

1st MONITORING REPORT

Document prepared by Coralia Environmental for Genneia



GENNEIA

Version 5.0 (23/06/2025)

Monitoring Report (Version 3.4)	
Name of project	Solar Parks in the Cuyo Region
BCR Project ID	BCR-AR-755-1-001
Registration date of the project activity	-
Project holder	GENNEIA S.A.
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Version number of the Project Document applicable to this monitoring report	Version 5.0 (07/05/2025)






Monitoring Report (Version 3.4)	
Applied methodology(ies)	ACM0002 v22.0
Project location (Country, Region, City)	Cuyo region Province of San Juan & Province of Mendoza Argentina
Project starting date	30/03/2023
Quantification period of GHG reductions/removals	7 years (30/03/2023 to 29/03/2030)
Monitoring period number	First (1 st) monitoring period
Monitoring period	30/03/2023 to 31/10/2024
Amount of emission reductions or removals achieved by the project in this monitoring period	123,470 tCO ₂ e
Contribution to Sustainable Development Goals	     SDG 7: Affordable and clean energy SDG 8: Decent work and economic growth SDG 12: Responsible consumption and production SDG 13: Climate action SDG 15: Life on land
Special category, related to co-benefits	Not Applicable.

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1 General description of project

The Solar Parks in the Cuyo region is a grouped renewable energy project located in Argentina, aimed at advancing clean energy production through solar power generation. Currently, this project includes two initial solar parks, Sierras de Ullum Solar Park (PSSU) and Tocota Solar Park (PSTO III), located in San Juan province within the Cuyo region, with plans for future expansions that could potentially include new parks in the neighboring province of Mendoza. Specifically, the Malargüe and Anchoris solar parks, situated in the Malargüe and Luján de Cuyo departments, are expected to join in subsequent project instances once they obtain commercial authorization.

This project's primary objective is to generate electricity from solar energy, a clean, renewable source that significantly mitigates greenhouse gas (GHG) emissions, addressing the global issue of climate change. By injecting solar energy to the National Energy Matrix, the project reduces dependence on fossil fuels, limiting carbon emissions and helping Argentina meet its renewable energy targets. National Law No. 27,191, which amended Argentina's Renewable Energy Law, mandates that renewable energy contribute 20% of the country's National Energy Matrix by 2025. Despite a gradual increase in renewable energy contributions, recent data indicates that Argentina must accelerate the implementation of renewable projects to meet this target, making the Cuyo solar parks an essential contribution toward achieving these goals.

The two initial parks of the grouped project—PSSU and PSTO III—are significant contributors to reducing carbon emissions. The PSSU, located in Ullum, San Juan, is projected to lower annual emissions by approximately 61,782 tons of CO₂ equivalent during its first quantification period. Similarly, PSTO III, located in Calingasta, San Juan, aims to achieve a reduction of 51,083 tons of CO₂ equivalent annually during its first quantification period.

The Cuyo Solar Parks project aligns closely with several Sustainable Development Goals (SDGs), notably SDG 7, which emphasizes affordable and clean energy. By displacing fossil fuel-based energy with solar energy, the project contributes to a cleaner national grid and supports Argentina's transition to a sustainable energy mix. Through job creation in the construction, operation, and maintenance of the solar parks, the project also advances SDG 8, promoting economic growth and financial inclusion. Furthermore, under SDG 12, the project incorporates waste recycling practices and transparent sustainability reporting, while its impact on climate action under SDG 13 reflects Argentina's commitment to the Paris Agreement's GHG reduction goals. Lastly, SDG 15 benefits from the project's land restoration and biodiversity preservation initiatives during its abandonment phase, ensuring the protection of local ecosystems.

Solar Parks in the Cuyo region address Argentina's energy needs, environmental goals, and sustainable development targets through a robust commitment to renewable energy. This project underscores the growing shift toward clean, reliable energy sources, which not only support environmental preservation but also drive socio-economic growth and a cleaner, more sustainable future for the region and beyond.

1.1 Sectoral scope and project type

The Solar Parks in the Cuyo region project falls under the sectoral scope of energy industries, which includes activities related to the production and use of renewable energy sources, such as solar power, to generate electricity. Considering that the project focuses on solar photovoltaic electricity generation, the project type is renewable energy.

Additionally, this project is classified as a grouped project. The grouped approach allows for the initial inclusion of two solar parks—PSSU and PSTO III—with potential expansions for new instances, such as the Malargüe and Anchoris solar parks in the province of Mendoza. This structure enables future solar parks to be added to the project as they are developed and commercially authorized, facilitating scalability and streamlined administration. In this regard, future instances will comply with the applicable requirements for grouped projects.

1.2 Project start date

According to the definitions established in section 11.4 of the BCR Standard, projects can only be certified and registered with the BCR Program if the start date is within the five years prior to the start of validation.

Since this is a grouped project, this condition must be met by each instance and solar power plant of the project independently.

Instance 01:

PSSU received its commercial authorization to start operations on the 30th of March of 2023; therefore, this is the date where real action regarding GHG emission reductions begun for PSSU.

PSTO III received its commercial authorization to start operations on the 30th of December of 2023; therefore, this is the date where real action regarding GHG emission reductions begun for PSTO III.

1.3 Project quantification period

Quantification periods consist of 7-year terms, renewable a total of two times over the duration of the project. Taking this into account, the first quantification period spans from 30th of March of 2023, to 29th of March of 2030.

1.4 Project location and project boundaries

The grouped renewable energy project is located in the Cuyo region in Argentina, encompassing Mendoza and San Juan provinces, an area known for its mountainous terrain and desert-like climate. The specific solar parks within this grouping, namely PSSU and PSTO III, are as follows:

1. **PSSU:** Situated on Provincial Route No. 54, at km 5.6, in Ullum, San Juan province. The site, accessible from San Juan city, lies 23.5 km northwest along Provincial Route No. 60, then 4.7 km north on Route No. 54. This area occupies 159 hectares with cadastral identification NC: 0730/210705, Fraction 2D, Plane 07-939-19. Geographic boundaries are defined by coordinates across six perimeter points.



Figure 1: Map with location of the PSSU project (green polygon). Source: Google Earth/GENNEIA S.A.

The vertices defining the perimeter of the project area are presented in the following table.

Vertex	Geographic Coordinates – WGS 84	
	Latitude	Longitude
1	31°22'17.17"S	68°40'19.12"W
2	31°22'17.06"S	68°39'36.95"W
3	31°22'54.70"S	68°39'36.89"W
4	31°23'3.87"S	68°39'52.11"W
5	31°23'3.94"S	68°40'19.26"W
6	31°23'3.17"S	68°40'21.16"W

Table 1: Coordinates of the boundaries of the PSSU site.

2. **PSTO III:** Located in Calingasta, San Juan province, approximately 65 km north of Calingasta via Provincial Route No. 412. The site spans 300 hectares at an altitude of 2,435 meters, encompassing cadastral fractions under nomenclature 1620-736440 and 1620-738458, Survey Plan 16-2611-15. Coordinates are outlined at four perimeter vertices, establishing its geographical boundary.

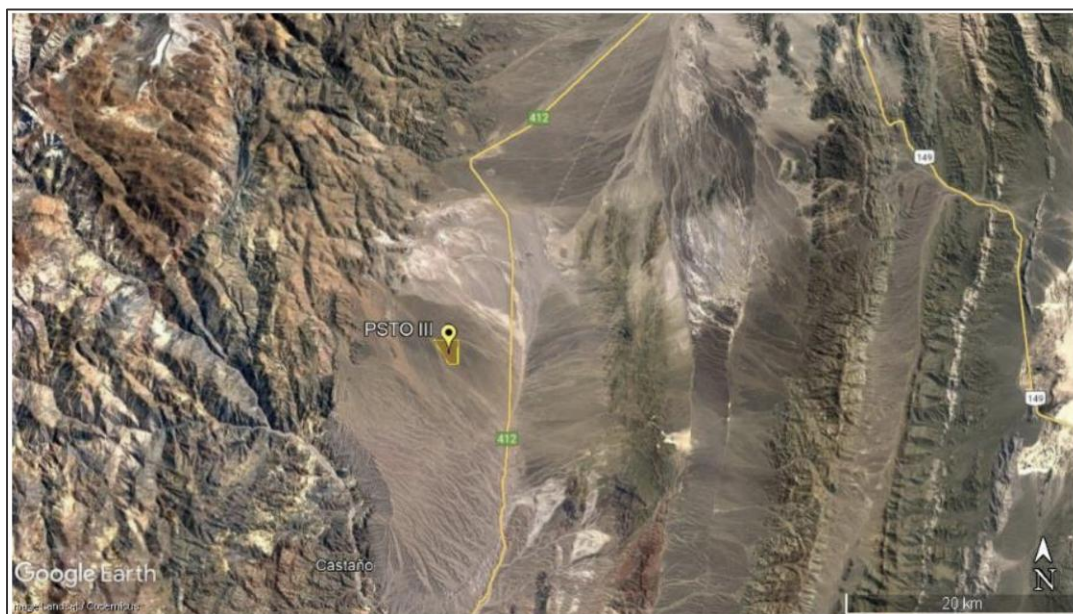


Figure 2: Map with location of the PSTO III project. Source: Google Earth/GENNEIA S.A.

The vertices defining the perimeter of the project area are presented in the following table.

Vertex	Geographic Coordinates – WGS 84	
	Latitude	Longitude
P1	30°48'36.85"S	69°29'11.96"W
P2	30°49'43.66"S	69°28'23.51"W
P3	30°49'43.77"S	69°27'52.87"W
P4	30°48'37.14"S	69°27'52.55"W

Table 2: Coordinates of the boundaries of the PSTO III site.

Regarding the spatial extent of the project boundary, ACM0002 states the following:

“The spatial extent of the project boundary includes the project power plant/unit and all power plants/units connected physically to the electricity system that the CDM project power plant is connected to.”

Having this into account, the defined spatial extent encompasses both the physical site of each solar plant (i.e. geographical limits of each solar park) and all the power plants connected to the SADI, as shown in the figure below.

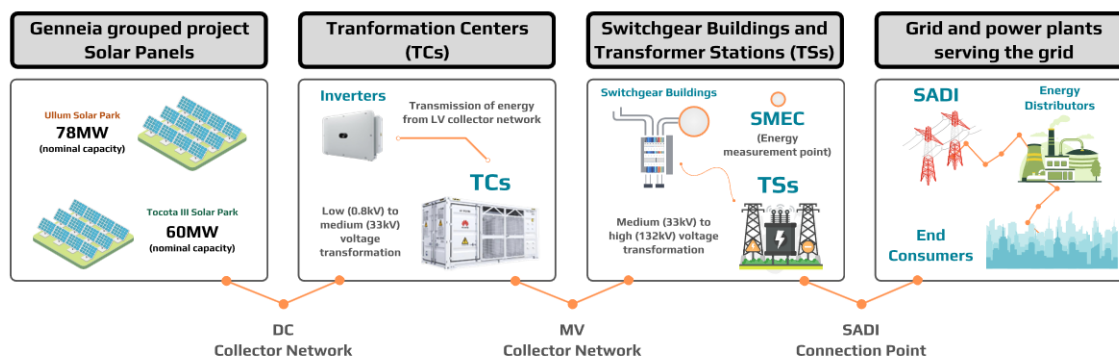


Figure 3: Diagram of project boundaries. Regarding both solar parks of Instance 01, the energy generated by the photovoltaic modules is collected by the DC current collector networks and transported to the inverters of each solar park, which are grouped into blocks and connected to transformation centers (TCs) to raise their voltage from low voltage to medium voltage (33kV). From the TCs, the energy is collected by the medium voltage (MV) network, which directs the energy to a switchgear building. This building houses underground 33 kV interconnection lines, as well as the necessary auxiliary service equipment for the plant, along with its control, protection, and measurement systems. The energy is then transmitted through these underground 33 kV interconnection lines to the medium-voltage busbars of each park's transformer station (TS), where it is finally evacuated into the SADI through high-voltage lines at the 132 kV level.

1.5 Summary Description of the Implementation Status of the Project

The PSSU and PSTO III solar parks are currently in operational status. The construction phase has been completed, and they have been in the operational phase since their commercial commissioning, with PSSU being commissioned on 30th March 2023 and PSTO III on 30th December 2023. The installed technologies, technical processes, and equipment used for the operation of both parks are described below:

PSSU

The control center is located outside the project area, in the existing Ullum 1, 2, and 3 Solar Parks premises (not included in this project), consolidating operations. A building serves as a control center and warehouse for the operation and maintenance of the Plant. The following image shows the location of the control center in relation to the PSSU project area.

After the conversion process takes place in the inverters and transformers cabins (from DC to AC), the final nominal power delivered by PSSU is 78 MW. This displaces an average of 173,153 MWh/year from the SADI (for the first quantification period), representing an average emissions reduction of 61,782 tCO₂e per year.

The solar park's own switching center is connected by an underground 33 kV medium voltage line (LMT) that also connects to the cells of the already operational Ullum Solar transformer station, owned by EPSE.

The following table summarizes the specific electrical characteristics of the selected photovoltaic module:

Photovoltaic Module Datasheet	
Manufacturer	JINKO
Model	JKM540M-72HL4-BDVP
Maximum Power	540 W
Maximum Power Voltage (Vmp)	41.13 V
Maximum Power Current (Imp)	13.89 A
Open Circuit Voltage (Voc)	49.73 V
Short Circuit Current (Isc)	13.89 A
Efficiency	20.94%
Maximum Power Temperature Coefficient	-0.35% / °C
Open Circuit Voltage Temperature Coefficient	-0.28% / °C
Short Circuit Current Temperature Coefficient	0.048% / °C
Maximum System Voltage	1,500 V
Total expected lifespan	30 years

Table 3: Technical characteristics of the selected module.

The photovoltaic modules are mounted on a single-axis movable structure, allowing tracking of the sun's rays from east to west for different times of the day to better harness the solar resource. The specific characteristics of the selected solar tracking system are as follows:

Technical data of the tracking system	
Manufacturer	ANTAI
Model	TAI SPACE
Tracking Type	Single Axis
Tracking Angle	+/- 60°
Mounting Type	1P

Table 4: Technical characteristics of the tracking system.

The park has a total of 14 identical blocks. Each block has 32 inverters according to the following table.

Block	AC Power @40°C (kVA)	DC Power @STC (kW)	Inverters per Block	Inverter Power @40°C (kVA)	Module Power @STC (W)	Modules per String	Strings per Inverter	Strings
1 to 14	6,500	5,806	32	204	540	28	12	384

Table 5: Inverters configuration.

The inverters have been selected to comply with grid codes for the Plant's nominal power, site operating conditions, and optimization of the available land for the Project. The specific characteristics of the selected inverters are as follows:

Inverter Datasheet	
Manufacturer	HUAWEI
Model	SUN2000-215 KTL-H3
Nominal Power (@25°C) kWac	215 W
Maximum Input Voltage Allowed	1,500 V
Maximum Input Current Allowed	30 A
MPPT Vmin	500 V
MPPT Vmax	1,500 V

Table 6: Technical characteristics of the inverter.

As previously mentioned, the inverters of the Solar Park are grouped into 14 blocks and they are connected to transformation centers (TCs) to raise their voltage from low voltage to medium voltage. The TCs have a three-winding step-up transformer, two low-voltage switchboards for connecting the inverters, a medium-voltage switchgear for connection to the medium-voltage collector network, and other components necessary for auxiliary services.

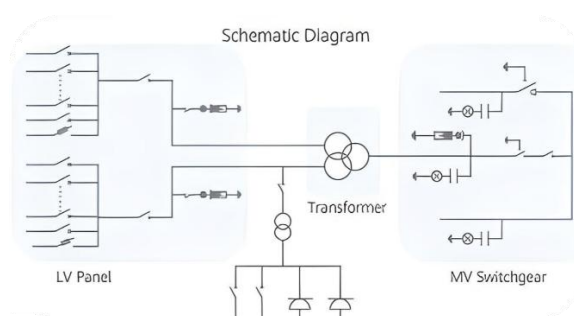


Figure 4: TCs typical connection diagram.

The Solar Park consists of three types of collector networks, namely:

- Direct current collector network consisting of Solar type copper cables, where one section is mounted on the tracking structures and the other section buried to the inverters.
- Low-voltage collector network consisting of three-core aluminum cables insulated in cross-linked polyethylene. They are installed directly buried between inverters and transformation centers.
- Medium-voltage collector network consisting of single-core aluminum cables insulated in cross-linked polyethylene. They are installed directly buried between TCs and medium-voltage collector bars of the solar park.

The overall operation scheme of the solar park is the following:

The energy generated by the photovoltaic modules is collected by the DC current collector networks and transported to the inverters of the Solar Park, which are grouped into 14 blocks and connected to transformation

centers (TCs) to raise the voltage from low to medium. From the TCs, the energy is transmitted to the park's own switchgear building. From there, two underground lines, approximately 320 meters in length, extend beneath National Route No. 54, connecting to the cells of the Ullum Solar transformer station (TS), owned by EPSE, where the voltage is finally raised to high-voltage and evacuated into the SADI at the 132 kV level. It is worth noting that the switchgear building houses not only the two underground lines, but also the necessary auxiliary equipment for the plant, as well as the control, protection, and measurement systems of the solar park. The electromechanical installation plans and the project layout are attached in Annex 01.

PSTO III

The operation and maintenance office are located within the PSTO III project area, at the central coordinates 30°49'37.52"S; 69°28'2.50"W. Operational structures are installed for the operation and maintenance (O&M) of the Plant, including a parking lot, a warehouse, and a site for waste disposal. The following image shows the location of the O&M office in relation to the PSTO III project area.

After the conversion process takes place in the inverters and transformers cabins (from DC to AC), the final nominal power delivered by PSTO III is 60 MW. This displaces an average of 143,169 MWh/year from the SADI (for the first quantification period), representing an average emissions reduction of 51,083 tCO₂e per year.

The solar park's own switching center will be connected by two underground 33 kV medium voltage lines (LMT) that will connect to the cells of the Tocota transformer station, owned by EPSE.

The following table summarizes the specific electrical characteristics of the selected photovoltaic module for PSTO III solar park:

Photovoltaic Module Datasheet	
Manufacturer	JINKO
Model	JKM565N-72HL4-BDV
Maximum Power	540 W
Maximum Power Voltage (V _{mp})	42.14 V
Maximum Power Current (I _{mp})	13.41 A
Open Circuit Voltage (V _{oc})	50.87 V
Short Circuit Current (I _{sc})	14.19 A
Efficiency	21.87%
Maximum Power Temperature Coefficient	-0.30% / °C
Open Circuit Voltage Temperature Coefficient	-0.25% / °C
Short Circuit Current Temperature Coefficient	0.046% / °C
Maximum System Voltage	1,500 V
Total expected lifespan	30 years

Table 7: Technical characteristics of the selected module.

The photovoltaic modules are mounted on a single-axis mobile structure, allowing them to track the sun from east to west throughout the day, aiming to maximize solar resource utilization. The specific characteristics of the selected solar tracking system are as follows:

Technical data of the tracking system	
Manufacturer	ARCTECH
Model	SKYLINE I
Tracking Type	Single Horizontal Axis
Tracking Angle	+/- 60°
Mounting Type	Direct piling/predrilling

Table 8: Technical characteristics of the tracking system.

The park inverters are grouped in blocks, with a total of 540 inverters according to the following table.

Block	AC Power @40°C (MW)	DC Power @STC (MWp)	Total Inverters	Inverter Power @40°C (kVA)	Module Power @STC (W)	Modules per String	Strings per Inverter	Strings
Complete Park	100	107.09	540	215	565	27	13	7,020

Table 9: Inverter configuration.

The inverters have been selected to comply with grid codes for the Plant's nominal power, site operating conditions, and optimization of the available land for the Project. The specific characteristics of the selected inverters are shown in table 6, since the technology and model is the same as for the PSSU project. These inverters, which are grouped into blocks, are connected to the Transformation Centers (TCs) to raise their voltage from low voltage to medium voltage.

The specific characteristics of the selected TCs are as follows:

Technical specifications of the TCs	
Manufacturer	HUAWEI
Model	STS-6000K-H1
Nominal Power (40° C)	6500 kVA
AC Voltage on LV Side	0.8 kV
AC Voltage on MV Side	33 kV

Table 10: Characteristics of PSTO III TCs.

The TCs feature a three-winding step-up transformer, two low-voltage panels for connecting the inverters, a medium-voltage switchgear for connection to the medium-voltage collector network, an auxiliary power transformer, and other components necessary for auxiliary services. The TCs connection diagram is shown in figure 4.

The plant consists of three types of collector networks, namely:

- Direct Current (DC) Collector Network: composed of Solar-type copper cables, part of which are mounted on the tracking structures and the other part buried to the inverters.
- Low Voltage (LV) Collector Network: composed of cross-linked polyethylene insulated aluminum triplex cables. They are directly buried between inverters and transformer stations. The voltage level is 0.8 kV.
- Medium Voltage (MV) Collector Network: composed of aluminum single-core cables insulated in cross-linked polyethylene. They are directly buried between the transformer stations and medium-voltage collector bars of the Plant. The voltage level is 33 kV.

The overall operation scheme of the Solar Park is the following:

The energy generated by the photovoltaic modules is collected by the DC current collector networks and transported to the inverters of the Solar Park, which are grouped into blocks and connected to transformation centers (TCs) to raise their voltage from low voltage to medium voltage. From the TCs, the energy is collected by the medium voltage network through six (6) 33 kV collector branches, which direct the energy to the switchgear building. This building houses two (2) underground 33 kV interconnection lines, as well as the necessary auxiliary service equipment for the plant, along with its control, protection, and measurement systems. The energy is then transmitted through these two underground 33 kV interconnection lines to the medium-voltage busbars of the Tocota TS, located to the south of the solar park, where the voltage finally raised to high-voltage and evacuated into the SADI at the 132 kV level. The electromechanical installation plans and the project layout are attached in Annex 01.

Total GHG emission reductions achieved in this monitoring period was 123,556 tCO₂e.

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

The steps, requirements and equations outlined in the ACM0002 "Large-scale Consolidated Methodology: Grid-connected electricity generation from renewable sources" (v22.0) were followed, and GHG emissions reduction calculations were derived accordingly from this methodology.

Additionally, the applicability conditions included in the following tools were applied:

- TOOL01 v7.0.0: Tool for the demonstration and assessment of additionality
- TOOL05 v3.0: Tool to calculate baseline, project and/or leakage emissions from electricity consumption
- TOOL07 v7.0: Tool to calculate the emission factor for an electricity system
- TOOL23 v03.0: Additionality of first-of-its-kind project activities

- TOOL24 v03.1: Tool for common practice
- TOOL27 v14.0: Tool for Investment analysis

3 Double Counting and Participation under Other GHG Programs

The “Avoiding Double Counting” Tool v2.0 of the BCR standard (from now on, ADC Tool) defines a set of requirements and principles to avoid the double counting of emission reductions or removals.

In this regard, project holder ensures that none of the four scenarios/conditions described in the ADC Tool are met in this grouped project, aligned with the scope of the ADC Tool that prohibits the accounting, issuance and retirement of GHG mitigation results that meet any of those four scenarios/conditions described by the ADC Tool.

Regarding the provisions in place to avoid the double issuance of VCC, it is worth noting that this grouped project has not been included or registered in any other GHG program and that the emission reductions accounted for (in the form of avoided tons of CO₂e) will be issued for the first and only time as Verified Carbon Credits (VCC) under the BCR Standard. Also, the “Framework Contract signed between the Biocarbon’s Registry and Project Holders” addresses this topic by prohibiting, in its Seventh clause, Double Accounting and the double issuance of VCC.

The project activity has no potential project overlap with other policies, programs, and mechanisms (i.e. I-RECs), such as emission trading programs and the Paris Agreement.

4 Contribution to Sustainable Development Goals (SGD)

During this monitoring period, the renewable energy project significantly contributed to Sustainable Development Goals (SDGs) through activities in solar photovoltaic energy generation and associated social & environmental initiatives.

The project's ongoing development supports **SDG 7** by increasing renewable energy's share in the national grid (SADI), directly impacting Global Indicator 7.2.1 by generating measurable megawatt-hours (MWh) of clean energy that displaces fossil fuel-based electricity, thereby advancing Argentina's transition toward sustainable energy. Monitoring and reporting for **SDG 7** are conducted through continuous meter readings and CAMMESA reports. During this monitoring period, a total of 346,046 MWh were injected to SADI by the solar parks of Instance 01 operating under this grouped project (refer to the first table of section 15.2.2 of this document).

Additionally, the project enhanced economic growth and employment (**SDG 8**) by creating jobs within the solar parks of Instance 01 during this monitoring period, positively affecting GDP per employed person during this monitoring period (Indicator 8.2.1, refer to “Employment records” table in section 15.2.2 of this document). Employment records track the creation of stable jobs that promote financial inclusion (Indicator 8.10.2) by enabling workforce access to banking and financial services, since all employees of the solar parks create a new bank account when contracted.

In waste management (**SDG 12**), recycling and waste reduction strategies were implemented during this first monitoring period, ensuring sustainable material handling during all project phases, aligning with Indicator 12.5.1 (refer to the tables “Residues reused and repurposed locally” and “Response to Hazardous Waste Spill” in section 15.2.2 of this document).

For climate action (**SDG 13**), the project complies with Argentina’s climate laws and plans (National Promotion Scheme for the Use of Renewable Energy Sources for Electricity Generation Law or “Law No. 27,191”, and the National Climate Change Adaptation and Mitigation Plan for 2030 or “PNAyMCC”^A), helping to meet Indicator 13.2.1 through renewable energy integration. During this monitoring period, training programs were conducted to bolster local climate resilience and awareness, aligning with Indicators 13.3.1 and 13.3.2 (refer to tables “Attendance of online training sessions”, “Internships provided to regional school students” and “Residues reused and repurposed locally” in section 15.2.2 of this document).

Lastly, **SDG 15** is supported through land restoration during the project’s abandonment phase, addressing Indicator 15.3.1. Since neither PSSU nor PSTO III are currently in their abandonment phase, this SDG was not monitored in this monitoring period.

Regarding nationally stated sustainable development priorities, these were initially established by Argentina in the 2030 Agenda adopted in September 2015, committing the country to the achievement of the 17 SDGs^B. However, on September 24, 2024, during the general debate of the 79th Session of the United Nations General Assembly in New York, the Argentine President indicated a shift in the country’s approach to sustainable development priorities^C. As Argentina is currently in the process of redefining its nationally stated sustainable development priorities, it is not yet possible to assess this grouped project’s contribution to these priorities within the current monitoring period.

^A Law No. 27,191 can be accessed through the [following link](#). PNAyMCC can be accessed through the [following link](#).

^B Nationally sustainable development priorities established by the [2030 Agenda](#) can be found in the [following link](#).

^C Official President’s speech can be found in the [following link](#).

5 Compliance with Applicable Legislation

Genneia ensures compliance with relevant legislation and regulations related to this grouped project through a structured process managed by its dedicated Legal Team. The Legal Team identifies applicable law and monitors updates and amendments. A periodic review process is in place to assess compliance, integrating regulatory changes into operational practices. The team collaborates across departments to ensure alignment with legal standards, demonstrating a proactive and robust approach to regulatory compliance. This procedure is part of the Documentary Management System controlled by the company's legal team.

Information of the organizational structure of the legal team and the procedures for periodic review of relevant legislation and regulations is available in Annex 01, that will be provided to the CAB.

Relevant laws that directly impact project activities are outlined below, along with the justification for the project's compliance with each in the case of solar parks of Instance 01 (for future Instances the same process will be followed).

Law	Description	Justification for Compliance
No. 24,065 (National Law)	Legal aspects related to the Wholesale Electricity Market (MEM) and its rights and obligations.	The Argentine Secretariat of Energy, on behalf of the National Executive Power of the Republic of Argentina, authorized GENNEIA S.A. to operate as a MEM agent for the PSSU solar park under Resolution RESOL-2022-804-APN-SE#MEC and for the PSTO III solar park under Resolution RESOL-2023-861-APN-SE#MEC. Both resolutions were included in the folder titled "MEM Agent Authorizations" in Annex 06 of the PD.
No. 6,634 (Provincial San Juan Law)	General Environmental Law: Guiding principles for the preservation, conservation, protection, and improvement of the provincial environment.	Both solar parks, PSSU and PSTO III, conducted environmental impact assessments (EIAs) prior to construction to ensure compliance with all environmental criteria. These assessments were provided in Annex 07 of the PD. The Environmental Impact Statement (DIA) approving the EIAs was issued by the State Secretariat of Environment and Sustainable Development under RES 1009-SEAyDS-2021 for PSSU and RES 1564-SEAyDS-2024 for PSTO III. For PSSU, the statement expired in November 2024, prompting the Provincial Energy Entity (EPSE) of San Juan to submit an official request for its renewal. The resolutions and the request are available in Annex 01.

Table 11: Compliance with relevant laws for solar parks of Instance 01.

The grouped project demonstrates compliance with applicable legislation and international commitments during this monitoring period through comprehensive adherence to environmental and social regulations across all stages of its solar park's development. This includes following environmental management guidelines in design, construction, operation, and maintenance to minimize environmental impact and uphold quality criteria that ensure compatibility with the local ecosystem. All project activities are governed by current environmental regulations, underscoring a commitment to legal compliance and robust management structures.

Additionally, the project adheres to the protection of communities that may be impacted by the project activities. This involves ensuring protection of Indigenous Peoples' rights, as established in the United Nations Declaration

on the Rights of Indigenous Peoples and ILO Convention 169. This compliance is specifically applied through coordination with the National Institute of Indigenous Affairs (Instituto Nacional de Asuntos Indígenas, INAI)^D, Argentina's authority on Indigenous affairs. The two initial solar parks of Instance 01 of this grouped project (PSSU & PSTO III) are located in the province of San Juan, where the Huarpe people represent 1.8% of the provincial population. However, according to the National Register of Indigenous Communities (Re.Na.C.I.) of INAI, there are no registered indigenous communities within the project areas or neighboring departments, indicating no overlap with Indigenous territories or claims in PSSU or PSTO III project sites^E, thereby validating project activities within the scope of environmental and social legislative requirements.

Moreover, the project aligns with Argentina's national legal framework promoting renewable energy, supporting a regulatory commitment to reduce greenhouse gas emissions by transitioning towards sustainable energy sources.

6 Climate change adaptation

Genneia has implemented environmental impact assessments for both PSSU and PSTO III which included various climate change adaptation measures derived from the GHG project activities. These assessments involved the development of an environmental management plan that included the identification of potential environmental impacts, covering the construction, operation and maintenance, and abandonment phases of each solar park.

Below is a summary of the measures implemented during this monitoring period regarding climate change adaptation, and the results of their monitoring are included in section 15.2.2, using the corresponding indicators.

Impacted Factor	Stage	Adaptation measures implemented	Indicator
Water	Entire projects' lifecycle	Proper maintenance of hydric protections was made to reduce the possibility of water accumulation during the operation of the solar park in this monitoring period.	Number of floodings in each solar park

^D <https://www.argentina.gob.ar/interior/inai>

^E Servicio informativo de San Juan (29/20/2020) "Pueblos originarios buscan la reglamentación del Consejo Consultivo Indígena Provincial". Available in: <https://sisanjuan.gob.ar/desarrollo-humano-y-promocionsocial/2020-10-29/27019-pueblos-originarios-buscan-la-reglamentacion-del-consejo-consultivo-indigena-provincial>

Portal Argentina (28/09/2021) "El INAI firmó un convenio con la provincia de San Juan para el relevamiento territorial de comunidades indígenas". Available in: <https://www.argentina.gob.ar/noticias/el-inafirmo-un-convenio-con-la-provincia-de-san-juan-para-el-relevamiento-territorial-de>

Socio-economic	Construction, Operation, and Abandonment	When weather conditions pose a risk to personnel, equipment, or other environmental factors, operations were suspended until the risk no longer exists.	Report on operational suspensions due to weather
Adaptation measure implemented			Indicator
Weekly SHyMA Stakeholder Meetings: Implementing weekly and monthly meetings during this monitoring period with safety, occupational health, and environmental stakeholders from contracting companies aims to enhance collaborative efforts. These meetings address action plans and mitigation strategies for the project's main occupational and environmental risks.			SHyMA meeting attendance and minutes
Emergency Drills: Conducting yearly emergency drills focusing on raising awareness, fostering commitment, and practicing responses to such events among staff. These drills include action plans for scenarios related to extreme weather events, demonstrating strong contractor commitment and preparedness.			Emergency drill reports.

Table 12: Climate change adaptation measures covered by the environmental management plans for both PSSU and PSTO III and implemented during this monitoring period.

7 Carbon ownership and rights

GENNEIA S.A. is the sole owner of the solar parks and, consequently, the sole owner of the grouped project, including the associated carbon rights. GENNEIA S.A. holds full land-use rights for the area in which the solar parks are located. To ensure transparency and compliance with legal frameworks, GENNEIA S.A. has verified that no indigenous or local traditional communities reside in or have territorial claims within the project area, as confirmed in Sections 4 and 9 of the Project Document. Additionally, the company has confirmed that no legal requirement for prior consultation was necessary, as no communities were identified within the area of influence.

8 Environmental Aspects

To ensure environmental sustainability, an environmental impact assessment was carried out for each solar park of the initial instance of this grouped project (PSSU and PSTO III). Actions and corrective measures to prevent and/or mitigate the environmental impacts resulting from the project activities were defined as part of an environmental management plan included in the environmental impact assessment of each solar park.

To address environmental safeguard risks that may arise from this grouped project's activities, the assessment questionnaire from Annex A of the Sustainable Development Safeguards Tool v1.1 of the BCR Standard was

completed in Section 8 of the Project Description Document. Each question was answered with appropriate justification, and indicators were set to monitor the proposed measures.

All environmental safeguards were followed during this first monitored period to ensure no net-harm to the environment. Environmental aspects monitored during this monitoring period were:

Response to Hazardous Waste Spill: Procedures were in place to contain and remediate hazardous waste spills using spill kits, which included absorbent powder, diatomaceous earth, and tools for safe collection and disposal of contaminated materials. A total of 11 hazardous waste spills were documented in PSTO III, while no spills occurred in PSSU. All incidents in PSTO III were non-significant and managed in compliance with hazardous waste regulations (Law 24,051 (Hazardous Waste) Regulatory Decree 831/93 and Provincial Law 522-L and RD 1211/07).

Bacteriological and Physicochemical Quality of Water for Human Consumption: Water quality monitoring ensured compliance with national standards. Sampling results met the expected parameters, such as the absence of coliforms, *Escherichia coli*, and other harmful bacteria, along with acceptable physicochemical values for pH, chlorine, and other substances.

Report of Mitigation Measures for Bird Incidents: Monitoring tracked bird strikes to evaluate the effectiveness of mitigation measures. The qualitative assessment of incidents ensured that strategies were in place to minimize impacts on bird populations, especially during peak migration periods.

Traffic and Road Safety Hazards: Traffic safety protocols, including defensive driving practices and convoy travel methods, were implemented to manage road hazards. Despite these efforts, one traffic incident occurred in PSSU and another in PSTO III, with responses documented in Annex 12, that will be provided to the CAB.

Wildlife and Habitat Impacts during Construction and Abandonment Phases: Environmental monitoring of wildlife and habitats found no significant impacts in either PSSU or PSTO III. The assessment included noise disturbances, waste management, and habitat reduction, with scoring systems used to evaluate potential impacts.

PM₁₀ (Respirable Thoracic Particulate Matter): PM₁₀ concentrations ($<0.05 \text{ mg/m}^3$) were monitored during PSTO III construction using certified equipment, with results well below regulatory limits (3 mg/m^3) and WHO guidelines (0.05 mg/m^3). Monitoring occurred once at the 50% construction stage at three perimeter locations. Although no data was collected for PSSU, PSTO III results are considered a valid proxy due to shared geographic and methodological conditions. This ensures compliance with environmental standards, mitigates health risks, and supports SDG 11.

For more information, the monitoring results for all defined environmental indicators are detailed in Section 15.2.2.

9 Socioeconomic Aspects

To ensure socio-economic sustainability, an environmental impact assessment was carried out for each solar park of the initial instance of this grouped project (PSSU and PSTO III). Actions and corrective measures to prevent and/or mitigate the socio-economic impacts resulting from the project activities were defined as part of a socio-economic management plan included in the environmental impact assessment of each solar park.

To address socio-economic safeguard risks that may arise from this grouped project's activities, the assessment questionnaire from Annex A of the Sustainable Development Safeguards Tool v1.1 of the BCR Standard was completed in Section 8 of the Project Description Document. Each question was answered with appropriate justification, and indicators were set to monitor the proposed measures.

All socio-economic safeguards were followed during this first monitored period to ensure no net-harm to the local communities and society in general. Social aspects monitored during this monitoring period were:

Traffic and Road Safety Hazards: During the monitoring period, traffic and road safety hazards were addressed through the implementation of protocols outlined in the “Manejo Defensivo Protocolo.pdf” and “Viaje metodo CONVOY - PSTO III.docx” to enhance vehicular safety within the solar park areas. These documents are provided in Annex 12, which will be available to the CAB. Despite these measures, one traffic incident was reported for PSSU and one for PSTO III. These incidents were documented in the file “Monitoreo de situaciones en los parques 2023_2024.xlsx” in Annex 12, which also details the corrective actions taken to address the situations. Also, a training session was conducted to reintroduce safe driving practices for personnel traveling to PSTO III, aiming to prevent incidents as speeding from occurring in the future and evidence of this session is available in Annex 12.

Community Mental Health and Well-being: Community mental health and well-being were monitored through the collection of complaints and concerns via designated communication channels, with no complaints recorded for PSSU and 1 for PSTO III. The complaint received for PSTO III was made by the Gendarmería in the town of Villanueva regarding excessive speeds by personnel traveling to the solar park. In response, a training session was conducted to reintroduce safe driving practices for personnel traveling to the parks, aiming to prevent such incidents from occurring again in the future. These efforts were tracked and managed using the file “Seguimiento Mental Health and Well-being.xlsx”, and evidence of the training provided to ensure safe driving practices by park personnel is included in the document “Reinducción Conducción Segura y Velocidades - Reclamo Social Mayo 2024.pdf”. Both documents are available in Annex 09, which will be submitted to the CAB.

For more information, the monitoring results for all defined socio-economic parameters are detailed in Section 15.2.2.

GENNEIA S.A. has verified that no indigenous or local traditional communities reside in or have territorial claims within the project area, as confirmed in Sections 4 and 9 of the Project Document.

10 Stakeholders' Consultation

The stakeholder consultation process is thoroughly documented below, detailing methods for identifying and engaging local stakeholders, with information regarding feedback received, and specifying mechanisms for ongoing communication with stakeholders:

- (a) The stakeholder engagement and consultation process for Genneia's solar park projects followed the Integrated Management System (SIG) guidelines (available in Annex 02, which will be provided to the CAB), designed to ensure that stakeholder interests are addressed, risks identified, and mitigation measures implemented. The process was detailed and structured, beginning with a thorough stakeholder identification and context analysis for each solar park. This information was documented in a context and stakeholder analysis matrix for each park and stored in different spreadsheets.
- (b) The analysis included both internal and external factors impacting the project. External context elements included factors like the social atmosphere in nearby communities, political and market conditions, and environmental considerations. Internal context factors involved elements like organizational goals, worker health, and workplace safety.
- (c) Next, stakeholders were identified, including all individuals and groups with potential positive or negative influence over project activities. These included local communities, suppliers, emergency services, public agencies, unions, and media outlets. Each stakeholder's needs and expectations were documented, with additional details added if multiple needs were identified. This careful stakeholder mapping was aimed at understanding the influence, interest, and impact each party might have on the project, facilitating effective risk and opportunity assessment.
- (d) The risk and opportunity identification phase followed, which considered internal, external, and stakeholder-related factors. Risks were logged in each park's spreadsheet with specific categorization, description, and evaluation columns. Evaluations were based on likelihood and impact, with results ranked as high, medium, or low priority. High-priority issues required action plans with defined control measures to mitigate risks or capitalize on opportunities, while medium-priority risks had existing control measures, and low-priority risks required no action.
- (e) Subsequent steps involved defining and implementing action plans for high-priority risks and opportunities. These plans outlined necessary actions, resource requirements, responsible parties, deadlines, and implementation status. Departments such as Sustainability, Human Resources, Corporate Affairs, Operations, and Procurement participated in developing and confirming these action plans.
- (f) Once risks and opportunities were defined, the information was communicated to stakeholders, who were invited to review and provide feedback on the proposed action plans. Stakeholders' responses were addressed as part of a continuous internal follow-up process, fostering transparency and maintaining open channels for feedback throughout the project lifecycle.

(g) Following the construction phase of each solar park of Instance 01 of the grouped project, criteria for ongoing monitoring were established. Monitoring ensures that all actions are completed as planned and on time, with progress documented in a monitoring spreadsheet. Any necessary adjustments to action plans are also recorded. This structured process ensures that Genneia's solar projects operate transparently, effectively managing stakeholder concerns, potential risks, and improvement opportunities.

During this monitoring period, a total of 10 comments were received. The summary of all comments received is provided in the table below:

#	Solar Park	Reception Date	Stakeholder	Comment
1	PSSU	13/10/2023	Emanuel Avecilla - E.P.E.T N°7 San Juan	Requested to give a talk at a school
2	PSSU	22/09/2023	Marcos Ojeda - Marcos Ojeda	Requests for information for a thesis
3	PSSU	14/03/2024	Mirta Bruna - Mirta Bruna	Requests for a visit
4	PSTO III	29/05/2024	Alejandro Gustavo Paz - Escuadrón "25" Gendarmería "Jachal"	Requests for equipment for solar installation
5	PSSU	27/07/2024	Erica Molina - Escuela Especial Múltiple Ullum	Requests for toys for Children's Day
6	PSSU	04/07/2024	Usina de Ullum	Requests for sponsorship for the Renewable Energy room
7	PSSU	26/07/2024	Erica Molina - Escuela Especial de Ullum	Requests for donation
8	PSTO III	25/04/2024	Martín Lazaga - Puesto Gendarmería Villanueva	Complaint about speeding
9	PSTO III	04/06/2024	Yoel Aguilera - Delegación Municipal	Requests for donation
10	PSSU	13/08/2024	Francisco Rossomando - Universidad Nacional de San Juan	Requests for donation

Table 13: Summary of all comments received following the communication regarding the construction of each solar park to relevant stakeholders, up until the project start date.

The table below provides a clear overview of the considerations and actions taken for each comment.

#	Stakeholder	Response Date	Consideration and response to comment	Status
1	Emanuel Avecilla - E.P.E.T N°7 San Juan	06/11/2023	The E.P.E.T N°7 invited PSSU personnel to set up a booth or give a talk at the Open Fair of Technical Education in San Juan. They also expressed future interest in coordinating a visit and internships on-site. The communication and sustainability department is reviewing the proposal to move forward. On 06/11, it was decided to proceed with the talk.	Solved
2	Marcos Ojeda - Marcos Ojeda	22/09/2023	The inquiry was received, and the environmental department is reviewing the responses.	In progress

3	Mirta Bruna - Mirta Bruna	14/03/2024	It is informed that visits must be coordinated based on site availability. Once the formal note with the necessary details is received, possible dates for visits will be coordinated.	In progress
4	Alejandro Gustavo Paz - Escuadrón "25" Gendarmería "Jachal"	05/06/2024	They requested batteries and regulators for a solar installation. As the installation is located at Cerro Huachi, approximately 200 km from our area of influence, it was decided not to proceed with the support.	Solved
5	Erica Molina - Escuela Especial Múltiple Ullum	31/07/2024	A volunteer campaign for the purchase of new toys is under consideration. On 01/08, it was decided to proceed with the campaign and provide educational games.	Solved
6	Usina de Ullum	05/07/2024	Request for support in constructing the Renewable Energy room for the Usina de Ullum.	Solved
7	Erica Molina - Escuela Especial de Ullum	28/07/2024	They requested toys for a Children's Day campaign. A volunteer initiative will be carried out, and educational toys will also be provided to the school.	In progress
8	Martín Lazaga - Puesto Gendarmería Villanueva	10/05/2024	Following the comment, the issue was escalated to the SHyMA department.	Solved
9	Yoel Aguilera - Delegación Municipal	01/07/2024	The purchase of tools for the circular economy workshop will proceed.	Solved
10	Francisco Rossomando - Universidad Nacional de San Juan	26/08/2024	They request educational equipment. It was informed that this will be reviewed next year due to budget considerations.	In progress

Table 14: Summary of considerations and actions taken in response to the comments received from stakeholders.

More information is provided in Annex 02, which contains a detailed record of all comments in the “Seguimiento QCyR.xlsx” spreadsheet. Each comment has been resolved in a timely and appropriate manner, with updates provided in the “Status” column of the “Tratamiento y Cierre” section, ensuring clear and ongoing communication with all stakeholders.

11 REDD+ Safeguards

Not applicable.

12 Special categories related to co-benefits

Not applicable.

13 Implementation of the project

13.1 Implementation status of the project

PSSU received its commercial authorization to start operations on the 30th of March of 2023; therefore, this is the date where real action regarding GHG emission reductions begun for PSSU.

PSTO III received its commercial authorization to start operations on the 30th of December of 2023; therefore, this is the date where real action regarding GHG emission reductions begun for PSTO III. Thus, both solar parks of Instance 01 are operational since the beginning of this monitoring period.

It is important to mention that during this monitoring period, PSTO III experienced curtailment, which led to a decrease in expected performance and, consequently, lower energy generation by the solar park. This curtailment occurred due to oscillations caused by an issue in the carrier's grid. The curtailment has affected all solar parks connected to the same node (Bauchaceta node).

Specifically, the curtailment was due to the maximum operating limit of 300 MW for the Bauchaceta node with coupled bars. Initially, PSTO III had a dispatch limitation of 40 MW. However, following a request from YPF for priority dispatch (Category A), PSTO's dispatch was reduced to 14 MW while the dispatch capacity for Zonda YPF increased.

An analysis of curtailment percentages made by Genneia shows that while TOCOTA III maintained similar historical curtailment levels after March 23, there were no curtailment limitations for the Zonda solar park starting from that date. This change coincided with an adjustment in priority dispatch by CAMMESA. Additionally, the analysis highlights that during peak generation, the total power injected into the Bauchaceta node reached 300 MW, fully utilizing the maximum capacity. Evidence of this analysis can be found in the file "Curtailment - Cadena de mails.pdf" available in Annex 05 (provided to the CAB).

Efforts are underway to address these limitations in the short term through the installation of additional equipment and the optimization of operational parameters, including tension control (132 kV and 33 kV), ramp rates for active and reactive power, and adjustments to proportional-integral (PI) loop gains. These measures aim to reduce the impact of curtailment and ensure more efficient and stable operation of the solar park within the existing grid constraints. Evidence of this can be found in the file "Medidas Curtailment - Cadena de mails.pdf" available in Annex 05 (provided to the CAB).

It is important to mention that there have not been events or situations that occurred during the monitoring period, which may impact the applicability of the ACM0002 methodology.

13.2 Changes after the GHG project registration

13.2.1 Temporary deviations

No temporary changes from the registered monitoring plan, the applied methodologies, or other BCR regulatory documents were registered during this monitoring period.

13.2.2 Permanent Changes

13.2.2.1 Corrections

No corrections to project information or parameters that were fixed at the registration of the project activity were made.

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

No permanent changes to the monitoring plan, BCR program methodologies in use, or other regulatory documents related to BCR program methodologies were made during this monitoring period.

13.2.2.3 Changes to GHG project design

No changes to the GHG project design were made during this monitoring period.

14 Grouped Projects

No new instances were added during this monitoring period.

15 Monitoring system

15.1 Description of the monitoring plan

The monitoring plan provides a comprehensive framework that ensures accurate and consistent data collection and management throughout the project's lifecycle. It outlines the monitoring structure, including the roles and responsibilities of key personnel, and specifies the critical parameters to be monitored, such as greenhouse gas (GHG) emissions, energy generation, and resource usage. Additionally, the plan details the monitoring practices that will be employed, ensuring alignment with industry standards and regulatory requirements. It also covers the

procedures for quality assurance and quality control (QA/QC) to ensure the integrity and reliability of the collected data. This includes calibration of monitoring equipment, periodic audits, and validation processes to detect and correct any anomalies or deviations. Furthermore, the plan specifies protocols for data storage, archiving, and security, ensuring that all information is preserved in a manner that facilitates future reporting, verification, and potential audits. All these activities are carried out in strict accordance with the approved methodology ACM0002 v22.0, which governs large-scale grid-connected renewable energy projects, and the BCR Tool for Monitoring, Reporting, and Verification (MRV) v1.0, ensuring full compliance with international best practices and standards.

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

To estimate GHG emission reductions for this first monitoring period, the combined margin emission factor (CM) and the net electricity generated during the monitored period were utilized.

1. **Combined Margin Emission Factor (CM):** The combined margin emission factor was determined *ex-ante* in accordance with Option a of Step 6 of TOOL07 v7.0 under the Clean Development Mechanism (CDM). This calculation used the previously determined Operating Margin (OM) and Build Margin (BM) emission factors, as outlined in TOOL07 paragraphs 81(a), 83, and 86(a).

The CM value was calculated using the weighted contributions of OM and BM following the methodology described in TOOL07. This parameter was validated at the start of the project and remains fixed for the first quantification period, thus no updates or adjustments to the *ex-ante* value were necessary for this monitoring period.

2. **Net Electricity Generated During the Monitored Period:** The net electricity generated during the period was determined through direct measurement using SMEC (electricity meters) installed in the switchgear buildings of each solar park (refer to Figure 3). The data is collected and recorded by CAMMESA.
 - **Monitoring Frequency:** Measurements are continuous, with recordings taken at least monthly. Typically, data is read every 24 hours using telemetering technology (remotely).
 - **Monitoring Equipment:** High-precision metering panels installed in the switchgear buildings of each solar park include both a primary and a redundant meter. These meters are connected to transformers in the metering cell and comply with precision classes 0.2s/0.5r. They are equipped with certified tariff discriminators, built-in recorders, communication modems, and protection mechanisms.
 - **QA/QC Procedures:** Meter verification is conducted in accordance with national authority regulations (CAMMESA). The recorded generation values are published by CAMMESA, which is the electricity

wholesale market management company^F. The configuration of the metering panels enables accurate measurement, recording, and remote or local data retrieval by CAMMESA, ensuring precise and reliable monitoring of energy generation to verify emission reductions.

- **Archiving:** All monitoring data is electronically archived and will be retained for at least two years following the conclusion of the final quantification period.

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

Baseline emissions (**BE_y**) are derived using the following equation:

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

Where:

- **BE_y** = Baseline emissions in year y (tCO₂/year)
- **EG_{PJ,y}** = Quantity of net electricity generation produced and supplied to the grid as a result of the implementation of the CDM project activity in year y (MWh/year)
- **EF_{grid,CM,y}** = Combined margin CO₂ emission factor for grid-connected power generation in year y, calculated using **TOOLo7** (tCO₂/MWh)

Considering this equation, and as described in section (a), the only parameter monitored during this period was the net electricity generation (EG_{PJ,y}). The detailed process for monitoring this parameter, including its measurement methodology, frequency, QA/QC procedures, and equipment specifications, has already been outlined in section (a).

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

Not applicable as per paragraph 71 of ACM0002 v22.0.

^F The historical reports published by CAMMESA can be accessed through the following link: <https://cammesaweb.cammesa.com/historico-sintesis-mensual-2024/>. Specifically, the database file "BASE_INFORME_MENSUAL_2024-10.zip" was downloaded, and the spreadsheet "Generación local mensual.xlsx," located within the "Bases_Oferta_INFORME_MENSUAL" folder, was used.

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

As previously mentioned in section 8 of this monitoring report, to address environmental safeguard risks that may arise from this grouped project's activities, the assessment questionnaire from Annex A of the Sustainable Development Safeguards Tool v1.1 of the BCR Standard was completed in Section 8 of the Project Description Document. Each question was answered with appropriate justification, and indicators were set to monitor the proposed measures.

All environmental safeguards were followed during this first monitored period to ensure no net-harm to the environment. In this context, details on the assessment and monitoring results for all defined environmental parameters are included in Section 15.2.2.

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

Regarding energy generation, each solar park of Instance 01 is equipped with two primary electricity meters and two redundant backup meters to ensure accurate measurement in case the primary meters fail. In the event of any meter failure, the project holder will follow the procedures outlined in the "Sistema de Medición Comercial" (SMEC)^G and CAMMESA regulations^H. Additionally, if any other emergency prevents accurate measurement of power generation or if data is lost due to a monitoring failure, no emission reductions will be claimed for that period until the meters are functioning correctly again and reliable data is available.

More information about the quality control and quality assurance procedures for all the data monitored is available in section 15.2.2.

(f) description of the methods defined for the periodic calculation of GHG reductions or removals and leakage;

Already outlined in sections (a) and (c).

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

The organizational structure described in Section 16.1 of the PD outlines the roles and responsibilities of each team member responsible within the monitoring plan for the proper implementation and execution of the Monitoring,

^G <https://cammesaweb.cammesa.com/inicio-smec/>

^H <https://cammesaweb.cammesa.com/normativa/>

Reporting, and Verification (MRV) of project activities. Each role and its responsibilities are detailed in the corresponding Job Description Form. These forms are available in Annex 03.

15.2 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,OM,y} (<i>ex-ante</i> value)
Data unit	tCO ₂ /MWh
Description	Operating Margin emission factor
Source of data used	Argentine Secretariat of Energy (see section 3.7.3 of the PD)
Value(s)	0.447 (<i>ex-ante</i> calculation; data vintage: 2021-2023)
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	Calculation of baseline emissions
Justification of choice of data or description of measurement methods and procedures applied	<i>Ex-ante</i> Simple Operating Margin option of Step 3 of the TOOL07 v7.0 has been chosen using last available data for the period 2021-2023 provided by the Argentine Secretariat of Energy from information collected by CAMMESA.
Additional comments	This emission factor will be kept fixed for the first quantification period. For the subsequent quantification periods, this factor will be updated based on the most recent three historical years for which data is available at the time of submission of the request for renewal of the quantification period to the CAB and BCR technical committee.

Data / Parameter	EF _{grid,BM,y} (<i>ex-ante</i> value)
Data unit	tCO ₂ /MWh
Description	Build Margin emission factor
Source of data used	Argentine Secretariat of Energy (see section 3.7.3 of the PD)
Value(s)	0.086 (<i>ex-ante</i> calculation; data vintage: 2023)
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	Calculation of baseline emissions
Justification of choice of data or description of measurement methods and procedures applied	Option 1 of Step 5 of the TOOL07 v7.0 has been chosen using last available data (year 2023) provided by the Argentine Secretariat of Energy from information collected by CAMMESA.
Additional comments	This emission factor will be kept fixed for the first quantification period. For the subsequent quantification periods, this factor will be updated based on the most

	recent information available at the time of submission of the request for renewal of the quantification period to the CAB and BCR technical committee.
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Data / Parameter	EF_{grid,CM,y} (weighted average)
Data unit	tCO ₂ /MWh
Description	Combined Margin emission factor
Source of data used	Calculated using OM and BM and following TOOL07 (see section 3.7.3 of the PD)
Value(s)	0.357 (<i>ex-ante</i> calculation; data vintage: 2023)
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	Calculation of baseline emissions
Justification of choice of data or description of measurement methods and procedures applied	Option a of Step 6 of the TOOL07 v7.0 has been chosen using previously calculated OM and BM emission factors, following paragraphs 81(a), 83 and 86(a).
Additional comments	This emission factor will remain fixed for the first quantification period. For the subsequent quantification periods, it will be updated based on the new values for both the Operating Margin and Build Margin emission factors.

15.2.2 Data and parameters monitored

Estimation of GHG emission removals or reductions

Data / Parameter	EG _{PJ,y}																		
Data unit	MWh/year																		
Description	Net electricity generated in the year y																		
Measured/Calculated/Default	Measured																		
Source of data	SMEC records																		
Value(s) of monitored parameter	<table><tr><th>Year</th><th>Solar Park</th><th>EG_{PJ,y}</th></tr><tr><td>2023</td><td rowspan="2">PSSU</td><td>122,827 MWh</td></tr><tr><td>2024</td><td>142,487 MWh</td></tr><tr><td>2023</td><td rowspan="2">PSTO III</td><td>57 MWh</td></tr><tr><td>2024</td><td>80,675 MWh</td></tr><tr><td colspan="2">Total for this monitoring period</td><td>346,046 MWh</td></tr></table>			Year	Solar Park	EG _{PJ,y}	2023	PSSU	122,827 MWh	2024	142,487 MWh	2023	PSTO III	57 MWh	2024	80,675 MWh	Total for this monitoring period		346,046 MWh
	Year	Solar Park	EG _{PJ,y}																
	2023	PSSU	122,827 MWh																
	2024		142,487 MWh																
	2023	PSTO III	57 MWh																
	2024		80,675 MWh																
	Total for this monitoring period		346,046 MWh																
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 (7.2.1) and SDG 13 (13.2.1).																		
Monitoring equipment (type, accuracy class, serial number,	High-precision metering panels are installed in each solar park's switchgear building. These panels include both two primary meters and two redundant meters as back-up, both of which are connected to transformers in the metering cell. The meters are of precision class 0.2s/0.5r and are equipped with certified tariff discriminators, built-in																		

calibration frequency, date of last calibration, validity)	recorders, communication modems, and protection equipment. The characteristics of the meters are shown below:						
	Meter Description	Type	Accuracy class	Serial Number	Calibration frequency*	Last calibration date	Validity*
	SDULM71P	Primary meter	0.2s	MW-1806A010-02	Established by CAMMESA	13/09/2023	Established by CAMMESA
	SDULM71C	Back-up meter	0.2s	MW-1806A013-02	Established by CAMMESA	13/09/2023	Established by CAMMESA
	SDULM72P	Primary meter	0.2s	MW-1806A022-02	Established by CAMMESA	13/09/2023	Established by CAMMESA
	SDULM72C	Back-up meter	0.2s	MW-1806A033-02	Established by CAMMESA	13/09/2023	Established by CAMMESA
	TOC3M71P	Primary meter	0.2s	MW-2302A475-02	Established by CAMMESA	18/01/2024	Established by CAMMESA
	TOC3M71C	Back-up meter	0.2s	MW-2302A476-02	Established by CAMMESA	18/01/2024	Established by CAMMESA
	TOC3M72P	Primary meter	0.2s	MW-2210A126-02	Established by CAMMESA	17/01/2024	Established by CAMMESA
	TOC3M72C	Back-up meter	0.2s	MW-2210A121-02	Established by CAMMESA	17/01/2024	Established by CAMMESA
*Refer to QA/QC Procedures for more information.							
All calibration certificates for the SMECs are available in Annex 04.							
Measuring/Reading/Recording frequency	Continuous measurement and at least monthly recording. Typically, the measured data is read once every 24 hours using tele-metering technology (remotely).						
Calculation method (if applicable)	Direct measurement with the SMEC (electricity meters installed at the switchgear building of each solar park, see Figure 3), and data is collected by CAMMESA.						
QA/QC Procedures applied	<p>The verification of the meters is done as established by the national authorities (CAMMESA)¹. In this regard, the generation values were obtained from public reports issued by CAMMESA¹, as the measurements recorded by the SMEC are collected by CAMMESA and published on its website on a monthly basis.</p> <p>The setup of the metering panels allows accurate measurement, recording, and remote or local data download by CAMMESA, ensuring precise and reliable monitoring of energy generation for emission reduction verification⁶.</p> <p>Since CAMMESA is the national electricity wholesale market management company, it is not necessary to cross-check these generation values.</p>						

¹ CAMMESA establishes measurement quality audits to ensure the accuracy of data used in economic transactions among MEM agents and the reliability of records collected by the SMEC. As the responsible party, CAMMESA conducts equipment tests and verifications either directly or through third-party contracts. A field audit system is in place to monitor MEM agents' actions at their SMEC measurement points, verify compliance with current standards, and ensure the quality of the recorded information. These verifications are performed on a random basis, and until a verification is completed, CAMMESA continues to consider the meter as verified. Detailed information on this process is available on [CAMMESA's dedicated website](#).

² The historical reports published by CAMMESA can be accessed through the following link: <https://cammesaweb.cammesa.com/historico-sintesis-mensual-2024/>. Specifically, the database file "BASE_INFORME_MENSUAL_2024-10.zip" was downloaded, and the spreadsheet "Generación local mensual.xlsx," located within the "Bases_Oferta_INFORME_MENSUAL" folder, was used. With that spreadsheet, the files provided in Annex 05 "Generación local Mensual PSSU.xlsx"; "Generación local Mensual PSTO III.xlsx" were created. The net electricity generation calculated in those files was then exported to the spreadsheet "Baseline and Net GHG Emission Reductions Calculations.xlsx" in Annex 05.

⁶ Regarding calibration frequency and validity, verifications are conducted randomly¹. Until a new verification is performed, CAMMESA considers the SMEC as valid and verified based on the most recent calibration.

Climate change adaptation

Data / Parameter	Number of floodings
Data unit	-
Description	Tracks the occurrence of floodings during solar parks lifetime.
Measured/Calculated/Default	N/A.
Source of data	Annex 06: "Monitoreo de situaciones en los parques 2023_2024.xlsx"
Value(s) of monitored parameter	# of floodings documented: PSSU : 0 ; PSTO III : 1
Indicate what the data are used for (Baseline/Project/Leakage emission calculations)	This indicator is not used for baseline/project/leakage emission calculations. Flooding records reflect any adverse weather conditions that occurred during the period. This indicator is used to assess the effectiveness, during solar parks lifetime, of drainage planning and soil movement control during construction.
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	N/A.
Measuring/Reading/Recording frequency	Regularly during all stages of each solar park, especially after significant weather events.
Calculation method (if applicable)	N/A.
QA/QC Procedures applied	Reports were verified by safety officers and correlated with weather data.

Data / Parameter	Report on operational suspensions due to weather
Data unit	N/A (qualitative assessment).
Description	Documents instances where operations were suspended due to weather conditions and the impact on personnel, equipment, or the environment.
Measured/Calculated/Default	N/A.
Source of data	Annex 06: "Monitoreo de situaciones en los parques 2023_2024.xlsx"
Value(s) of monitored parameter	N/A (qualitative assessment).
Indicate what the data are used for (Baseline/Project/Leakage emission calculations)	This indicator is not used for baseline/project/leakage emission calculations. This indicator is used to evaluate the effectiveness of weather-related safety protocols in protecting personnel and the environment.
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	N/A.
Measuring/Reading/Recording frequency	Continuous, with reports generated after each suspension event.
Calculation method (if applicable)	N/A.
QA/QC Procedures applied	Reports were verified by safety officers and correlated with weather data.

Data / Parameter	SHyMA meeting attendance and minutes
Data unit	-
Description	Tracks attendance and content of weekly meetings to address safety, health, and environmental risks.
Measured/Calculated/Default	N/A.
Source of data	<p>Within Annex 07, the following files are included:</p> <ul style="list-style-type: none"> The file “Planificación – PSSU.xlsx”, which contains a Gantt-style schedule with all planned PSSU meetings (both executed and rescheduled), along with a breakdown of the total number of meetings generated, by area (Avance tab), and other relevant details (Notas tab). The file “Planificación – PSTO III.xlsx”, which contains a Gantt-style schedule with all planned PSTO III meetings (both executed and rescheduled), along with a breakdown of the total number of meetings generated, by area (Avance tab), and other relevant details (Notas tab). <p>The folder “Fotos,” which provides photographic evidence of some meetings conducted during the monitored period.</p>
Value(s) of monitored parameter	# of meetings held: PSSU: 133 ; PSTO III: 81
Indicate what the data are used for (Baseline/Project/Leakage emission calculations)	This indicator is not used for baseline/project/leakage emission calculations. This indicator is used to ensure regular stakeholder engagement in safety and environmental risk management.
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	N/A.
Measuring/Reading/Recording frequency	At least weekly during the project activities.
Calculation method (if applicable)	N/A.
QA/QC Procedures applied	No QA/QC procedures were applied.

Data / Parameter	Emergency drill reports
Data unit	-
Description	Records the completion of yearly emergency drills focused on extreme weather events.
Measured/Calculated/Default	N/A.
Source of data	Annex 07: includes drill procedures (“Procedimiento Simulacros de Emergencia.pdf”), drill reports (“Drill Report 1 - PSTO III - LLamado de emergencia.pdf”; “Drill Report 2 - PSTO III - Respuesta ante accidente.pdf”; “Drill Report 1 - PSSU - Simulacro ante emergencia nocturna.pdf”), a timeline with the planification and execution of drills (“Planificación – PSSU.xlsx” ; “Planificación – PSSU.xlsx”), and photographic evidence of the drills (“Fotos” folder).
Value(s) of monitored parameter	# of drills conducted: PSSU: 1 ; PSTO III: 2

Indicate what the data are used for (Baseline/Project/Leakage emission calculations)	This indicator is not used for baseline/project/leakage emission calculations. This indicator is used to ensure preparedness for extreme weather events through regular emergency drills.
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	N/A.
Measuring/Reading/Recording frequency	Annually.
Calculation method (if applicable)	N/A.
QA/QC Procedures applied	Drill reports were made to ensure the effectiveness of drills conducted.

SDSs and SDGs

Data / Parameter	Attendance of online training sessions
Data unit	-
Description	Tracks the number of individuals from the local community who participated in the "Energizate" Program training sessions.
Measured/Calculated/Default	N/A.
Source of data	Annex 08: "Detalle cursos brindados.pdf"
Value(s) of monitored parameter	# of participants in the training programs: 31.
Indicate what the data are used for (Baseline/Project/Leakage emission calculations)	This indicator is not used for baseline/project/leakage emission calculations. This indicator is used to assess community engagement and the reach of training programs implemented. This parameter will be also used as an indicator of SDG 13 (13.3.1 and 13.3.2).
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	N/A.
Measuring/Reading/Recording frequency	After each training session.
Calculation method (if applicable)	N/A.
QA/QC Procedures applied	Attendance records were accurately maintained and stored for future reference.

Data / Parameter	Internships provided to regional school students
Data unit	N/A (qualitative assessment).
Description	Monitors the internships offered to students from regional schools under the Professional Internships program.
Measured/Calculated/Default	N/A.
Source of data	Annex 08: "Convenio Prácticas profesionalizantes EPET7.pdf".

Value(s) of monitored parameter	N/A (qualitative assessment).
Indicate what the data are used for (Baseline/Project/Leakage emission calculations)	This indicator is not used for baseline/project/leakage emission calculations. This indicator is used to measure the involvement of local students in renewable energy projects. This parameter will be also used as an indicator of SDG 13 (13.3.2).
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	N/A.
Measuring/Reading/Recording frequency	Annually, or per internship cycle.
Calculation method (if applicable)	N/A.
QA/QC Procedures applied	-

Data / Parameter	Residues reused and repurposed locally
Data unit	N/A (qualitative assessment).
Description	Tracks if waste material was reused and repurposed locally as part of Circular Economy Courses.
Measured/Calculated/Default	N/A.
Source of data	Annex 08: "Informe final Curso Economía Circular.pdf"; "Donación Juguetes.pdf"; "Donación Herramientas.pdf"; "Donación Madera.jpeg"; "Donación Madera 2.jpeg"; "Donación Pallets"; "Donación Sierra Sin Fin.pdf" ^L .
Value(s) of monitored parameter	N/A (qualitative assessment).
Indicate what the data are used for (Baseline/Project/Leakage emission calculations)	This indicator is not used for baseline/project/leakage emission calculations. This indicator is used to measure the effectiveness of the Circular Economy Courses in reducing waste and provide evidence of the implemented courses. This parameter will be also used as an indicator of SDG 12 (12.5.1) and SDG 13 (13.3.1 and 13.3.2).
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	N/A.
Measuring/Reading/Recording frequency	Periodically, based on waste collection and repurposing cycles.
Calculation method (if applicable)	N/A.
QA/QC Procedures applied	-

^L The waste materials generated from the project activities were donated to various entities as part of the circular economy program, for recycling and reuse.

Data / Parameter	Employment Records
Data unit	N/A (qualitative assessment).
Description	Employment in the construction, operation, and maintenance of solar parks.
Measured/Calculated/Default	N/A.
Source of data	Annex 08: "Listado Personal Operación – PSSU y PSTO III.xlsx"; "Listado Personal Construcción – PSSU.xlsx"; "Listado Personal Construcción – PSTO III.xlsx".
Value(s) of monitored parameter	N/A (qualitative assessment).
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 (8.2.1).
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	N/A.
Measuring/Reading/Recording frequency	Continuous throughout all phases of solar parks.
Calculation method (if applicable)	N/A.
QA/QC Procedures applied	-

Data / Parameter	Response to Hazardous Waste Spill
Data unit	-
Description	Procedures for containing and remediating hazardous waste spills, including the collection of contaminated materials and disposal. This includes the use of spill kits with absorbent powder, diatomaceous earth, and a plastic shovel for the collection and safe disposal of affected soil (if any).
Measured/Calculated/Default	N/A.
Source of data	Annex 10: "Hazardous Waste Spills Matrix – PSSU.xlsx" & "Hazardous Waste Spills Matrix – PSTO III.xlsx" ^M .
Value(s) of monitored parameter	# of Hazardous Waste Spills documented: PSSU: 0 ; PSTO III: 11

^M No hazardous waste spills were recorded during the monitored period for PSSU. For PSTO III, 11 hazardous waste spills were recorded. Annex 10 includes the matrices ("Hazardous Waste Spills Matrix – PSSU.xlsx" and "Hazardous Waste Spills Matrix – PSTO III.xlsx"), which document the monitoring of all potential spill sources, and the spills recorded during the monitored period. The matrix uses a scoring system that evaluates the frequency, extent, toxicity, magnitude, reversibility, and affected resources by each spill, assigning a score that, if greater than 14, classifies the spill as significant. Spills were categorized as either "Normal" or "Emergency" based on whether the spill resulted from routine activities at the solar parks or represented an emergency due to an unexpected spill. Of the 11 spills recorded in PSTO III, none were significant, and the corresponding procedures for containing and remediating hazardous waste spills, including the collection of contaminated materials (if any) and disposal were followed in compliance with current legal regulations for hazardous waste management: Ley 24051 (Residuos Peligrosos) Dto Reglam. 831/93 & Ley Provincial 522-L y DR 1211/07.

Indicate what the data are used for (Baseline/Project/Leakage emission calculations)	This indicator is not used for baseline/project/leakage emission calculations. This indicator is used to ensure proper containment, remediation, and disposal of hazardous waste spills. This parameter will be used as an indicator of an environment SDS and SDG 12 (12.5.1).
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	N/A.
Measuring/Reading/Recording frequency	As spills occurred.
Calculation method (if applicable)	N/A.
QA/QC Procedures applied	Proper disposal of contaminated material was verified as per company procedures and environmental regulations ^M .

Data / Parameter	Bacteriological and Physicochemical Quality of Water for Human Consumption
Data unit	<u>Bacteriological Parameters:</u> Presence/Absence (e.g., Coliforms, Escherichia coli), CFU/ml (e.g., Pseudomonas aeruginosa, Mesophilic bacteria) <u>Physicochemical Parameters:</u> mg/ml or pH units.
Description	Monitoring the bacteriological and physicochemical quality of water in designated areas to ensure compliance with national standards and safe consumption during project activities.
Measured/Calculated/Default	Measured
Source of data	Annex 06: "Certificado de Analisis de agua Mayo - PSTO III.pdf"; "Certificado de Analisis de agua Mayo - PSSU.jpg"; "Certificado de Analisis de agua Julio - PSSU.pdf"; "Certificado de Analisis de agua Agosto - PSSU.pdf".
Value(s) of monitored parameter	<u>Expected values:</u> (According to Ley Nacional N° 19.587 – Decreto Reglamentario N° 351/79 – Anexo I Artículo 58) <u>Bacteriological Parameters:</u> Coliforms Bacteria: Absence/100 ml Escherichia coli: Absence/100 ml Pseudomonas aeruginosa: Absence/100 ml Mesophilic bacteria: <10 CFU/ml <u>Physicochemical Parameters:</u> pH (6,5 – 8,5), amonio (0,2 mg/lit); cadmio (0,005 mg/lit); cinc (5 mg/lit); cloro residual (0,2mg/lit); cloruro (350 mg/lit); cobre (1 mg/lit); fluoruro (1,7 mg/lit); sólidos disueltos totales (1500 mg/lit) y sulfatos (400 mg/lit). The results are included in Annex 06.
Indicate what the data are used for (Baseline/Project/Leakage emission calculations)	This indicator is not used for baseline/project/leakage emission calculations. This indicator is used to ensure that water used in the project complies with national water quality standards to protect human health. This parameter will be used as an indicator of an environmental SDS.
Monitoring equipment (type, accuracy class, serial number,	Not applicable since measuring involves laboratory analysis.

calibration frequency, date of last calibration, validity)	
Measuring/Reading/Recording frequency	At least once for each solar park during this monitoring period.
Calculation method (if applicable)	Laboratory analysis following Standard Methods (e.g., SM 9221 B, SM 4500 H-B).
QA/QC Procedures applied	Laboratory analysis following Standard Methods (e.g., SM 9221 B, SM 4500 H-B) and tolerated limits are based on Ley Nacional N° 19.587- Decreto Reglamentario N° 351/79 – Anexo I Artículo 58.

Data / Parameter	Report of mitigation measures for bird incidents
Data unit	N/A (qualitative assessment).
Description	Tracks the incidents of bird strikes against construction elements, monitoring the effectiveness of mitigation measures.
Measured/Calculated/Default	N/A.
Source of data	Annex 11: "Monitoreo de situaciones en los parques 2023_2024.xlsx"
Value(s) of monitored parameter	N/A (qualitative assessment).
Indicate what the data are used for (Baseline/Project/Leakage emission calculations)	This indicator is not used for baseline/project/leakage emission calculations. This indicator is used to reduce and monitor the impact of the project on bird populations. This parameter will be used as an indicator of an environment SDS.
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	N/A.
Measuring/Reading/Recording frequency	Regular monitoring, frequency may increase during peak migration periods.
Calculation method (if applicable)	N/A.
QA/QC Procedures applied	Not applicable since acceptable levels for bird strikes were not exceeded.

Data / Parameter	Traffic and Road Safety Hazards
Data unit	-
Description	Monitoring traffic flow and road safety hazards during project activities, particularly during construction phases.
Measured/Calculated/Default	N/A.

Source of data	Annex 12: "Monitoreo de situaciones en los parques 2023_2024.xlsx"; "Manejo Defensivo Protocolo.pdf"; "Viaje metodo CONVOY - PSTO III.docx" ^N .
Value(s) of monitored parameter	# of traffic incidents within the project areas: PSSU: 1 ; PSTO III: 1
Indicate what the data are used for (Baseline/Project/Leakage emission calculations)	This indicator is not used for baseline/project/leakage emission calculations. This indicator is used to manage and minimize the impact of project-related traffic on local infrastructure and road safety. This parameter will be used as an indicator of an environmental and a social SDS.
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	N/A.
Measuring/Reading/Recording frequency	Throughout the construction phase and during major maintenance activities.
Calculation method (if applicable)	N/A.
QA/QC Procedures applied	N/A.

Data / Parameter	Wildlife and Habitat Impacts during Construction and Abandonment Phases
Data unit	N/A (qualitative assessment).
Description	Assessment of wildlife and habitat impacts during the construction and abandonment phases, focusing on habitat reduction, noise disturbances, and waste management.
Measured/Calculated/Default	N/A.
Source of data	Annex 11: "Registro de Fauna - PSSU 2024.xlsx"; "Registro de Fauna - PSTO III 2023.xlsx"; "Registro de Fauna - PSTO III 2024.xlsx"; "Wildlife and Habitats impacts matrix - PSSU.xlsx"; "Wildlife and Habitats impacts matrix - PSTO III.xlsx"; "Monitoreo de situaciones en los parques 2023_2024.xlsx".
Value(s) of monitored parameter	<u>Significant impacts documented</u> ^O : PSSU: 0 ; PSTO III: 0

^N Files "Manejo Defensivo Protocolo.pdf" and "Viaje metodo CONVOY - PSTO III.docx" in Annex 12 include the implemented protocols aimed at ensuring the safety of vehicular transportation within the areas of the solar parks. However, despite adhering to these protocols, one traffic incident was recorded for PSSU and one for PSTO III during the monitoring period. The file "Monitoreo de situaciones en los parques 2023_2024.xlsx" provides a description of these two incidents and outlines the procedures undertaken in response to them.

^O No significant wildlife and habitat impacts were recorded during the monitored period for PSSU and PSTO III. Annex 11 includes the matrices ("Wildlife and Habitats impacts matrix - PSSU.xlsx" and "Wildlife and Habitats impacts matrix - PSTO III.xlsx"), which document the monitoring of all potential impact sources, and the impacts recorded during the monitored period. The matrix uses a scoring system that evaluates the frequency, extent, toxicity, magnitude, reversibility, and affected resources by each possible impact, assigning a score that, if greater than 14, classifies the impact as significant. Impacts were categorized as either "Normal" or "Emergency" based on whether it resulted from routine activities at the solar parks or represented an emergency due to an unexpected impact. Of the 123 impact sources monitored in PSSU, none were significant. Of the 54 impact sources monitored in PSTO III, none were significant.

Indicate what the data are used for (Baseline/Project/Leakage emission calculations)	This indicator is not used for baseline/project/leakage emission calculations. This indicator is used to minimize the adverse effects of project activities on local wildlife and habitats. This parameter will be used as an indicator of an environmental SDS.
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	N/A.
Measuring/Reading/Recording frequency	Continuous throughout the project activity.
Calculation method (if applicable)	N/A.
QA/QC Procedures applied	Environmental monitoring will include regular reviews and adjustments to mitigation measures as necessary. Relevant laws were followed for every impact monitored.

Data / Parameter	PM10 (Respirable Thoracic Particulate Matter)						
Data unit	mg/m³						
Description	Monitoring of PM10 concentrations at specified locations during construction activities to assess potential health impacts.						
Measured/Calculated/Default	Measured						
Source of data	Annex 13: “Air Quality Results.pdf”; “Air Quality Monitoring – Methodological Procedures.pdf”; “Calibration Certificates.pdf”.						
Value(s) of monitored parameter	< 0.05 mg/m³ for the three tested samples. Results in Annex 13 ^p : “Air Quality Results.pdf”.						
Indicate what the data are used for (Baseline/Project/Leakage emission calculations)	This indicator is not used for baseline/project/leakage emission calculations. This indicator is used to ensure that PM10 levels do not exceed regulatory guidelines and to mitigate any potential health risks to workers and nearby communities. This parameter will be used as an indicator of an environmental SDS.						
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	Information on the equipment used to measure PM10 is shown below:						
	Equipment Description	Type	Accuracy class	Serial Number	Calibration frequency	Date of last calibration	Validity
	Balance	Analytic	0.0001g	D450012779	Before each sampling.	02/12/2022	Until next sampling.

^P Although air quality measurements should have been conducted for both PSSU and PSTO III, the monitoring was carried out exclusively for PSTO III. However, these measurements can be considered a valid proxy for PSSU, given that both projects are located in San Juan and share similar geographic and climatic conditions, particularly regarding wind patterns. Additionally, the results from PSTO III demonstrated optimal air quality levels. Therefore, it can be reasonably assumed that similar results would apply to PSSU, as both solar parks were constructed using the same methodologies established by Genneia.

	Air sampling devices and analytical tools used were certified accordingly. The calibration certificate of the equipment is available in pages 45-47 in Annex 13: "Calibration Certificates.pdf".
Measuring/Reading/Recording frequency	Once at the 50% mark of the construction stage at three perimeter locations of the park.
Calculation method (if applicable)	N/A.
QA/QC Procedures applied	Calibration of sampling equipment and adherence to standard operating procedures to ensure data accuracy. Monitoring results were compared against regulatory guidelines: 3 mg/m ³ (Decreto 351/79) and 0.05 mg/m ³ (WHO Air Quality Guidelines).

Data / Parameter	Community Mental Health and Well-being
Data unit	-
Description	Monitoring the community's mental health and well-being during project activities by tracking complaints and concerns related to stress, anxiety, and social isolation.
Measured/Calculated/Default	-
Source of data	Annex 09: "Seguimiento Mental Health and Well-being.xlsx", and evidence of the training provided to ensure safe driving practices by park personnel is included in the document "Reinducción Conducción Segura y Velocidades - Reclamo Social Mayo 2024.pdf".
Value(s) of monitored parameter	# of Complaints/Concerns/Comments Received: PSSU: 0 ; PSTO III: 1
Indicate what the data are used for (Baseline/Project/Leakage emission calculations)	This indicator is not used for baseline/project/leakage emission calculations. This indicator is used to address and mitigate potential negative impacts on community well-being during the project lifecycle. This parameter will be used as an indicator of a social SDS.
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	N/A.
Measuring/Reading/Recording frequency	Continuous monitoring throughout the project's activity.
Calculation method (if applicable)	N/A.
QA/QC Procedures applied	Regular review of complaint logs and prompt response to community concerns. Standard communication tools and complaint management systems. A proactive communication strategy was implemented to keep the community informed about project activities and provide them with a platform to voice concerns.

16 Quantification of GHG emission reduction / removals

16.1 Baseline emissions

As per paragraph 57 of ACM0002 v22.0, baseline emissions include only CO₂ emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity. The methodology assumes that all project electricity generation above baseline levels would have been generated by existing grid-connected power plants and/or the addition of new grid-connected power plants. The baseline emissions are to be calculated as follows:

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

Where:

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

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

$EF_{grid,CM,y}$ = Combined margin CO₂ emission factor for grid connected power generation in year y calculated using TOOLo7 (tCO₂/MWh)

As per paragraph 59 of ACM0002 v22.0, calculation of quantity of net electricity generation ($EG_{PJ,y}$) shall be calculated as follows:

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

Where:

$EG_{PJ,y}$ = Quantity of net electricity generation that is produced and supplied to the grid as a result of the implementation of the BCR project activity in year y (MWh/yr).

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

Taking this into account, if the net electricity supplied to the grid during this monitoring period (by each solar park) is multiplied by the weighted average CM emission factor, the estimated rounded baseline emissions for each solar park in Instance 01 are obtained for this monitoring period and shown below:

Solar Park	Year	EG _{PJ,y} (MWh/yr)	BE _y (tCO ₂ /yr)
PSSU	2023 (30/03 - 31/12)	122,827	43,825
	2024 (01/01 - 31/10)	142,487	50,840
Solar Park	Year	EG _{PJ,y} (MWh/yr)	BE _y (tCO ₂ /yr)
PSTO III	2023 (30/12 - 31/12)	57	20
	2024 (01/01 - 31/10)	80,675	28,785
		EG _{PJ,y} (MWh)	BE _y (tCO ₂ /yr)
Total		346,046	123,470

Table 15: Baseline emissions for the project's first monitoring period.

Details of the BE_y calculations for both solar parks are provided in the “Baseline and Net GHG Emission Reductions Calculations.xlsx” spreadsheet in Annex 05. Additionally, EG_{PJ,y} values used were obtained from the first table of section 15.2.2.

16.2 Project emissions/removals

Since the project activity is the operation of solar parks for the generation of solar photovoltaic energy, with no BESS included, the project emissions are zero.

$$PE_y = 0$$

16.3 Leakages

Not applicable as per paragraph 71 of ACM0002 v22.0.

16.4 Net GHG Emission Reductions / Removals

The Net GHG Emission Reductions are equal to the baseline emissions since project emissions are zero and, as per paragraph 72 of ACM0002 v22.0:

$$ER_y = BE_y - PE_y$$

Where:

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

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

PE_y = Project emissions in year y (tCO₂e/yr)

It is worth noting that the start date for the first quantification period is March 30, 2023, as this is the start date of PSSU, the first park in Instance 01 to begin operations. For this first year of this monitoring period, emission reductions are composed of the reductions generated by PSSU between March 30, 2023, and December 31, 2023, added to the reductions generated by PSTO III from December 30, 2023, which is when PSTO III started its operations.

The table below shows the total Net GHG Emission Reductions calculated *ex-post* for the first monitoring period.

Year	GHG emission reductions in the baseline scenario (tCO ₂ e)	GHG emission reductions in the project scenario (tCO ₂ e)	GHG emissions attributable to leakages (tCO ₂ e)	Net GHG Emission Reductions/Removals (tCO ₂ e)
2023 (30/03 - 31/12)	43,845	0	0	43,845
2024 (01/01 - 31/10)	79,625	0	0	79,625
Total	123,470	0	0	123,470

Table 16: Total Net GHG Emission Reductions for the project's first monitoring period.

Details of the Net GHG Emission Reductions calculations for both solar parks are provided in the “Baseline and Net GHG Emission Reductions Calculations.xlsx” spreadsheet in Annex 05.

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

The table below shows the percentage difference between ex-ante estimates and ex-post calculations.

Solar Park	Year	Ex-ante estimated Net GHG Emission Reductions (tCO ₂ e)	Ex-post Net GHG Emission Reductions (tCO ₂ e)	Percentage difference (%)
PSSU	2023 (30/03 - 31/12)	54,269	43,825	19.24
	2024 (01/01 - 31/10)	59,362	50,840	14.36
PSTO III	2023 (30/12 - 31/12)	362	20	94.39
	2024 (01/01 - 31/10)	54,880	28,785	47.55
Total		168,872	123,470	26.89

Table 17: Differences between *ex-ante* and *ex-post* Net GHG Emission Reductions for this monitoring period.

Details on the calculations of these differences are provided in the “Diferencia reducciones ex-ante vs ex-post.xlsx” spreadsheet in Annex 05.

The observed differences between the actual emission reductions and the estimates in the Project Document occurred due to the following factors:

1. A conservative approach was taken by using the estimated average energy production (P₅₀) instead of P₇₅, to avoid any increase in the actual emission reductions/removals achieved during the current monitoring period compared to the *ex-ante* estimated values.
2. The months covered by the spring and summer seasons are the ones with the highest energy generation, given that the generation is photovoltaic, and the solar incidence and intensity are at their peak during those seasons. Since these seasons span from September to March, those months represent the period of maximum energy generation. Both parks are affected by this:
 - **PSSU:** In 2023, the months of January, February, and March (up to the 30th) were not included because the project had not yet commenced commercial operation, which officially began on 30/03/2023. Similarly, for 2024, since the monitoring period extends only until October, the months of November and December were also not accounted for.

- **PSTO III:** For 2023, a percentage difference of nearly 100% is observed, which is significant. However, it is important to note that 2023 only included the first two days of the solar park's operation, as it began operating on December 30 of that year, and minimal energy generation occurred during those days as part of the initial operational testing of the park. Therefore, this deviation is acceptable, considering it reflects only the park's initial two days of operation. As for 2024, considering that the monitoring period extends to October 2024, the months of November and December of that year were not accounted for. Additionally, as previously explained in Section 13.1, curtailment also had a significant impact.

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

Not applicable, as there was no increase in the actual emission reductions/removals achieved during the current monitoring period compared to those stated in the registered project document.

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NOTE: This Monitoring Report (MR) shall be completed following the instructions included. However, it is important to highlight that these instructions are complementary to the BCR STANDARD, and the Methodology applied by the project holder, in which more information on each section can be found.