of CAR.				
The applicable geographical area for the common practice analysis shall be the entire country.				
Project holder response.				Date: 11-05-2023
The applicable geographical area for the common practice analysis have been extended to the entire country as seen in section 3.4.2 "Procedimiento para demostrar la adicionalidad de acuerdo con la TOOL 01.version 07.0.0".				
Documentation provided by project responsible.				
See drive Adicionalidad, file name: "Energías Renovables-Base de Datos 2022-12"				
Audit team assessment.				Date: 15-05-2023
In the analysis of common practice described in section 3.4.2 of PDD version 3 it was taken Argentina as the applicable geographical area.				
Audit team conclusion: Closed.				

CAR ID	3	Requirement	Section 8 of BCR Standard and paragraph 3.2.3 of ISO 14065:2013.	Date: 05-05-2023
Description of CAR.				
In section 5.2 of PDD shall be described how Genesis is involved with the GHG project under assessment.				
Project holder response.				Date: 11-05-2023
The action has already been corrected in the new version of the PDD.				
Documentation provided by project responsible.				
N/A				
Audit team assessment.				Date: 15/05/2023

In section 5.2 of PDD version 3, it was described how Genesis is involved with the GHG project under assessment.

Audit team conclusion:
Closed.

CAR ID	4	Requirement	Paragraph 65 of applied methodology ACM0002 version 20.0. Section 7.2, Data / Parameter table 12 of Methodological tool Baseline, project and/or leakage emissions from electricity consumption and monitoring of electricity generation, version 3.0.	Date: 05-05-2023
Description of CAR.				
The monitoring methodology for parameter $EG_{facility,y}$ described in section 16.1 of PDD version 2 does not follow the provision of the applied methodology.				
Project holder response.				Date: 11-05-2023
The monitoring methodology for parameter $EG_{facility,y}$ described in section 16.1 of PDD has been corrected and now follows the provision of the applied methodology. Monitoring methodology now follows the provision of the applied methodology.				
Documentation provided by project responsible.				
N/A				
Audit team assessment.				Date: 15-05-2023
In section 16.1 of PDD version 3, the monitoring methodology for parameter $EG_{facility,y}$ is described properly in accordance with the provision of the applied methodology.				
Audit team conclusion: Closed.				

FAR ID	N/A	Requirement		Date: DD-MM-YYYY
Description of FAR.				
Project responsible response.				Date: DD-MM-YYYY
Documentation provided by project responsible.				

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Audit team assessment.	Date: DD-MM-YYYY

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ANNEX 2: AUDIT PLAN

AUDIT PLAN FOR GHG MITIGATION PROJECTS



Title of the GHG mitigation project initiative	Proyecto solar CASA La Calera en San Luis		
Full name and position of the project responsible	Hernan Juri Administration and Finance Manager. SECCO.		
email	Mobile	+54 (0341) 409-4000	
Address, including Country.	Juan Pablo II 5665 (Colectora Av Circunvalación and Uriburu), Rosario, Santa Fé Province, Argentina.		
Information and position of the contact person	Hernan Juri Administration and Finance Manager. SECCO.		
Type of audit	Validation	✓	Verification
	Totally remote		Partially remote
			✓
<p>I am writing to submit the proposed 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 appreciate you inviting the relevant people from the areas that will be audited.</p> <p>For the daily balance of information by the audit team, I would appreciate having a physical or remote space to hold the meeting, as well as access to the basic documentation of the GHG mitigation initiative.</p> <p>Regarding the occupational health and safety conditions applicable to your organization, please inform them before visiting the site so that the audit team can request from ICONTEC the necessary personal protection elements.</p> <p>The information used for the execution of this audit will be treated confidentially by the audit team and Icontec. The language of the validation report will be English, and the language of the interviews will be Spanish.</p> <p>The conditions of this service are indicated in REGULATION FOR VALIDATION AND VERIFICATION SERVICES R-PS-012.</p>			
Audit Criteria	<ul style="list-style-type: none"> - ISO 14064-2:2019 - BCR Standard, versión 3.0 - Approved consolidated methodology ACM0002: Grid-connected electricity generation from renewable sources, version 20.0. <p>The validation and/or verification of the GHG mitigation project will be carried out through the support of technological means in a partially remote way.</p>		
Audit objectives	<p>For Validation:</p> <p>Evaluate the likelihood that the implementation of the planned GHG project will produce the GHG removals / reductions declared by the project manager, considering the following:</p> <ul style="list-style-type: none"> • Conformity with the applicable validation criteria, including the principles and requirements of the relevant GHG standards or programs within the scope of validation. • The establishment, justification, and documentation of the GHG mitigation project. • The relevance of the controls of the planned GHG project. 		
Audit scope	This validation exercise covers the evaluation of a GHG mitigation project that consists of the installation of a wind generation solar in the Province of Sal Luis in		

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AUDIT PLAN FOR GHG MITIGATION PROJECTS

	<p>the Republic of Argentina. The electrical energy generated by the solar power plant will be delivered to the National Interconnected System (SADI).</p> <p>The baseline scenario for this GHG mitigation project is defined by the electricity that would have been generated by the generation plants that are currently connected to the SADI, or the generation plants that are expected to be connected to the SADI.</p> <p>The GHG emission sources in the baseline scenario are given by the CO₂ emissions from the generation of electricity in the fossil fuel-based generation plants that are displaced by the implementation of this GHG mitigation project.</p> <p>In the PDD delivered for the documentary review, before the on-site inspection, it has been defined that the first accreditation period is 7 years starting on March 15th/2023 and ending on March 14th/ 2030 with the option of requesting renewal at the end of the aforementioned first accreditation period.</p>											
Level of assurance	95%	Materiality- Relative importance	5%									
Sampling plan/ Evidence – gathering plan	<p>Regarding the information and documentation of the planning of the GHG mitigation project, including procedures and criteria for the project, the baseline, quality control and assurance, risk management, and the documents of this verification, They are listed in the following table:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">Parameters</th> <th style="width: 20%;">Sampling (%)</th> <th style="width: 40%;">Level of assurance (100%)</th> </tr> </thead> <tbody> <tr> <td>Methodologies and tools used to calculate removals</td> <td style="text-align: center;">100</td> <td style="text-align: center;">100</td> </tr> <tr> <td>Formulae for calculating removals</td> <td style="text-align: center;">100</td> <td style="text-align: center;">100</td> </tr> </tbody> </table>			Parameters	Sampling (%)	Level of assurance (100%)	Methodologies and tools used to calculate removals	100	100	Formulae for calculating removals	100	100
Parameters	Sampling (%)	Level of assurance (100%)										
Methodologies and tools used to calculate removals	100	100										
Formulae for calculating removals	100	100										
Lead auditor name	Francy Ramírez (FR)	email	fmramirez@icontec.net									
Auditor	N/A	Technical expert	Francy Ramírez (FR)									
Opening meeting	03-05-2023	Time	09:00 h									
Closing meeting	05-05-2023	Time	16:30 h									
Date on which the audit plan was completed	21-04-2023											

ACTIVITIES PLAN ON SITE

DATE	TIME	AUDIT CRITERIA	AUDITOR	NAME AND POSITION OF THE AUDITEE
03-05-2023	Trip by plane from Rosario to San Luis		FR	<ul style="list-style-type: none"> Emanuel Rodríguez Hernan Juri Virginia Rivaioli José Blanco Alejandra Camara Laura Garzon Leandro Falenzo Ciro López Natalia Soria
	Opening meeting - Description of the nature of the project, its implementation and its operation and technical aspects. - Tour by the project's facility - Visit to the interconnection Point (Delivering to Argentinean interconnected electric grid) Assessment of: - The monitoring system in place. - Compliance of the project implementation with the registered project design document Interview with personnel in charge of operational and maintenance activities. - Interview with stakeholders regarding to :			

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		-Environmental impacts -Social programs. -Local stakeholder consultation		
Trip by plane from San Luis to Rosario				
04-05-2023	09:00 h to 12:30 h	<ul style="list-style-type: none"> • Description and explanations about quantification period (project start date). • Description and explanations about methodology, baseline and emission reductions calculations. • Description and explanations about Monitoring plan 	FR	<ul style="list-style-type: none"> • Emanuel Rodríguez • Pablo Giacosa • Hernan Juri • José Blanco • Alejandra Camara • Laura Garzon
	12:30 h to 14:00 h	Lunch	FR	
	14:00 h to 17:00	Description and explanations about timing of the investment decision of the project activity and additionality analysis	FR	<ul style="list-style-type: none"> • Hernan Juri • Diego Tartufoli • Andrea Perruchi • Alejandra Camara • Roberto Beducci • Laura Garzon
05-05-2023	09:00 h to 12:30 h	Description and explanations about: <ul style="list-style-type: none"> - Description about regulatory framework applicable for the project activity. - Carbon ownership and rights. - Risk Management. 	FR	<ul style="list-style-type: none"> • Hernan Juri • María Victoria Sosa • Alejandra Camara • Roberto Beducci • Laura Garzon
	12:30 h to 14:00 h	Lunch	FR	
	14:00 h to 15:00 h	Description and explanations about: <ul style="list-style-type: none"> - Environmental aspects - Social aspects. - Stakeholder's consultation. - Sustainable development goals. Review of pending issues from May 3 rd to May 5 th .		<ul style="list-style-type: none"> • Hernan Juri • Alejandra Taylor • Andrea Perruchi • Alejandra Camara • Roberto Beducci • Laura Garzon
	15:00 h to 16:30 h	Identification of findings by the Lead Auditor (private session)	FR	
	16:30 h to 17:00 h	Partial Closing meeting. Identification of Findings (FAR, CLs and CARs)	FR	
Observations:				
<ul style="list-style-type: none"> - 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 in agreement with the project owner. - All personnel of the project owner related to the GHG mitigation initiative must be available if requested by 				

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AUDIT PLAN FOR GHG MITIGATION PROJECTS



- the audit team to evaluate any requirements.
- During any phase of this evaluation process (document review, before the on-site visit, on-site visit, drafting of the audit report, or technical review) findings can 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-GV-086 NOTIFICATION OF VALIDATION AND VERIFICATION SERVICES