MONITORING REPORT

SMALL-SCALE RENEWABLE ENERGY PROJECTS IN CHILE - MONITORING REPORT OF FIRST MONITORING PERIOD

Document prepared by Natural Assets SpA

Date of issue (V*4.0 23/01/2026*)

Monitoring Report Template (Version 3.4)	
Name of project	*Small-scale renewable energy projects in Chile* *Instance: Quetena Solar Park*
BCR Project ID	*BCR-CL-512-1-001*
Registration date of the project activity	*20-10-2025*
Project holder	*Natural Assets SpA (EnergyLab)*
Contact	*cmosella@energylab.cl* *+56 9 8828 7578* *Fidel Oteiza 1941, of. 504, Providencia.*
Version number of the Project Document applicable to this monitoring report	*V4.0 (23/01/2026)*
Applied methodology(ies)	*AMS-I.D "Grid connected renewable electricity generation" Version 18.0*

Monitoring Report Template (Version 3.4)	
Project location (Country, Region, City)	*The project is located in Chile.* *This instance is located in Calama Commune, Antofagasta Region.*
Project starting date	23/09/2021
Quantification period of GHG reductions/removals	23/09/2021 to 22/09/2031
Monitoring period number	First monitoring period
Monitoring period	23/09/2021 to 31/12/2024
Amount of emission reductions or removals achieved by the project in this monitoring period	42,799tCO2e
Contribution to Sustainable Development Goals	*SDG7* *SDG8* *SDG13*
Special category, related to co-benefits	*The project does not apply to special categories*

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1 General description of project

This grouped project aims to reduce GHG emissions by displacing CO_2 emissions attributable to the generation of electricity which would have otherwise been partially generated from the operation of fossil fuel-fired power plants connected to the grid and will be composed of different instances of renewable energy generation, initially solar power instances but with the possibility to include other kinds of renewable energy, like wind or small scale hydro in the future.

The Small-scale renewable energy project in Chile aims to contribute in the following ways:

- Achieve GHG emission reductions by incorporating projects related to the production of non-conventional renewable energy, specifically by means of solar, wind or hydro energies.
- Support, facilitate, and encourage the development of small grid-connected renewable energy projects in Chile, by helping project developers to overcome local barriers related to development and finance through the inclusion of their activities in this grouped project.
- Contribute to the sustainable development in Chile through environmental, social, economic, and technological benefits, such as the use of renewable energy resources to produce non-conventional renewable energy, generating direct employment and income generation opportunities.
- The higher-level and long-term additional purpose of this grouped project is to strengthen Chile's renewable energy promotion policies by providing a platform that facilitates the transition to a low-carbon economy through the generation of additional financial support for renewable energy via national and international carbon markets.

1.1 Sectoral scope and project type

This project is eligible under the scope of the BCR Standard V4.0, as it generates electricity through Non-Conventional Renewable Energies (NCRE) and provides quantifiable Greenhouse Gas (GHG) emission reductions, using the methodology AMS-I.D "Grid connected renewable electricity generation" Version 18.0.

This project is classified as "Activities in the energy sector".

This is a grouped project.

1.2 Project start date

The start date of the first instance "Quetena Solar Park" is 23.09.2021, which is the commercial operation start date, meeting the maximum retroactivity of five years to the first validation of the project as per official exemption authorized by BioCarbon Standard dated 02.10.2025[1], following section 11.4.1 "Prior consideration" of the BCR Standard V4.0.

1.3 Project quantification period

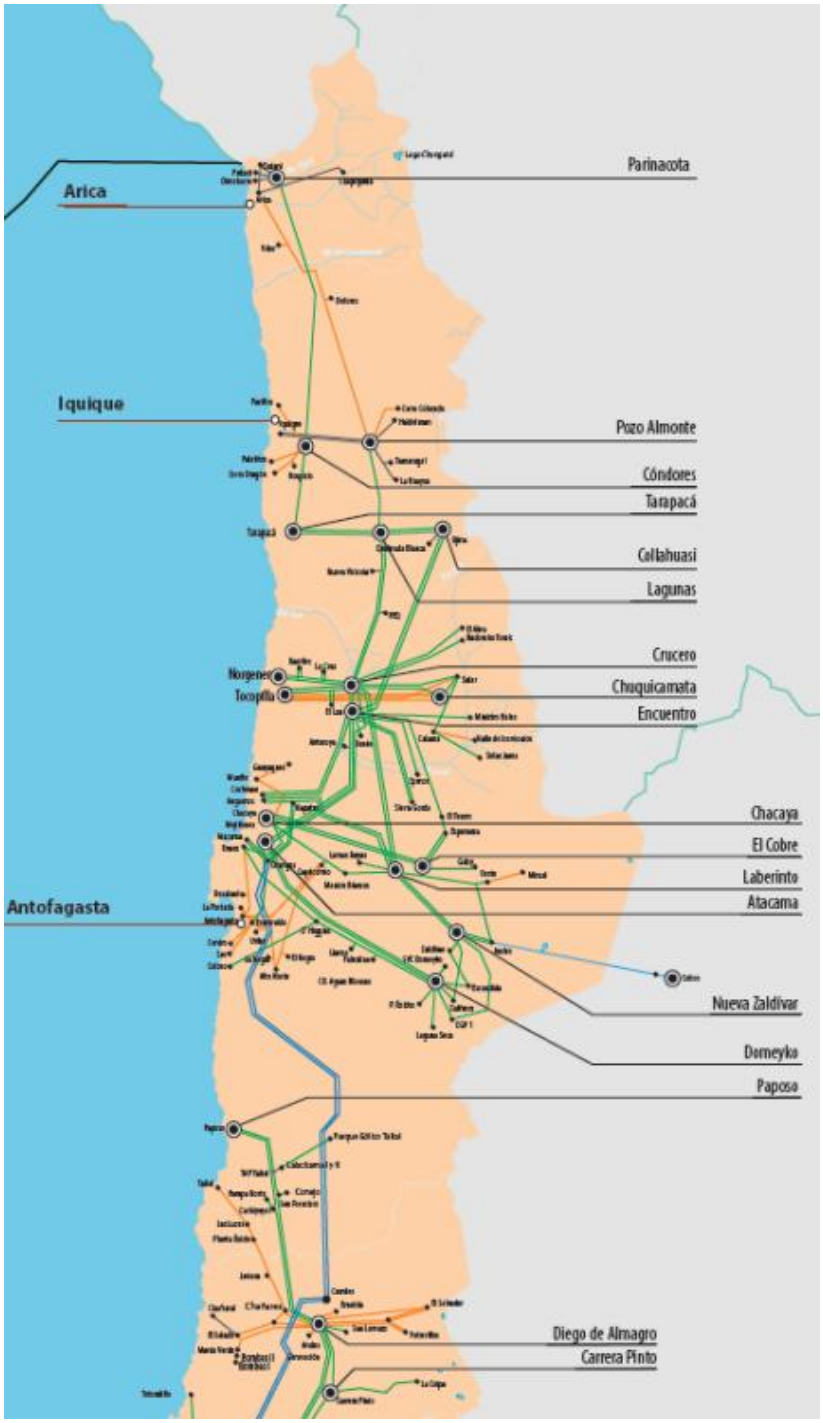
As stated in section 3.2.3 of the Project Document, the quantification period for GHG emission reductions is ten years, not renewable. The starting date corresponds to the Commercial Operation Date (COD) informed by National Electricity Coordinator (Coordinador Eléctrico Nacional).

For the first instance Quetena Solar Park the quantification period is from 23.09.2021 to 22.09.2031.

1.4 Project location and project boundaries

The boundary of the project, in terms of a geographical area within which all instances included in the project are implemented, encompasses the geographical boundary of Chile, specifically those instances connected to the SEN and Aysén subsystem. Chile extends between 17° 30' 00'' and 56° 30' 00'' south latitude, and its central meridian is 70° 30' 00'' west longitude.

[1] Reference document: Official Exemption Letter issued by BioCarbon Standard, available in the project's evidence files as "02.10.2025_Oficio EnergyLab.pdf"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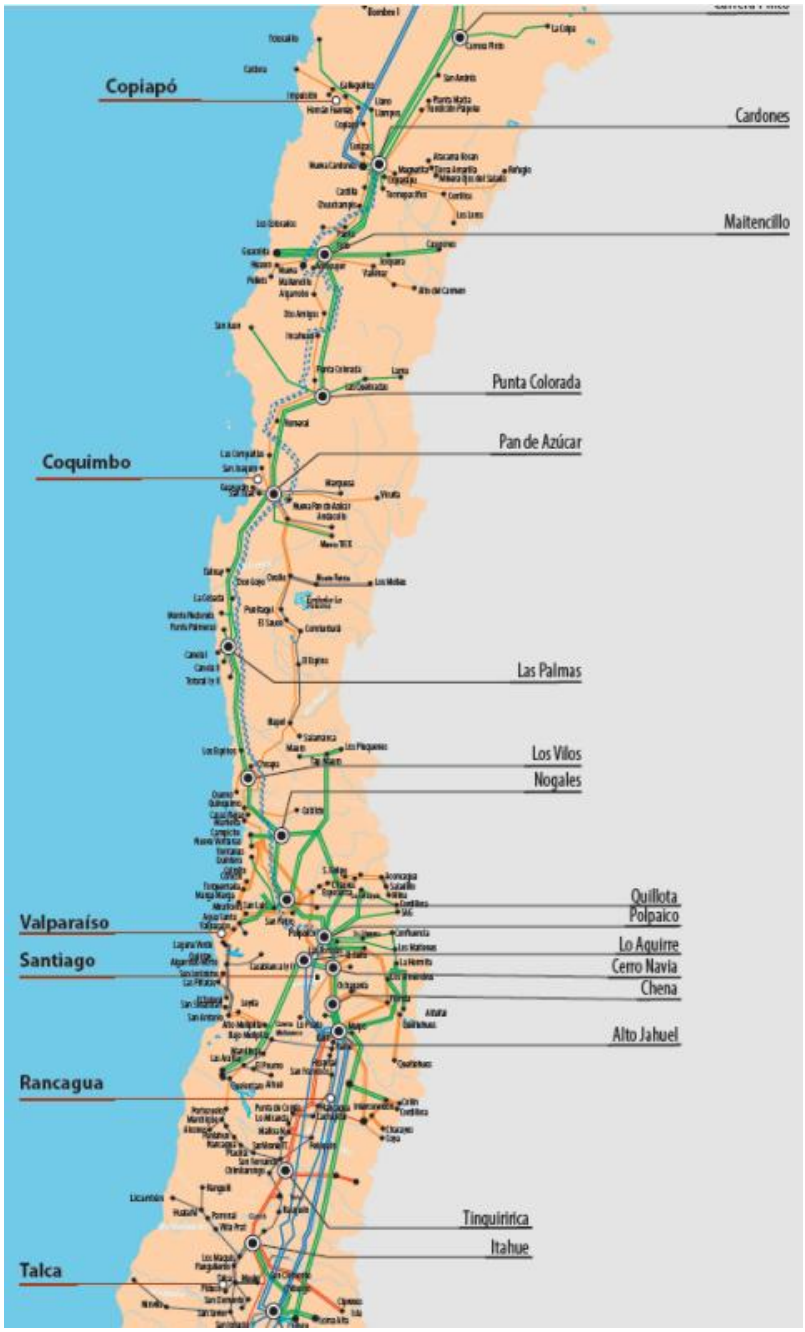
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Lo Aguirre
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Figure 1: National Electric System (SEN), adapted from Cigre (2021)

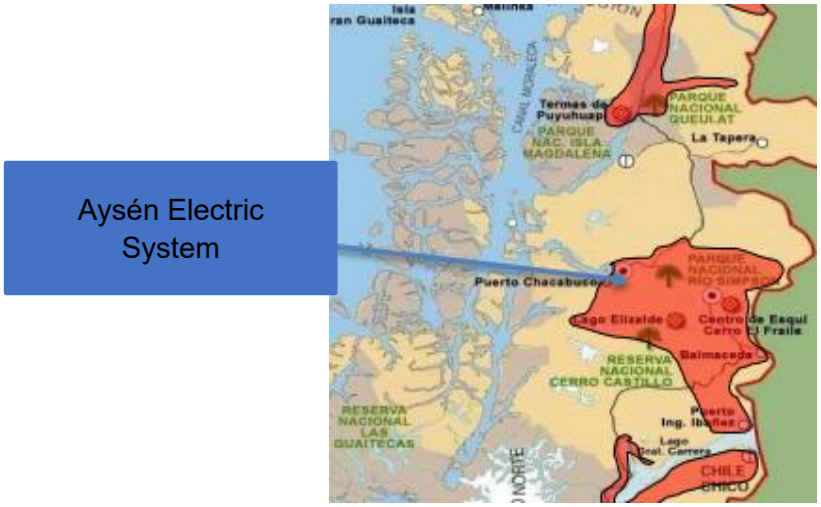

Figure 2: Aysén Electric System, adapted from Grupo SAESA

The physical boundary of each instance is restricted to the geographical area of each one. All applicable national and/or sectoral policies and regulations of Chile within that chosen boundary will be taken into consideration and correspondingly referenced.

Furthermore, the location of the initial instance, "Quetena Solar Park", is the following.

- **Quetena Solar Park**

This instance is in Chile, in the Antofagasta Region, El Loa province, Calama Commune, in a rural area just 1 km west of the city of Calama and 196 km northeast of Antofagasta, the regional capital.

Figure 3: Quetena Solar Park and route from Calama's airport

Figure 4: Quetena Solar Park installations

The following table lists the general coordinates of the project, inside which the different components of the project are located:

Installations	Vertices	UTM Coordinates H 19S DATUM WGS-84	Area (ha)

		East	North	
Quetena Solar Park	1	503,809	7,517,081	18.00
	2	503,920	7,517,048	
	3	504,100	7,516,887	
	4	504,103	7,516,717	
	5	504,199	7,516,716	
	6	504,224	7,516,723	
	7	504,400	7,516,722	
	8	504,483	7,516,654	
	9	504,476	7,516,646	
	10	504,398	7,516,713	
	11	504,225	7,516,713	
	12	504,214	7,516,709	
	13	504,215	7,516,668	
	14	504,094	7,516,668	
	15	504,094	7,516,481	
	16	503,807	7,516,381	
	17	503,792	7,516,570	

Table 1: Quetena Solar Park coordinates

The project boundaries according to the methodology AMS-I.D are described as follows:

"The spatial extent of the project boundary includes the project power plant, and all power plants connected physically to the electricity system that the CDM project power plant is connected to."

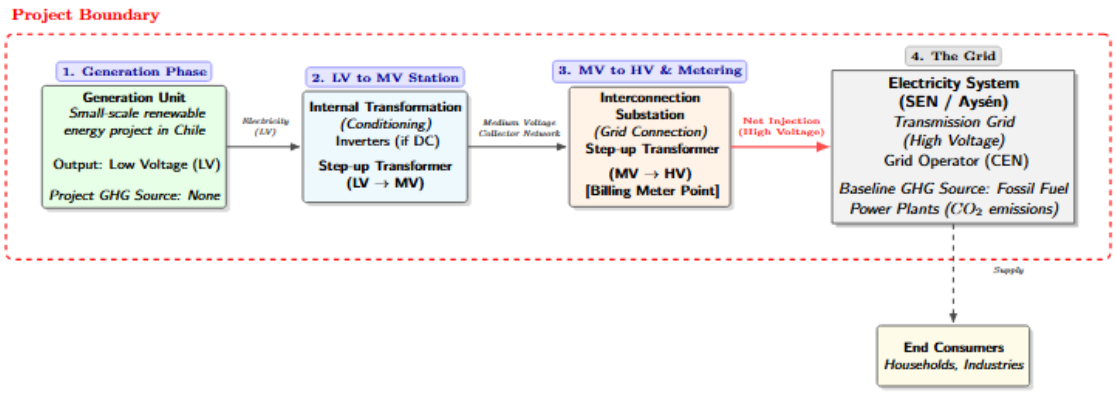

Figure 5: Project boundary diagram

1.5 Summary Description of the Implementation Status of the Project

i. Quetena Solar Park

Quetena Solar Park has a peak installed capacity of 9.94 MW and is connected to the SEN. The principal components of this instance and their characteristics can be seen in the tables below:

Solar panels

Parameter	Value	
Manufacturer	LONGi Solar	
Model	LR5-72HBD-530M	LR5-72HBD-535M
Dimensions	2,256*1,133*35 mm	
Module Type	Bifacial	
Bifaciality	70±5%	
Module efficiency	20.7%	20.9%
Maximum power (STC)	530 W	535 W
Voltage at maximum power (STC)	41.35 V	41.50 V
Current at maximum power (STC)	12.82 A	12.90 A
Quantity installed	6,216	12,432
Compliance	IEC 61215, IEC 61730, UL 61730, ISO 9001:2015, ISO 14001: 2015, TS62941, ISO 45001: 2018	

Table 2: Characteristics of solar panels in Quetena Solar Park

Inverters

Parameter	Value
Manufacturer	Sungrow Power Supply Co., Ltd.
Model	SG3125HV-30
Dimensions	6,058*2,896*2,438 mm
Max PV input voltage	1,500 V
Max PV input current	3,997 A
AC output power	3,125 kVA @ 50 °C / 3,437 kVA @ 45 °C
Power factor at nominal power	>0.99
Efficiency (Max. / Euro.)	99.0% / 98.7%
Quantity installed	3
Compliance	CE, IEC 62109, IEC 61727, IEC 62116, IEC 62271-202, IEC 62271-200, IEC 60076

Table 3: Characteristics of inverters in Quetena Solar Park

Electricity meter

Parameter	Value
Manufacturer	Schneider Electric
Model	ION7400
Dimensions	98*112*78.5 mm
Sampling rate	256 samples/cycle
Memory capacity	512 MB
Measurement current	50-10000 mA
Measurement voltage	57-400 V AC 42-69 Hz between phase and neutral 100-690 V AC 42-69 Hz between phases
Measurement accuracy	Current +/- 0.1% Voltage +/- 0.1% Active energy +/- 0.2%
Accuracy class	IEC 62053-22 Class 0.2S Active energy ANSI C12.20 Class 0.2 Active energy IEC 61557-12 Class 0.2 Active energy
Quantity installed	1 unit
Compliance	IEC 62053-22, IEC 62052-11, IEC 62053-24, IEC 61557-12, IEC 61326-1, IEEE 1588, IEC 62586

Table 4: Characteristics of the electricity meter in Quetena Solar Park

The construction start date of this instance was 26.11.2020 and its operation start date was 23.09.2021.

The total GHG emission reductions achieved during this monitoring period is 42,799tCO2e.

2 Title, reference and version of the baseline and monitoring methodology(ies) applied to the project

The methodology used to quantify GHG emissions reductions corresponds to the approved methodology AMS-I.D "Grid connected renewable electricity generation" Version 18.0.

According to the methodology, TOOL07 "Tool to calculate the emission factor for an electricity system" in its latest version must be used to calculate the combined margin of CO_2 emission factor for grid connected power generation, for this project the latest version is Version 7.0.

3 Double Counting and Participation under Other GHG Programs.

As provided by the BCR Tool "Avoiding Double Counting (ADC)" in its latest version, there are scenarios in which double counting could happen:

1) Double issuance of VCC
2) Double use of VCC
3) Double claiming
4) Duplicate certification or serialization
5) Improper attribution for financial or benefit purposes

The project holder ensures that none of the above will be met at any point during the project life cycle by complying with the provisions of the BCR Standard V4.0, for example, a fraction of the VCCs (10%) will be contributed to the general reserve account.

BCR standard is the only GHG program that this project and its instances have applied to.

This instance has not been registered, submitted for registration, or certified under any other GHG program (e.g., CDM, Verra, Gold Standard, Cercarbono). Furthermore, this instance has not sought or received environmental crediting certifications from other standards. Particularly the instance is not registered in PoA 9411: Chilean small-scale renewable energy programme of activities,

To ensure alignment with the BCR Standard, the following has been verified for all project instances:

- No Dual Registration: This instance is not currently (or previously) registered in another GHG program, eliminating the need for cancellation.

- Exclusive Claim to GHG Reductions: All projected GHG reductions are solely attributed to this initiative and are not counted toward any other program or project.
- Legal and BCR Alignment: This instance complies with Chile's national legal framework and the BCR Standard Operating Procedures.

Additionally, this instance has not been rejected by or withdrawn from another GHG program.

4 Contribution to Sustainable Development Goals (SDG)

This grouped project aims to contribute to reducing GHG emission by incorporating projects related to the production of non-conventional renewable energy, specifically solar, wind and hydro energies. It also contributes to the sustainable development in Chile through environmental, social, economic and technological benefits, such as the deployment of clean energy sources, creation of local employment opportunities, stimulation of local economies, and technology transfer from both international and urban centers to rural areas. Furthermore, this grouped project aims to facilitate and encourage the development of small-sized grid-connected renewable energy projects in Chile, by helping instance implementers overcome local barriers related to development and financing through inclusion under this grouped project.

Instances under this grouped project will, at a minimum, report contribution to the following SGDs:

- SDG 7 "Affordable and clean energy"
- SDG 8 "Decent Work and Economic Growth
- SDG 13 "Climate action"

The target and indicator related to each SDG will be identified and reported for each instance using the BCR Tool for Determining the Contributions of GHG Projects to Achieving the Sustainable Development Goals.

a. Quetena Solar Park

Contribution to SDG 7 (Target 7.2 - Indicator 7.2.1): “Renewable energy share in the total final energy consumption”. This instance contributes by providing verifiable data on the total amount of solar electricity produced and injected into the grid.

Contribution to SDG 8 (Target 8.2 - Indicator 8.2.1): “Annual growth rate of real GDP per employed person.”. This instance creates jobs in the construction and operation, promoting economic growth and improving proportion of formal employment.

Contribution to SDG 13 (Target 13.2 - Indicator 13.2.1): “Number of countries that have communicated the establishment or operationalization of an integrated policy/strategy/plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low greenhouse gas emissions development in a manner that does not threaten food production (including a national adaptation plan, nationally determined contribution, national communication, biennial update report or other)”. While this indicator applies at the national level, the project supports Chile’s implementation of its climate strategy and NDC targets by avoiding GHG emissions, as quantified in this document.

Quetena Solar Park shows its compliance with SDGs requirement by providing verifiable data on the total amount of electricity produced using solar power and injected into the grid (indicator 7.2.1), hired workers during the operation stage (indicator 8.2.1)and the amount of GHG emissions avoided (indicator 13.2.1). Furthermore, Quetena Solar Park does not generate impact on any of the SDSs in the corresponding assessment Tool and this project does not apply for co-benefits, so monitoring of extra variables is not required.

The total amount of electricity produced using solar power and injected into the grid is 83,871MWh during this monitoring period.

During this monitoring period, a worker has been hired to operate the plant in accordance with indicator 8.2.1.

The amount of GHG emissions avoided is 42,799tCO2e during this monitoring period.

5 Compliance with Applicable Legislation

In Chile there are legal and environmental frameworks that regulate the implementation of new projects in the country:

- Law 19.300 "Law on general bases of the environment", in effect since 1994, establishes the legal framework for the proposal, evaluation, and implementation of projects that may generate an environmental impact in Chile.

- Decree No. 40 of 2012 approves the Regulation of the Environmental Impact Assessment System (RSEIA). This decree establishes the provisions by which the Environmental Impact Assessment System and Community Participation in the Environmental Impact Assessment process will be governed.

  The RSEIA establishes the provisions and procedures for evaluating the environmental impact of projects and activities in Chile. The objective of the RSEIA is to ensure that projects are developed sustainably and with the least possible impact on the environment and the vulnerable groups in the area, including indigenous groups.

In particular, the initial instances of this grouped project comply with these 2 requirements by the means of entering to the RSEIA through the presentation of an Environmental Impact Declaration (DIA) or an Environmental Impact Study (EIA), having the corresponding sectorial permits and obtaining an Environmental Qualification Resolution (RCA).

On the other hand, the technical and legal regulatory framework applicable to the electricity sector is established primarily through the following laws and regulations:

- Decree with Force of Law No. 4 of 2006 – General Electricity Services Law (LGSE).
- Law No. 20.936 – Establishes a new electricity transmission system and creates an independent coordinating body for the National Electric System.
- Law No. 20.571 – Regulates the remuneration scheme for residential electricity generators.
- Supreme Decree No. 125 of 2017 – Regulation on the Coordination and Operation of the National Electric System.
- Supreme Decree No. 229 of 2005 – Regulation on the Valuation and Expansion of the Medium-Size Systems established under the LGSE.

These legal provisions are implemented through a series of technical standards and regulatory guidelines issued and periodically updated by the National Energy Commission (CNE).[2]

All instances of this grouped project comply with the applicable technical regulations through the grid-connection approval letter issued by the CNE, which authorizes project construction and interconnection to the electrical system. During the operational phase, the power plants must comply with CNE guidelines and respond to information requests through the official reporting and communication channels established by the authority. The information for the initial instance "Quetena Solar Park" is below.

- Quetena Solar Park

i. DIA presented
ii. Sectorial permits obtained.

- PAS 138 (Permit for the construction, repair, modification, and expansion of any public or private work intended for the evacuation, treatment, or final disposal of sewage and wastewater of any nature.)
- PAS 140 (Permit for the construction, repair, modification, and expansion of any garbage and waste treatment plant of any kind or for the installation of any place intended for the accumulation, sorting, processing, sale, or final disposal of garbage and waste of any kind.)
- PAS 142 (Permit for any site intended for the storage of hazardous waste.)
- PAS 160 (Permit to subdivide and develop rural land or for construction outside urban limits.)

iii. Favorable RCA No. 0122 (04.07.2019)
iv. Yearly compliance with Annual Sworn Statement (DJA) from the Pollutant Release and Transfer Register (RETC).
v. Approval letter for connection to SEN, from National Electric Coordinator.
vi. National Electric Coordinator communication through official channels, which do not show any sanctioning actions, fines, or open proceedings against the project, thereby confirming its compliance during the operational phase.

5.1 Favorable RCA No. 0122 (04.07.2019)

[2] https://www.cne.cl/normativas/electrica/normas-tecnicas/

The project maintains a documentary management system that allows the identification, organization, and periodic review of all applicable legal and regulatory requirements related to its activities. This system ensures that current legislation, particularly environmental and administrative provisions, is accessible and updated regularly.

Relevant laws and regulations are recorded in a centralized register that includes references, descriptions, and revision dates, allowing the project holder to demonstrate ongoing compliance with national and local frameworks. Any updates or changes in legislation are incorporated into this register and communicated to the staff responsible to ensure continuous conformity with applicable requirements.

At present, no new laws or regulatory changes have been identified that affect the project's operation or its compliance status.

6 Climate change adaptation

The BCR Standard V4.0 presents criteria that the instances must comply with related to climate change adaptation as follows:

> (a) consider one or more of the strategic lines proposed in the National Climate Change Policies and/or focuses aspects outlined in the regulations of the country where the project is implemented;
>
> (b) improve conditions for the conservation of biodiversity and its ecosystem services, in the areas of influence, outside the project boundaries; i.e., natural cover on environmentally key areas, biological corridors, water management in watersheds, among others;
>
> (c) implement activities that generate sustainable and low-carbon productive landscapes;
>
> (d) propose restoration processes in areas of specific environmental importance;
>
> (e) design and implement adaptation strategies based on an ecosystem approach;
>
> (f) strengthen the local capacities of institutions and/or communities to take informed decisions to anticipate negative effects derived from climate change (recognition of conditions of vulnerability); as well as to take advantage of opportunities derived from expected or evidenced changes.

This instance contribute to criteria (a) and (c) established by the BCR Standard V4.0, as described below:

(a) Chile aims to achieve and maintain greenhouse gas (GHG) emission neutrality no later than 2050, as established by Law 21,455 (Framework Law on Climate Change, enacted in 2022). In this context, the development of new renewable energy instances contributes to the national decarbonization objectives and aligns with Chile's Nationally Determined Contribution (NDC), which sets a target of an electricity matrix composed of 70% renewable energy by 2030 and an absolute GHG reduction of 25–30% below 2016 levels.

(c) The grouped project promotes the implementation of small-scale renewable energy facilities (below 15 MW) that contribute to the decarbonization of Chile's electricity mix, fostering low-carbon productive landscapes in line with national climate and energy policies.

With respect to criteria (b), (d), (e) and (f), Quetena Solar Park instance complies with Chilean environmental regulations, including the submission of an Environmental Impact Declaration (DIA) to the Environmental Assessment Service (SEA). Given its limited scale and location in an area without pre-existing economic, residential, or cultural activities, its environmental and social footprint is minimal.

Therefore, additional conservation measures beyond instance boundaries (criterion b) or restoration actions (criterion d) are not foreseen. Likewise, ecosystem-based adaptation strategies (criterion e) are not applicable, as the instance does not significantly alter natural systems or generate climate vulnerability conditions. Finally, since the instance do not produce direct social or environmental impacts requiring adaptive responses, capacity-building actions under criterion (f) are not deemed necessary.

7 Carbon ownership and rights

- Quetena Solar Park

An agreement between Natural Assets SpA and PARQUE SOLAR QUETENA S.A. was executed on 03.09.2025 under the grouped project "Small-scale renewable energy projects in Chile".

The agreement establishes a fixed distribution of the verified carbon credits (VCCs) generated from 23.09.2021 to 22.09.2031 and includes the recognition and transfer of the corresponding carbon rights.

The responsibilities of both parties were defined, with Natural Assets SpA acting as Project Holder and PARQUE SOLAR QUETENA S.A. as Instance Implementer, each fulfilling their respective roles in project coordination, implementation, monitoring, and reporting.

Any disputes arising between the parties will be addressed through direct communication and, if needed, resolved according to the procedures established in the agreement.

Quetena Solar Park, as stated in its DIA and recognized by the Environmental Impact Assessment System (SEIA) through the corresponding favorable RCA, is not located within a populated area, and therefore no agreements with local communities or indigenous groups were required.

8 Environmental Aspects

The latest version of BCS Sustainable Development Safeguards SDSs Tool (Version 2.0 published on June 2025) is applied.

- **Quetena Solar Park**

Environment:

a) Land use: Resource efficiency and pollution prevention and management

Activities related to this instance are related to the generation of electricity by means of solar energy, in other words, there are no impacts on human health and the environment, no pollution is generated. Also, this instance is in a desertic zone, with low to no existence of animal or vegetal life, so no considerable impact is generated.

b) Water

The activities do not consider extraction of water from underground reservoirs and do not generate liquid waste that could pollute them or water streams nearby.

c) Biodiversity and ecosystems

This instance studied the biodiversity and ecosystems in the affected area before the construction phase and concluded that the zone is devoid of flora and with highly impacted fauna, given that this is a desert environment near an urban center. In response to the identification of *Microlophus theresioides* and other terrestrial vertebrates in the baseline studies, the project implemented a specific Controlled Disturbance Plan prior to the construction phase following the Chilean legislation.

The plan consisted of a controlled intervention to induce the gradual displacement of fauna towards safe adjacent areas. Specific actions included displacement of low-mobility wildlife from the intervention zone towards receptor habitats, coupled with habitat enrichment measures, specifically the construction of artificial rock shelters to facilitate the settlement and protection of displaced individuals.

To validate the effectiveness of the mitigation, a follow-up monitoring campaign was conducted. The assessment focused on species richness, abundance, and the displacement degree of *Microlophus theresioides*. Key findings include:

First campaign (June 22-24, 2021):

- A total of 22 individuals of *M. theresioides* were recorded. Significantly, the vast majority were observed in an adjacent sector, directly associated with the habitat enrichment structures (rock piles) implemented during the controlled disturbance. In contrast, only a single specimen was recorded within the active construction/works area, demonstrating the high effectiveness of the displacement methodology.
- The monitoring also identified natural predators such as the *Geranoaetus polyosoma* and external threats like the presence of domestic dogs in the area.

Second campaign (December 20-22, 2021)

- The follow-up monitoring confirmed the long-term success of the measure. The population in the enrichment zones increased to 38 individuals (indicating successful reproduction/settlement), while zero individuals were recorded within the project's operational area.

These results demonstrate that the fauna was effectively relocated and did not return to the site.

The full reports of these monitoring campaigns were officially submitted to the Superintendence of the Environment (SMA) and the Agricultural and Livestock Service (SAG) confirming compliance with the environmental commitments established in the RCA.

d) Climate change

This instance, as explained in section 6, contributes to generating sustainable and low-carbon productive landscapes by generating electricity from solar energy, reducing Chile's reliance on fossil fuels and contributing to its energy matrix goals.

9 Socioeconomic Aspects

- **Quetena Solar Park**

Social:

a) Human rights

- Labor and working conditions: This instance is regulated by Chilean work laws, preventing forced labor and child labor, discrimination in respect to employment and occupation, and providing a safe work environment and freedom of association.

  Nevertheless, unsafe working conditions may arise, exposing project stakeholders to potential hazards or accidents before, during, and after the implementation of the activities. Therefore, compliance with legislation is monitored to mitigate such risks.
- Gender equality and women empowerment: This instance promotes an inclusive work environment that provides opportunities and space within the company for everyone, regardless of their personal conditions, based exclusively on personal merit.
- Land acquisition, restrictions on land use, displacement, and involuntary resettlement: This instance does not generate relocation of human groups, as is located in a site with no human or indigenous groups present. Also, the area affected does not represent a traditional, medicinal, spiritual or cultural zone and no community uses it as an economic livelihood. Land usage is legally authorized through a signed lease agreement between the instance implementer and the landowner.

- Indigenous people and cultural heritage: As stated in the previous answer, the area affected does not represent a traditional, medicinal, spiritual or cultural zone. The instance location is not near indigenous land and does not register heritage-related elements.
- Community health and safety: All the waste generated in the construction phase was disposed of properly and no waste that could generate potential impact on the community's health or safety is produced during the operation phase. All phases in the life cycle of this instance comply with the health and safety regulations for workers and operators. The photovoltaic park has a perimeter fence with the purpose of restricting access to unauthorized individuals and always ensures security, both for the park and for the people.

b) Corruption

The instance implementer regulates its internal processes through, for example, internal audits, preventing consequences such as misuse of funds, fraudulent reporting, conflict of interest, lack of transparency, weak regulatory oversight, lack of accountability mechanisms, environmental permitting corruption and subcontractor corruption.

c) Economic impact

During all phases, the instance implementation has created opportunities for employment for the local community, contributing to the economic development of the region. There are no agreements made with local communities, as there is no presence of people in the influence zone nor use of the land for any kind of activity.

10 Stakeholders' Consultation

Quetena Solar Park:

The instance's name and information were published in the Official Gazette the day 01.06.2018, and, as established by the RSEIA, five radio announcements were broadcast through Radio Topater FM (Frequency 105.7 in Calama), a local broadcasting station. These announcements were broadcast once a day on days 4, 5, 6, 7 and 8 of June 2018, and contained the following message:

"Trivento SpA, through its legal representative Mr. Pedro Ewing, informs the community that it has submitted the Environmental Impact Declaration (DIA) for the project named "Parque Solar Quetena" to the Environmental Impact Assessment System. The project will be located in the municipality of Calama, in the Province of El Loa, Antofagasta Region, specifically 1 km west of Calama. It will have a lifespan of 30 years and will be developed over an area of 18 hectares. The project consists of the construction and operation of a photovoltaic solar park with an installed capacity of 9.9 MWp and a 300-meter-long, 23 kV transmission line to generate electricity and connect to the Local Distribution System.

According to Article 10 of Law 19.300, the project's entry classification corresponds to section (c), which covers power generation plants exceeding 3 MW. The Environmental Impact Declaration is available for consultation in digital format on the website www.sea.gob.cl and in physical format at the offices of the Environmental Assessment Service of the Antofagasta Region, located at Avenida República de Croacia 0336, on business days, Monday to Friday, from 9:00 AM to 2:00 PM, in continuous hours, Antofagasta.

If the project generates environmental burdens for nearby communities, a citizen participation process may be initiated, provided that at least two legally recognized civic organizations, through their representatives, or a minimum of ten directly affected individuals submit a written request to the Environmental Assessment Service by June 15, 2018."

Also, the DIA was submitted for comments from the State Administration bodies with environmental competence, which, in accordance with current regulations, participate in the environmental impact assessment process, and a meeting with Human Groups Belonging to Indigenous Peoples (GHPPI for its acronym in Spanish) was held on June 7, 2018 at the *Red de Mujeres del Loa* Community Center, in the city of Calama, during which concerns were raised regarding potential risks associated with the implementation of the instance. These comments and concerns were documented in the meeting minutes, and the Environmental Assessment Service, as the authority responsible for collecting and channeling any questions not addressed during the meeting or submitted in writing by participants, did not report any relevant comments, observations or written inquiries related to the Parque Solar Quetena project. Consequently, these did not lead to any modifications in the instance's structure or planning.

The consultation resulted in observations and questions from some of the State Administration Bodies, mostly clarifications based on the DIA, which the instance implementer considered and addressed through an addendum. After that, a revision of said addendum was made by the State Administration bodies and resulted in new

questions and comments, which were again considered and addressed through a complementary addendum.

Although a revision of the public environmental impact record confirms that no relevant comments, observations, opinions or questions were received from individuals or civic organizations in relation to the radio broadcast or Official Gazette publication, a voluntary agreement was settled with the community Likan Tatay, located near the project site , as part of the instance implementer's voluntary social engagement and community involvement efforts, in which the instance implementer commits to installing a surveillance system to improve the safety of the community's communal headquarters.

The commitments established with the Likan Tatay community were duly implemented. The agreed works were executed and formally received by the community, as evidenced in the reception letter dated November 15.

As part of the project implementation, communication and grievance mechanisms are established to ensure that any interested party can submit comments, questions, or concerns at any time during the life of the project. These mechanisms are designed to be transparent, accessible, and reliable, promoting open dialogue with all stakeholders. Its description and operation can be found at https://energylab.cl/comunidad/.

The same website also provides information on BioCarbon's ethical channel and direct communication channels with the Quetena PV park. The Grievance Mechanism, BioCarbon's ethical channel, and park communication channels were shared with the stakeholders of Parque Solar Quetena through email.

The communication mechanism allows stakeholders to receive information and share their feedback regarding project activities through designated contact channels, such as email or written correspondence.

The grievance mechanism provides a structured process for receiving, documenting, and responding to any complaints related to the project. All submissions are treated with confidentiality and respect, and the project ensures that no person will face discrimination or retaliation for raising a concern in good faith.

Both mechanisms aim to foster trust and continuous engagement with the community and other stakeholders, contributing to the responsible and sustainable management of the project.

The communication channels and grievance mechanisms have been established retroactively to ensure continued stakeholder participation and transparency. No comments or grievances have been received to date.

11 REDD+ Safeguards

Not applicable.

12 Special categories, related to co-benefits

The project does not apply to special categories.

13 Implementation of the project

13.1 Implementation status of the project

The starting date of Quetena Solar Park instance is on 23.09.2021 as the commercial operation start date. The instance has a peak installed capacity of 9.94 MW and has since operated unchanged and with no special events. No events or situations as changes in project scope, no modifications to operational procedures, no equipment failures, and no regulatory updates during this monitoring period have occurred that have impacted the applicability of the methodology

13.2 Changes after the GHG project registration

13.2.1 Temporary deviations

As the first monitoring report of the project, there are no temporary deviations.

13.2.2 Permanent Changes

13.2.2.1 Corrections

As the first monitoring report of the project, there are no corrections.

13.2.2.2 Permanent changes to the monitoring plan, BCR program methodologies in use, or other regulatory documents related to BCR program methodologies.

As the first monitoring report of the project, there are no permanent changes.

13.2.2.3 Changes to GHG project design

As the first monitoring report of the project, there are no changes to GHG project design.

14 Grouped Projects

- Quetena Solar Park

a) The geographical area within every instance (initial or additional) of the project is developed is the territory of Chile, while the facility is physically connected to the SEN or Aysén subsystem, as established in the methodology AMS-I.D.
The criteria for the addition of a new greenfield instance will be, in first place, to have up to 15 MW of installed capacity and it must connect to the SEN or Aysén subsystem. This criterion applies to greenfield solar, wind and hydro without reservoirs instances. Criteria stated in the methodology such as complying with being a renewable energy generator can be understood as automatically fulfilled by the nature of the instance.

This instance is located near the city of Calama and is connected to the SEN at the substation CALAMA. This is a greenfield instance and has an installed peak capacity of 9.94 MW.

b) Additional instances will comply with the guidelines of the BCR Standard, in their most recent version.

This is considered an initial instance and complies with the guidelines of the BCR Standard with the information stated in the Project Document.

c) Additional instances will fully adhere to the provisions outlined in the latest release of the applicable BioCarbon methodological documents.

The latest release of the applicable methodological documents is used to calculate GHG emission reductions for this instance.

d) Emission reductions will be included only for validated project activities and will be informed separately for each instance.

As an initial instance, Quetena Solar Park is included in the emission reduction calculations.

e) The GHG emission reduction activities described in the validated project document will be implemented.

This instance follows the activities described in the Project Document.

f) All new instances meet the conditions of applicability described in the methodology as it contains the same criteria used to add new instances to the project.

This is an initial instance and meets the methodology conditions of applicability by being a greenfield solar power instance with an installed capacity of less than 15 MW.

g) The geographic area where new instances could take place is the same as the initial instances, in other words, Chilean territory and the SEN and Aysén subsystem, so any new instances would have the same baseline scenario conditions. Without prejudice to the foregoing, additionality will be evaluated individually for each instance, prior to the decision to add them to the project.

This is an initial instance, and its baseline conditions were evaluated in the Project Document. This instance's additionality was evaluated individually.

h) All new instances will start their activities at a later date than the initial instances. The start of activities is understood as the moment when new instances begin construction.

This instance is an initial instance. This point does not apply.

i) The baseline scenario for all instances (initial and additional) is the same, and corresponds to the baseline described in section 3.3 of the Project Document, as every new instance will be connected to the SEN or Aysén Subsystem.

This instance is an initial instance, and its baseline scenario is that the electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources into the grid. This instance is connected to the SEN.

j) Every new instance's additionality will be evaluated before its addition to the project following the procedure described in this document, and if any instance does not manage to qualify as additional it could not be included as a new instance.

The additionality analysis for Quetena Solar Park explained in section 3.4 of the Project Document concludes that this instance is additional as the analysis results in a simple payback period of 8 years for this instance and a market penetration of 4.5%, below the threshold of common practice.

k) Every new instance will comply with all methodology applied provisions. New instances are limited to projects encompassing small-scale greenfield projects and capacity addition below 15 MW, conditions stated by the methodology.

This is an initial instance. This point does not apply.

15 Monitoring system

15.1 Description of the monitoring plan

The monitoring plan is carried out according to the methodology and PD, separately for each instance under this project. Each instance implementer has overall responsibility for monitoring and reporting to the project holder of all parameters at the instance site.

(a) data and information to estimate GHG reductions or removals during the quantification period:

According to the description of sources in section 3.5 of the Project Document, the primary information source is the data stored by the operator or by an authorized entity, IGX, the company responsible for managing generation information, regulatory compliance, and the administrative management of the park. The report includes data on the measurement point, meter serial number, substation, and electricity delivered to the grid at 15-minute intervals.

(b) data and supplementary information for determining the baseline or reference scenario;

As stated in the methodology, the variables monitored are the grid emission factor and the net quantity of electricity generation supplied by each instance to the grid. For the monitoring of the emission factor, it is stated in section 3.7.3 of the Project Document that this factor is calculated ex-ante using the provisions in TOOL07 and fixed for the entire period, so in this case no monitoring is needed.

(c) specification of all potential emissions that occur outside the project boundaries, attributable to the activities of the GHG Project (leakage);

This activity does not generate emissions due to consumption of fossil fuels nor from leakage, as stated in the applicable methodology.

(d) information related to the assessment of environmental effects of the project activities;

An assessment was carried out using the SDS Tool, which shows that there are no negative environmental effects. This is complemented with annual compliance checks through the Annual Sworn Statement (DJA) of the Pollutant Release and Transfer Register (RETC), Chile's institutional environmental monitoring mechanism, through which compliance with current environmental regulations is verified.

(e) procedures established for the management of GHG reductions or removals and related quality control for monitoring activities;

The information provided by the instance's team, based on IGX reports, is reviewed by EnergyLab as the Project Holder and cross-checked against public information when available. For this verification period, the Hourly Generation History by Plant report published by CEN was used.

By comparing both datasets, for the years 2021 to 2023 both reports show the same amount of electricity delivered to the grid, validating the data.

For 2024, the months of January and February show differences of 16 percent and an unspecified percentage, respectively. This discrepancy is due to the fact that the public CEN report does not include all days of each month because of an internal error. A request was submitted to CEN through the transparency platform to obtain the complete data. Supporting documentation and the files received are attached. In the corrected version provided by CEN, all missing days are included, and the values in both datasets match.

The equipment used at all instances is calibrated and maintained in accordance with the Chilean Technical Norm of Security and Service Quality (NTSyCS), which is the most relevant regulation in terms of operational safety, service quality, and the technical standards that generation, transmission, and distribution facilities must comply with when connected to the grid.

Uncertainty, error propagation and adjustments on GHG reductions are calculated following the provisions of the BCR Tool "Conservative Approach and Uncertainty Management" Version 1.0.

As indicated in (b) above, this instance calculates the grid emission factor utilizing the CDM Tool07 Version 7.0. While the input data is sourced from official national entities, the resulting emission factor differs methodologically from the grid emission factor reported in the Chilean National GHG Inventory. Due to this specific methodological

distinction regarding the reference scenario, the exemption described in Section 11.3 of the BCR Tool does not apply to this instance.

All error propagation calculations were based on the data relating to each spreadsheet and were calculated using the guidance provided in the Tool:

Addition of uncertain quantities (Rule A):

$$U_{total} = \sqrt{(U_1)^2 + (U_2)^2 \pm \ldots + (U_n)^2}$$ Equation (1)

Combined uncertainty for multiplication or division (Rule B):

$$U_{total} = \sqrt{(U_{r1})^2 + (U_{r2})^2 \pm \ldots + (U_{rn})^2}$$ Equation (2)

Regarding error propagation for the baseline emission factor calculations, a relative uncertainty value was assigned to each fuel and electricity-related parameter. Standard error propagation rules, represented by Equations (1) and (2), were applied according to the calculation type (addition/subtraction or multiplication/division) to derive the uncertainty for every calculated variable ($FC_{i,m,y}$, $NCV_{i,y}$, $EF_{CO_2,i,y}$, $EG_{m,y}$, $EF_{EL,m,y}$, $EF_{OMsimple,y}$, $EF_{grid,BM,y}$, $EF_{grid,CM,y}$).

The uncertainties for all fuel and electricity-related parameters are detailed in the table below:

Fuel type / Generation	ε NCV	ε FUEL CONSUMPTION	ε GENERATION
Biogas	1%	1%	
Biomass	1%	2%	
Coal	1%	2%	
Natural gas	1%	1%	
LPG	1%	1%	
LNG	1%	1%	
Petcoke	1%	2%	
Diesel fuel	1%	1%	

Oil No. 6	1%	0.50%	
Electricity generation			0.2%

Table 5: Parameter uncertainty

For the project emissions reduction calculations, a similar approach was adopted. A specific uncertainty value was assigned to each electricity generation measurement (both injections and withdrawals). Equation (3) was utilized to propagate uncertainties for net and total generation, as these calculations involve only summation and subtraction. Subsequently, Equation (4) was applied for the final emissions reduction calculation, which requires multiplication by the emission factor.

Finally, the relative half-width of the confidence interval, representing the relative uncertainty of the total emission reductions, was calculated to be 0.06%. Since this value is significantly below the 30% threshold, no adjustment for high uncertainty is required, in compliance with the *Tool "Conservative Approach and Uncertainty Management"* Version 1.0.(f) description of the methods defined for the periodic calculation of GHG reductions or removals and leakage.

For GHG reductions calculation the following step will be followed:

- Energy generation data will be monitored following Chilean laws and regulatory obligations, that establish monitoring frequency and data storage procedures.
- Yearly data will be collected by each instance from official sources by each instance. A prioritization of data sources has been structured, and the basis for the calculation shall follow this hierarchy, applying each subsequent level only if the preceding one is not available.
    - For the first instance primary data is used: data stored by the operator or by an authorized entity, in full compliance with Chilean regulations.
- The information is reviewed by EnergyLab as the Project Holder and crosschecked against public report from grid coordinating entity when available.
- In the event of discrepancies, the lowest measurement is applied to maintain conservative criteria.
- EnergyLab then calculates the GHG reductions following the methodology described in the project document.

All information used for monitoring and reporting is supported by Chilean legislation and regulatory obligations applicable to the project owner and operator. In addition,

EnergyLab applies its internal Document Management Protocol, which organizes and regulates the handling, storage, and traceability of project data and documents.

(g) the assignment of roles and responsibilities for monitoring and reporting the variables relevant to the calculation of reductions or removals;

The Project Holder is EnergyLab, which is responsible for developing and promoting the grouped project in Chile. In this role, the entity collaborates with project developers or owners to incorporate their projects into the grouped project, thereby supporting them in overcoming local barriers related to project development and financing, while simultaneously fostering the adoption of renewable energy generation across Chile.

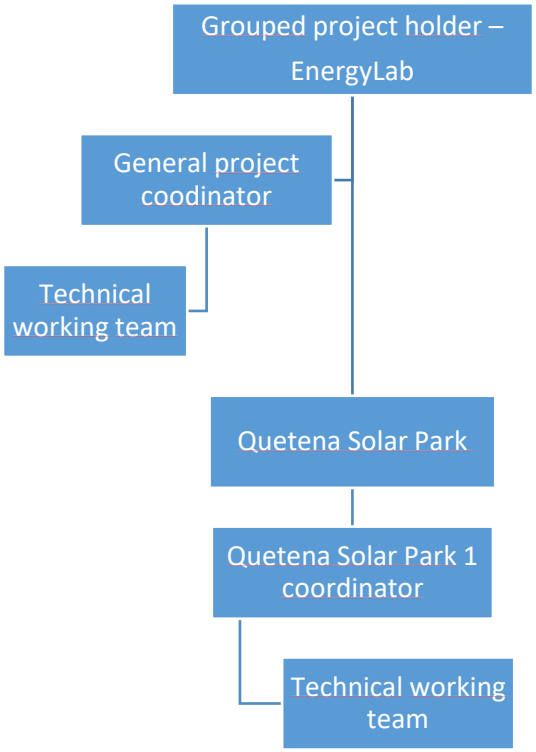

Figure 6: Participants and roles

EnergyLab appointed a general program coordinator and a technical team responsible for planning, supervising, and coordinating activities, ensuring technical consistency and

alignment with the criteria set forth in the program document and the standard, as well as carrying out operational execution, information gathering, and report preparation.

Quetena Solar Park appoints a Project Coordinator and a team responsible for the technical and administrative management of the project, including the implementation of activities, monitoring of indicators, and communication with the central program. In addition, they provide technical inputs and ensure the traceability of information, contributing to the transparent and verifiable integration of the project results into the program.

Documents, databases, and other information will be provided by the designated coordinator and technical team for each instance. EnergyLab will review the material and prepare the reports and documentation required for validation and verification.

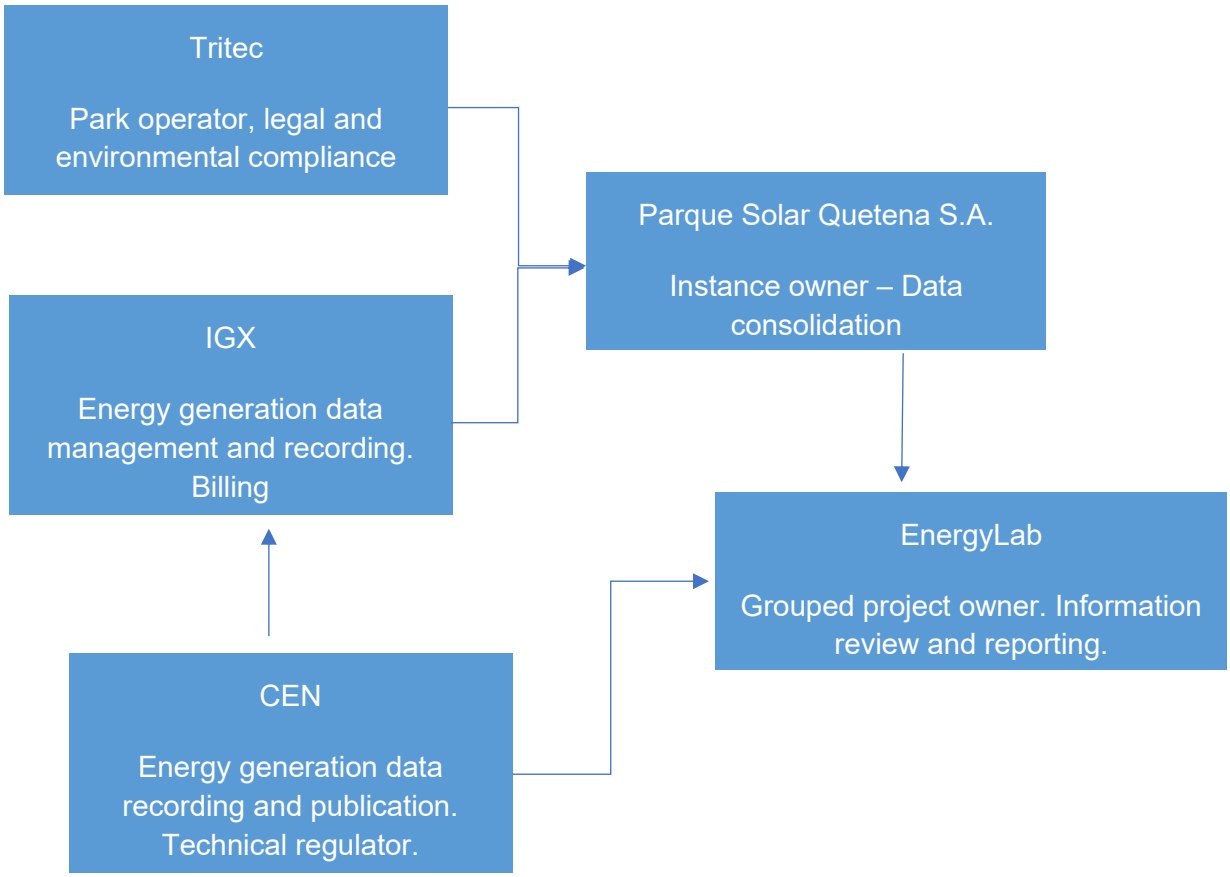

Figure 7: Quetena Solar Park participants and sources of information

Both the National Electrical Coordinator (CEN) and IGX, the private company responsible for managing electricity generation data, have access to the metering information for data retrieval and verification. Both entities operate secure data storage and management systems in compliance with Chilean data protection and regulatory requirements.

Tritec is the company in charge of the operation and maintenance of the power plant. Its responsibilities include ensuring continuous and safe operation, as well as full compliance with all applicable environmental, labor, and technical regulations throughout the project's operational phase.

The project establishes a clear process to detect and manage any deviations from the monitoring plan or the expected performance of mitigation activities. Monitoring data are regularly reviewed against the plan to identify inconsistencies or anomalies. If a deviation is detected, a corrective action is triggered, which includes:

1. Documenting the deviation and its potential impact;
2. Assessing the root cause and determining the necessary corrective measures;
3. Recording the resolution and updating the monitoring records to maintain traceability.

This process ensures that all potential deviations are managed proactively, maintaining the integrity of the monitoring plan and the reliability of the emission reductions reported by the project.

Greenhouse Gas (GHG) emission reductions achieved by Quetena Solar Park instance are quantified, monitored, reported, and verified in adherence to the BioCarbon MRV Tool Version 2.0. The project implementation follows the Monitoring Plan, ensuring scientific integrity, conservativeness, and full traceability of the mitigation outcomes.

This instance demonstrates compliance with the MRV tool by providing the following information:

1) Monitoring:
    a. All data collection and procedures are described above in points a) to g).
    b. Meter calibration information is attached as part of the QA/QC procedures.
    c. Monitoring and management system attached
2) Quantification:
    a. Use of the approved methodology AMS-I.D and tools related in their most recent version.

b. Documents providing activity data and emission factors used.
c. Uncertainty is quantified in the same documents following the procedures in the Tool "Conservative Approach and Uncertainty Management" Version 1.0.
d. As stated in the methodology, leakage is 0 for this instance.

3) Reporting
   a. The monitoring period is transparent and is stated in this document on the first page.
   b. All information, calculations and procedures are transparently described in this document.
   c. No deviations occurred during this monitoring period.
4) Verification

15.2 All reported information, including spreadsheets and field records, is organized and available for independent assessment by the accredited Conformity Assessment Body. The final request for credit issuance corresponds strictly to the quantity verified by the CAB, ensuring no double counting or overestimation of benefits. Data and parameters to quantify the reduction of emissions

15.2.1 Data and parameters determined at registration and not monitored during the monitoring period, including default values and factors

Data / Parameter	$EF_{grid,CM,y}$
Data unit	*tCO2/MWh*
Description	*Combined margin emission factor for grid connected power generation in year y for the SEN.*
Source of data used	*Calculated by the project participant using data of 2022, 2023 and 2024 from the following official sources:* *National Electric System (SEN):* • *Fuel Consumption: "Consumo de combustibles SEN", Comisión Nacional de Energía (CNE).*[3]

[3] *https://www.cne.cl/normativas/electrica/consulta-publica/electricidad/*

<table>
<tr><td></td><td>

- *List of Power Plants: "Listado de centrales generadoras", Coordinador Eléctrico Nacional.*[4]
  URL:

Hourly Generation: "Generación Horaria por central", Coordinador Eléctrico Nacional.[5]
</td></tr>
<tr><td>Value (s)</td><td>

Technology	$EF_{SEN,CM,y}$
Solar and wind	*0.5103*
Hydro	*0.3404*

Technology	$EF_{Aysen,CM,y}$
Solar and wind	*0.2894*
Hydro	*0.2983*
</td></tr>
<tr><td>Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)</td><td>Calculation of the baseline emissions.</td></tr>
<tr><td>Justification of choice of data or description of measurement methods and procedures applied</td><td>As per procedures of TOOL07</td></tr>
<tr><td>Additional comments</td><td>Fixed value during the 1st crediting period and updated for the next crediting periods.</td></tr>
</table>

Table 6: Combined margin emission factor

Data / Parameter	$EG_{m,y}$
Data unit	*MWh*
Description	*Net quantity of electricity generated and delivered to the grid by power unit m in years 2022, 2023 and 2024.*
Source of data used	*From official records from the regulator.*

[4] *https://infotecnica.coordinador.cl/instalaciones/centrales*
[5] *https://www.coordinador.cl/reportes-y-estadisticas/*

	Official database from the Coordinador Eléctrico Nacional (CEN) - the Independent System Operator. Specific Report: "Generación Real del Sistema" / "Generación Horaria por Central" (Hourly Generation by Plant).[6]
Value (s)	*Exact values are provided in the EF calculations spreadsheet.* *Total SEN 2022 = 37,337,493* *Total SEN 2023 = 30,759,610* *Total SEN 2024 = 25,812,196* *Total Aysén 2022 = 165,632* *Total Aysén 2023 = 175,156* *Total Aysén 2024 = 181,721*
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	*Calculation of the baseline grid emission factor.*
Justification of choice of data or description of measurement methods and procedures applied	*Official data provided by the regulator for all plants connected to the grid.*
Additional comments	*The information in stored for 10 years from the end of the quantification period as per the MRV Tool*

Table 7 Net quantity of electricity generated

Data / Parameter	$FC_{i,m,y}$
Data unit	*Mass or volume unit*
Description	*Amount of fuel type i consumed by power plant/unit m in year y*
Source of data used	*From official records from the regulator.* *Official data provided by the Comisión Nacional de Energía (CNE) through its regulatory platform:*

[6] *https://www.coordinador.cl/reportes-y-estadisticas/*

	1. For the National Electric System (SEN) and Medium Systems (SSMM): • *Report: "Cuadros de consumo de combustibles" (Fuel Consumption Tables). Section: Normativa Eléctrica / Fijación de Precios de Nudo.*[7] *2. Cross-check reference:* *Coordinador Eléctrico Nacional (CEN) - Anexo Técnico: "Consumo Combustibles".*[8]
Value (s)	*Exact values are provided in the EF calculations spreadsheet as there are up to 250 different plants.*
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	*Calculation of the baseline grid emission factor.*
Justification of choice of data or description of measurement methods and procedures applied	*Official data provided by the regulator for all plants connected to the grid.*
Additional comments	*The information in stored for 10 years from the end of the quantification period as per the MRV Tool*

Table 8: Fuel consumption

Data / Parameter	$NCV_{i,y}$
Data unit	GJ/m^3 *or* GJ/ton
Description	*Net calorific value (energy content) of fossil fuel type i in year y.*
Source of data used	*From operational statistics and yearbooks of the electricity/energy sector and from official records from the regulator.* *Primary Source:* • *National Energy Balance 2023 (BNE 2023), published by the Ministry of Energy.*[9]

[7] https://www.cne.cl/normativas/electrica/consulta-publica/electricidad/
[8] *https://www.coordinador.cl/operacion/documentos/normas-tecnicas*
[9] *http://energiaabierta.cl/categorias-estadistica/balance-energetico/*

	Secondary Sources (for conversion factors): • *2006 IPCC Guidelines for National Greenhouse Gas Inventories, Vol. 2, Chapter 1.*[10] *URL:* *GHG Protocol Guidance for the Pulp and Paper Sector (WRI).*[11]
Value (s)	*Data provided by the regulator is gross value. Therefore, values will be amended as per 2006 IPCC Guidelines for National Greenhouse Inventories vol 2 p.1.16.* *Biogas = 0.021* *Biomass = 13.397* *Coal = 27.824* *Natural Gas = 0.035* *LPG = 45.564* *NGL = 0.036* *Petroleum Coke = 32.196* *Diesel = 43.325* *Fuel Oil = 41.735*
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	*Calculation of the baseline grid emission factor.*
Justification of choice of data or description of measurement methods and procedures applied	*Gross Calorific Values (GCV) are extracted directly from the most recent National Energy Balance (BNE 2023). Since national data is reported in Gross values (kCal/kg or kCal/m³), a conversion to Net Calorific Values (NCV) is applied using the following criteria:* *1. Fossil Fuels (Coal, Diesel, Fuel Oil, Petcoke, Natural Gas):* *Values are converted to NCV following the 2006 IPCC Guidelines (Vol 2, Ch 1, p. 1.19), which imply reducing GCV by 5% for solid and liquid fuels and by 10% for Natural Gas.* *2. Biogas:*

[10] *https://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/2_Volume2/V2_1_Ch1_Introduction.pdf*
[11] *https://ghgprotocol.org/sites/default/files/2023-03/Pulp_and_Paper_Guidance.pdf*

	As the IPCC Guidelines do not specify a GCV-to-NCV conversion factor for Biogas, it is assumed to follow the same behavior as other gaseous fuels (approximating the value used for the rest of gases). *3. Biomass:* *The conversion from GCV to NCV is calculated based on the methodology provided in the "Calculation Tools for Estimating Greenhouse Gas Emissions from Pulp and Paper Mills" (GHG Protocol, WRI), specifically detailed on pages 8 and 9.* *Final values are adjusted to standard units (GJ/ton or GJ/m³) using the conversion factor: 1 kCal = 4.184 kJ.*
Additional comments	*The information in stored for 10 years from the end of the quantification period as per the MRV Tool*

Table 9: Net calorific value of fossil

Data / Parameter	$EF_{CO2,i,y}$
Data unit	*tCO2/GJ*
Description	*CO2 emission factor of fossil fuel type i in year y.*
Source of data used	*2006 IPCC Guidelines for National Greenhouse Gas Inventories, Volume 2 (Energy), Chapter 1 (Introduction), Table 1.4 "Default CO2 Emission Factors for Combustion".*[12]
Value (s)	*Fuel Oil = 0.0755* *Diesel = 0.0726* *Coal* = 0.0895* *Petcoke = 0.0829* *Natural Gas = 0.0543* *LNG = 0.0583* ** The type of coal according to table 1.4 of Chapter 1 of Vol. 2 (Energy) of the 2006 IPCC Guidelines on National GHG Inventories is "Other Bituminous Coal"*

[12] *https://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/2_Volume2/V2_1_Ch1_Introduction.pdf*

Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	*Calculation of the baseline grid emission factor.*
Justification of choice of data or description of measurement methods and procedures applied	*Values from the fuel supplier of the power plants (in invoices) are not available for the project participant. There are no regional or national average default values in the energy statistics/energy balance.* *Justification for Coal Type Selection:* *- The steps used to calculate the EF OM have been included in the PD, and only Option A1 has been applied, with Options A2 and A3 excluded as required.* *- The results of the OM and BM have been stated and corrected in the PDD.* *- The coal type selected is "Other Bituminous Coal", justified by national and international technical evidence. Specific values from fuel suppliers are not available to the project participant, and no national CO_2 emission factors exist in the national energy balance. Therefore, IPCC default values (lower limit of the 95% confidence interval) are applied as a conservative approach. Furthermore, the official document Resolución Exenta N° 69 – Informe de Costos de Tecnologías de Generación (CNE, 2017) explicitly defines the standard fuel for coal-fired power plants in the National Electric System as "Bituminous Coal."* *- Based on this, the FE for the SEN has been adjusted accordingly. An Excel file in English has been attached, integrating all calculations and supporting evidence for OM, BM, and CM, including this adjustment. For Other Fuels (Diesel, Fuel Oil, Natural Gas, etc.): The emission factors are selected directly from the corresponding categories in Table 1.4 of the 2006 IPCC Guidelines.*
Additional comments	*The information in stored for 10 years from the end of the quantification period as per the MRV Tool*

Table 10: CO2 emission factor of fossil fuel

15.2.2 Data and parameters monitored

Data / Parameter	$EG_{PJ,facility,y}$
Data unit	*MWh/y*
Description	*Quantity of net electricity supplied to the grid in year y.*
Measured /Calculated /Default:	*Measured*
Source of data	*Measured by electricity meter(s) at the electricity delivery point.*
Value(s) of monitored parameter	*Total 2021 = 4,883.9* *Total 2022 = 26,607.3* *Total 2023 = 25,795.4* *Total 2024 = 26,584.5*
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	*Calculation of Baseline emissions. This parameter will be also used as an indicator of SDG 7 and SDG 13.*
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	*The energy meter is bidirectional type, model ION7400 from Schneider electric, accuracy class 0.2S active energy conforming to IEC 62053-22, serial number MR-2009A249-02, The calibration frequency according to the Chilean NTSyCS in its technical annex: Measurement systems for economic transfers and corresponds to a period of 7 years for this energy meter. The calibration date of this energy meter was on 03.09.2020 and the configuration date was on 26.08.2021. Calibration is valid until September 2027 as per the verification period stated in the NTSyCS.*
Measuring/ Reading/ Recording frequency	*Continuously*
Calculation method (if applicable)	*Not applicable as this parameter is measured.*

<table>
<tr><td>QA/QC procedures applied</td><td>According to the TOOL07, paragraph 102(c): "All measurements should be conducted with calibrated measurement equipment according to relevant industry standards."
The equipment used at the instance is calibrated and maintained in accordance with the Chilean Technical Norm of Security and Service Quality (NTSyCS) in accordance with the following minimum frequency: [13]
<table><tr><th>Meter Age</th><th>Verification Period</th></tr><tr><td>≤ 7 years</td><td>7 years</td></tr><tr><td>> 7 years and ≤ 10 years</td><td>5 years</td></tr><tr><td>> 10 years</td><td>3 years</td></tr></table>
The information provided by the instance is and cross-checked against public information when available. For this verification period, the Hourly Generation History by Plant report published by CEN was used.
The information is stored for 10 years from the end of the quantification period as per the MRV Tool</td></tr>
</table>

Table 11: Quantity of net electricity supplied

Data / Parameter	*SDG 8: Employment records*
Data unit	*Not applicable*
Description	*Employment in the construction and/or operation of the instance.*
Measured /Calculated /Default:	*Not applicable*
Source of data	*Employment records from owner or operator of projects.*
Value(s) of monitored parameter	*One job has been generated for the operation phase. Job contract was signed on 07.09.2021 and remains valid during the entire monitoring period.*

[13] https://www.cne.cl/wp-content/uploads/2015/06/Anexo-NT-Sistemas-de-Medidas-para-Transferencias-Econ%C3%B3micas.pdf

Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	*This indicator is not used for baseline/project/leakage emission calculations. The project creates jobs in the renewable energy sector; therefore, this parameter will be used as an indicator of SDG 8*
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	*Not applicable*
Measuring/ Reading/ Recording frequency	*Not applicable*
Calculation method (if applicable)	*Not applicable*
QA/QC procedures applied	*Review of employment records from the project*

Table 12: Employment records

Data / Parameter	*Hazard Identification, Risk Assessment, and Control Determination Matrix.*
Data unit	*Not applicable*
Description	*Decree Supreme No. 44*[14] *requires employers to prepare a Hazard Identification, Risk Assessment, and Control Determination Matrix for the identification of hazards and the evaluation of associated risks.*
Measured /Calculated /Default:	*Not applicable*
Source of data	*Document from owner or operator of projects.*
Value(s) of monitored parameter	*Not applicable*

[14] https://www.bcn.cl/leychile/navegar?idNorma=1205298

Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	*This indicator is not used for baseline, project, or leakage emission calculations. It is applied to monitor compliance with legal requirements and workplace policies designed to prevent unsafe working conditions that could expose project stakeholders to potential hazards or accidents.*
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	*Not applicable*
Measuring/ Reading/ Recording frequency	*Periodically*
Calculation method (if applicable)	*Not applicable*
QA/QC procedures applied	*Review of the updated matrix and verification of compliance with the operator's obligations under the Chilean laws and decrees.*

Table 13: Hazard matrix

16 Quantification of GHG emission reduction / removals

16.1 Baseline emissions

i. Justification of applicable scenarios

The baseline emissions for greenfield generation units, as described in AMS-I.D are the product of the electrical energy baseline expressed in MWh of electricity produced by the relevant renewable generation unit multiplied by the grid emission factor. The calculation procedure is shown in subsection ii, below.

- Relevant equations

$$BE_y = EG_{PJ,y} \cdot EF_{grid,y} \qquad \text{Equation (1)}$$

Where:

- BE_y = Baseline emissions in year y (tCO2)
- $EG_{PJ,y}$ = Quantity of net electricity supplied to the grid because of the implementation of the project activity in year y (MWh)
- $EF_{grid,y}$ = CO2 emission factor of the grid in year y (tCO2/MWh)

Greenfield power plants:

$$EG_{PJ,y} = EG_{PJ,facility,y} \quad \text{Equation (2)}$$

Where:

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

Calculation of the Baseline Emissions:

As per the calculations in the PD the following table presents the Emission factor for the SEN, applicable to Quetena Solar Park:**First period** EF_{CM}				
Technology	w_{OM}	w_{BM}	$EF_{CM,SEN}$	
Solar	0.75	0.25	0.5103	
Wind	0.75	0.25	0.5103	
Hydro	0.5	0.5	0.3404	

Table 14: EF_{CM} for the SEN

To calculate the baseline emissions, measurements from the on-site energy meter were utilized. For each year, Net Generation was derived by subtracting the aggregated energy withdrawals from the aggregated energy injections. Subsequently, the total Net Electricity Generation (in MWh) for the monitoring period was multiplied by the applicable SEN Grid Emission Factor to quantify the emission reductions. The resulting baseline emissions are detailed in the table below. Quetena Solar Park produced 4,883.9 MWh from 23.09.2021 to 31.12.2021, 26,607.3 MWh during 2022, 25,795.4 MWh during 2023 and 26,584.5 MWh during 2024, meaning that the Baseline Emissions during each year correspond to the following values:

Year	EF_CM (t CO2e/MWh)	Electricity generation (MWh)	Baseline Emissions (t CO2e)
2021	0.5103	4,883.9	2,492
2022	0.5103	26,607.3	13,578
2023	0.5103	25,795.4	13,163
2024	0.5103	26,584.5	13,566

Table 15: Baseline emissions

Due to data gaps in energy withdrawal measurements for May 2022, February 2023, March 2023, July 2023, and August 2024, a conservative approach was applied as established in the Project Design Document. Missing values were replaced with the maximum withdrawal value recorded during the respective years. Crucially, this substitution is applied only to intervals where the Active Energy Injection is zero. Since the meter records net energy, during generation hours (where Injection > 0), the site's self-consumption is already deducted from the gross generation. Therefore, applying an estimated withdrawal value during injection intervals would result in double-counting of consumption.

Regarding the generation values for January and February 2024, these do not match the values downloaded directly from the IGX meter measurements, which manages the Project's asset data. This discrepancy arises because IGX data, sourced from the Coordinator, does not report generation for certain days in those months. This was verified against the Coordinator's public 2024 report, which contains the same omission. A transparency request was submitted to the Coordinator for the complete dataset, and the received document confirms on-site energy meter values were correct when considered all days of this period..

16.2 Project emissions/removals

i. Justification of applicable scenarios

According to the methodology AMS-I.D "Grid connected renewable electricity generation" Version 18.0 solar renewable energy projects will have zero project emissions ($PE_y = 0$) irrespective of the grid to which the generated electricity will be delivered. This condition is applicable to any solar, wind or hydro without reservoirs renewable instance.

ii. Relevant equations

Project emissions will be calculated as follows:

$$PE_y = 0$$ Equation (5)

16.3 Leakages

As per AMS-I.D para. 42, leakage will be considered only for biomass project activities. Hence, no leakage emissions are considered for any instances under this project document.

16.4 Net GHG Emission Reductions / Removals

Emission reductions are estimated based on the small-scale methodology AMS-I.D para. 43 equation (9), and are calculated on an instance-by-instance basis as follows:

$$ER_y = BE_y - PE_y - LE_y$$ Equation (10)

Where:

- ER_y = Emission reductions in year y (t CO2/y).
- BE_y = Baseline Emissions in year y (t CO2/y).
- PE_y = Project emissions in year y (t CO2/y).
- LE_y = Leakage emissions in year y (t CO2/y).

Period	Baseline emissions / removals (tCO_2e)	Project emissions / removals (tCO_2e)	Leakage emissions (tCO_2e)	Net GHG emission reductions / removals (tCO_2e)
2021 (23-09-2021--31-12-2021)	*2,492*	*0*	*0*	*2,492*
2022	*13,578*	*0*	*0*	*13,578*

2023	*13,163*	*0*	*0*	*13,163*
2024	*13,566*	*0*	*0*	*13,566*
Total	*42,799*	*0*	*0*	*42,799*

Table 16: Net GHG emission reductions

This result, in concordance with the explanation provided in section 15.1 about error propagation, is calculated to have a relative half-width of 0.06%. Since this value is significantly below the 30% threshold, no adjustment for high uncertainty is required, in compliance with the *Tool "Conservative Approach and Uncertainty Management"* Version 1.0.

16.5 Comparison of actual emission reductions with estimates in the project document

The estimated ex-ante GHG emission reduction was stated to be approximately 13,608 tCO2e/y or a total of 44,552 tCO2e for this monitoring period. According to the calculations above, the total emission reduction was 42,799 tCO2e.

Year	Emission reduction achieved (tCO2e)	Emission reduction estimated (tCO2e)	Difference
2021	*2,492*	3,728	-33.1%
2022	*13,578*	13,608	-0.2%
2023	*13,163*	13,608	-3.3%
2024	*13,566*	13,608	-0.3%
Total	***42,799***	**44,552**	**-3.9%**

Table 17: Real and estimated emission reductions

16.6 Remarks on difference from estimated value in the registered project document

The deviation observed during the initial monitoring period (September–December 2021) may be explained by the early operational phase of the project, during which

commissioning activities, grid connection adjustments, or temporary dispatch limitations could have reduced the net energy delivered to the system.

As subsequent years (2022–2024) show generation results closely aligned with the expected values (deviations below 3.5%), this initial difference is likely related to start-up and integration conditions rather than to long-term technical or environmental factors.