Gold Standard for the Global Goals

TEMPLATE

KEY PROJECT INFORMATION & PROJECT DESIGN DOCUMENT (PDD)

PUBLICATION DATE **29.06.2023**

VERSION **v.1.5**

RELATED SUPPORT

- TEMPLATE GUIDE Key Project Information & Project Design Document

This document contains the following Sections

KEY PROJECT INFORMATION

GS ID of Project	7737
Title of Project	Parque de los Llanos umbrella project
Time of First Submission Date	23/01/2020
Date of Design Certification	12/11/2020
Version number of the PDD	Version 12
Completion date of version	20/09/2024
Project Developer	Empresa Federal de Energía S.A. (EFESA)
Project Representative	Francisco Muro (Empresa Federal de Energía)
Project Participants and any communities involved	Empresa Federal de Energía S.A. (EFESA)
Host Country (ies)	Argentina
Activity Requirements applied	☐ Community Service Activity ☒ Renewable Energy ☐ Land-Use and Forests Activity Requirements/Risks & Capacities ☐ N/A
Scale of the project activity	☐ Micro scale ☐ Small Scale ☒ Large Scale
Other Requirements applied	-
Methodology (ies) applied and version number	ACM0002 "Grid-connected electricity generation from renewable sources" Version 21.0
Product Requirements applied	☒ GHG Emissions Reduction & Sequestration ☐ Renewable Energy Label ☐ N/A
Project Cycle:	☐ Regular ☒ Retroactive

Land-use & Forest Key Project Information

The table was deleted intentionally as it is N/A

Table 1 – Estimated Sustainable Development Contributions

SUSTAINABLE DEVELOPMENT GOALS TARGETED	SDG IMPACT (DEFINED IN B.6)	ESTIMATED ANNUAL AVERAGE	UNITS OR PRODUCTS
13 Climate Action (mandatory)	Emissions Reductions	23,809	tCO2e
7 Affordable and Clean Energy	MWh of renewable energy injected to the National Grid	59,259	MWh
8 Decent Work and Economic Growth	Number of people employed directly due to the project activity	21	Number of people
9 Build resilient infrastructure, promote sustainable industrialization and foster innovation	Reduction in the tension instability of the transmission line (132 kV)	Not estimated	Average voltage deviation (kV)

SECTION A. DESCRIPTION OF PROJECT

A.1 Purpose and general description of project

The proposed project activity consists of installing and operating a new photovoltaic power plant in Chamical, La Rioja province, in the northwest region of Argentina.
Parque de los Llanos photovoltaic power plant, divided in phases I, II and III (the plants PLPPP I, II & III hereafter) will contribute to meet the electricity demand of the country by generating power using zero emissions technology based on a renewable energy source. The installed capacity of these three phases will be: PLPPP I, 12 MW; PLPPP II, 8MW; PLPPP III, 10 MW. In total, the project will comprise 30 MW installed capacity.
Based on the technical data of the equipment to be installed (total installed capacity), the expected annual electricity generation is 59,259 MWh/yr.
The Project's goal is to reduce greenhouse gas (GHG) emissions by delivering renewable electricity to the National interconnected system (SADI). The Projects will contribute to the displacement of currently operating fossil-fuel based thermal power plant also delaying the construction of the new thermal power plants. The three photovoltaic plants will be developed, built and operated by EFE S.A. (Empresa Federal de Energía S.A.).
The three Photovoltaic power plants will be built in 3 (three) different periods and will have different features:

- **PLPPP I**: 12 MW of installed power in which construction began in June 2018 and its commercial start date was February 23, 2019. The panels (GCL brand) were mounted on ARRAY brand structures in rows with 5.5m of separation. A high voltage line was built to connect the Plant to the national electricity grid.
- **PLPPP II**: 8 MW whose construction began in the second quarter of 2019. The technology suppliers (the panels are UP Solar brand) and PPA clients for this project are different from those of PLPPP I & III. Its commercial start date was January 14, 2020.
- **PLPPP III**: 10 MW, which was expected to be operative by the end of 2021 has suffered delays due to (i) the pandemic situation (covid 19) that in Argentina meant obligatory social isolation from March 2020 to October 2020, (ii) the global and local economic downturn. This PLPPP III was then planned to be installed in 2023. However, the local economic situation worsened during this year since Argentina´s government has set multiple exchange and custom controls. Thus,

the exact date cannot be determined as EFESA depends 100% on external conditions. The final design will be determined at the time of the construction, and may vary in equipment brand, as well as quantities.

In addition to the solar plant, the Project included the re-adaptation and expansion of the ET Chamical substation (owned by the TRANSNOA) and the laying and construction of a high-voltage overhead line between it and Project site in 33 Kw and 6.2 km in length to dispatch the generated energy.

The baseline scenario corresponds to the operation and provision of electricity by the currently existing power generation mix and, in addition, the potential thermal power plants that would have been built and entered into operation dispatching electricity to the grid without the implementation of the Parque de los Llanos photovoltaic power plants. This scenario is the same as the one existing prior to the implementation of the proposed project activity.

Fossil-fuel based thermal power plants produce electricity with lower project capital expenditures (CAPEX) than renewable power generation plants and also with better performance for grid operation. Thus, for large scale power projects, private investors had always preferred to participate in fossil-fuel thermal power generation initiatives.

Consequently, the Gold Standard registration of the proposed project activity will contribute to mitigate climate change by supplying zero GHG emissions electricity to the grid (neither fossil- fuels are used to generate electricity nor to operate the photovoltaic power plants), displacing fossil-fuel based power plants (CO_2 emitters derived from the oxidation of fossil-fuels) and showing an alternative way for private investors to participate and promote large scale power generation by means of renewable energy sources.

A.1.1. Eligibility of the project under Gold Standard

The project activity meets the eligibility criteria as per section 3.1.1 of GS4GG Principles & Requirements (Version 1.2) document as described below:

- The project applies methodology ACM0002 Version 21.0, Sectoral Scope: 01, which is an approved methodology under Gold Standard.
- The project type is power generation using solar (photovoltaic) energy which is an eligible project type as it is in accordance with the Eligible Project Types & Scope under Renewable Energy Activity Requirements.

- The project activity results in displacement of electricity from thermal power stations while contributing to sustainable development of Argentina. Hence, the project contributes to the Gold Standard Vision and Mission.
- Solar power is an approved project type and does not require approval from Gold Standard.
- This project activity is not associated with geo-engineering or energy generated from fossil fuel or nuclear, fossil fuel switch, nor does it enhance or prolong such energy generation.

General Eligibility Criteria under Renewable Energy Activity Requirements:

- **Project Type**: As discussed above, the project type is eligible.
- **Project Location**: The project is located in Argentina. Further details have been provided in section A.4 of this report.
- **Project scale**: The project activity is 30 MW (a photovoltaic power plant involving three phases: PLPPP I, II & III) and thus qualifies under large scale projects.

Specific Renewable Energy Eligibility Criteria	Eligible?	Comments
(a) Projects shall generate and deliver energy services (e.g. mechanical work/electricity/heat) from non-fossil and renewable energy sources.	Yes	The project comprises the installation of a new renewable power generation plant using solar (photovoltaic) energy.
(b) Projects shall comprise of renewable energy generation units, such as photovoltaic, tidal/wave, wind, hydro, geothermal, waste to energy and renewable biomass, that are • Supplying energy to a national or a regional grid; OR • Supplying energy to an identified consumer facility via national/regional grid through a contractual agreement such as wheeling.	Yes	The project's photovoltaic power plant is connected to the Argentina National Grid.

(c) Any Project supplying electricity to a mini-grid shall refer to Community Services Activity Requirements.	N/A	The project's photovoltaic power plant is connected to the Argentina National Grid.
(d) Projects generating on-site energy for captive consumption at an industrial facility shall refer to the requirements in this document.	N/A	The project's photovoltaic power plant is connected to the Argentina National Grid.
2.1.3 Grid connected Renewable Energy projects - unless located in a Least Developed Country (LDC), Small Island Developing State (SIDS) or a Land Locked Developing Country (LLDC) - shall be deemed ineligible for the issuance of Gold Standard Verified Emission Reductions (GS VERs) or Gold Standard labels for Certified Emission Reductions (GS-CERs); (a) If a Renewable Energy project is connected to national or a regional grid and located in an Upper Middle- and High-Income Country4, OR (b) If project is located in a country where the penetration level of the proposed Renewable Energy Technology type is greater than 5% of the total grid installed capacity, at the time of the first submission to Gold Standard This eligibility clause will come into effect from 24 Jan 2020. Projects submitted for preliminary review after this date shall demonstrate compliance with this eligibility requirement.	Yes	At the time of the first submission to Gold Standard, Argentina, the country where the project is located, had a penetration level of the proposed Renewable Energy Technology type lower than 5% of the total grid installed capacity. The penetration level of the photovoltaic technology was 1.1% at the end of 2019. The project was submitted for the GS preliminary review on 23/01/2020, i.e. before 24/01/2020.

General Eligibility Criteria	Eligible?	Comments
(a) Types of Project: Eligible projects shall include physical action/implementation on the ground. Pre-identified eligible project types are identified in the Eligibility Principles and Requirements section.	Yes	According to the Specific Eligibility Criteria (table above), it is demonstrated that the project is of a type pre-identified as eligible.

(b) Location of Project: Projects may be located in any part of the world.	Yes	The project is located in Argentina. Further details have been provided in section A.2 of this PDD.
(c) Project Area, Project Boundary and Scale: The Project Area and Project Boundary shall be defined. Projects may be developed at any scale although certain rules, requirements and limitations may apply under specific Activity Requirements, Impact Quantification Methodologies and Products Requirements. In order to avoid double counting the Project shall not be included in any other voluntary or compliance standards programme unless approved by Gold Standard (for example through dual certification). Also, if the Project Area overlaps with that of another Gold Standard or other voluntary or compliance standard programme of a similar nature, the project shall demonstrate that there is no double counting of impacts at design and performance certification (for example use of similar technology or practices through which the potential arises for double counting or misestimation of impacts amongst projects).	Yes	Project Area and boundary are clearly described in sections A.4 and B.3 in this PDD. The project is not and will not be included in any other voluntary or compliance standard. The area where the project is located does not have another Gold Standard or other voluntary or compliance standard programme of a similar nature.
(d) Host Country Requirements: Projects shall be in compliance with applicable Host Country's legal, environmental, ecological and social regulations.	Yes	The project operates under the strict permission from regional and national authorities, and is developed with all necessary and applicable permits.

(e) Contact Details: As part of the Project Documentation the Project Developer shall provide (i) name and (ii) contact details of all Project Participants; AND in case of an organization (iii) the legal registration details and (iv) documentation by the governing jurisdiction that proves that the entity is in good standing (defined as being a legal or other appropriate entity registered in or allowed to operate within the required jurisdiction and with no evidence of insolvency or legal/criminal notices placed against it or any of its Directors). Gold Standard retains the right (at its own discretion) to refuse use of the Standard where reputational concerns are highlighted.	Yes	The Appendix 1 contains all contact details from the project developer. Necessary additional information is also provided in separate documents and are available as requested.
(f) Legal Ownership: Full and uncontested legal ownership of any Products that are generated under Gold Standard Certification, (for example carbon credits) shall be demonstrated. Where such ownership is transferred from project beneficiaries this must be demonstrated transparently and with full, prior and informed consent (FPIC). Note that for certain Project types there is a requirement for full and uncontested legal land title/tenure to be demonstrated. These are contained within specific Activity or Product Requirements. All projects shall immediately report to Gold Standard any land title/tenure disputes arising.	Yes	The project developer has ownership over the land receiving the power plant, thus has full and uncontested legal ownership of any Products that are generated under Gold Standard Certification. Please see section A.3 below.

(g) Other Rights: As well as legal title and ownership, the Project Developer shall also demonstrate where required uncontested legal rights and/or permissions concerning changes in use of other resources required to service the Project (for example, access rights, water rights etc.). Any known disputes or contested rights must be declared immediately to Gold Standard by the Project Developer and resolved prior to further project implementation in affected areas.	Yes	The project developer is the owner of all equipment and has all necessary permits needed to operate the project power plant, therefore has uncontested legal rights and permissions concerning changes in use of other resources required to service the Project. Please see section A.3 below.
(h) Official Development Assistance (ODA) Declaration: All Project Developers applying for project activities located in a country named by the OECD Development Assistance Committee's ODA recipient list and seeking Gold Standard Certification for carbon credits shall declare the Official Development Assistance (ODA) support. The Project Developer shall follow the GHG Emissions Reduction & Sequestration Product Requirements and submit the declaration at the time of Design Certification.		According to the latest DAC List of ODA Recipients (http://www.oecd.org/dac/financing-Sustainable-development/development-finance-standards/daclist.htm), Argentina is listed as a Upper Middle Income Countries. The project developer declares that no financing provided in connection with the project has come from or will come from ODA that has been or will be provided under the condition, whether express of implied, that any or all of the carbon credits issued as a result of the project's operation will be transferred directly or indirectly to the country of origin of the ODA.

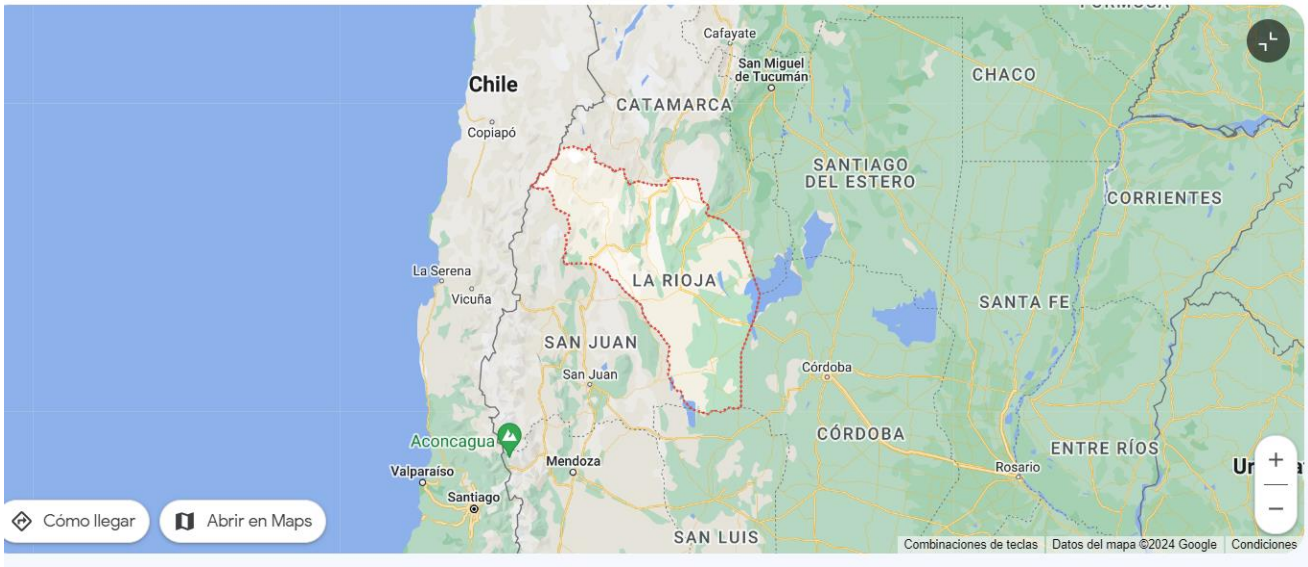
A.1.2. Legal ownership of products generated by the project and legal rights to alter use of resources required to service the project

Empresa Federal de Energía S.A. (EFE S.A.) is a private company whose core business is development and implementation of sustainable energy projects including renewable energy power generation. EFE S.A. has led the construction and, actually operates and

commercialize the electricity generated by PLPPP I and II. The company was created on July 26, 2017 and registered on that date in the IGJ (General Inspection of Justice).
The company is very committed to the environment, and is reflected in its mission, vision and principles. An example of this is that in addition to proposing to carry out a process of certification of emission reduction, in August 2020 EFESA obtained the B Corporation Certification and recertified in June of 2023.
The Undersecretary of Electrical Energy of the Ministry of Energy and Mining through Provision 136 of June 13, 2018 authorized the entry as generating agent of the Wholesale Electrical Market (MEM) to the firm EFE S.A. for its Projects of nominal power total of 30 MW, installed in La Rioja Province, connecting to the Argentina Interconnection System (SADI) in bars of 33 Kv of Substation Chamical, jurisdiction of the TRANSNOA (company of transportation of electrical energy by troncal distribution of northwest Argentina). Without this public provision EFESA would not have been able to operate in the wholesale electricity market and complies with Annex 17 of CAMMESA's procedures (MEM admission and administration conditions).
Through Resolution No. 352 of December 14, 2017, the Ministry of Environment of the Ministry of Planning and Industry of the Province of La Rioja approved the Environmental Impact Study of the Projects. The renewal of the Environmental Impact Study has been approved through Resolution No. 058 of March 19th of 2022.
The projects obtained the authorization of municipal government (department of Chamical) for the construction and operation of the photovoltaic power plants in the month of December 2017.

A.2 Location of project

Country: Argentina. Province: La Rioja. Location: Chamical.
The site is located along national route 79.6 km north of the junction of national route 38 and 110 km southeast of La Rioja Province.



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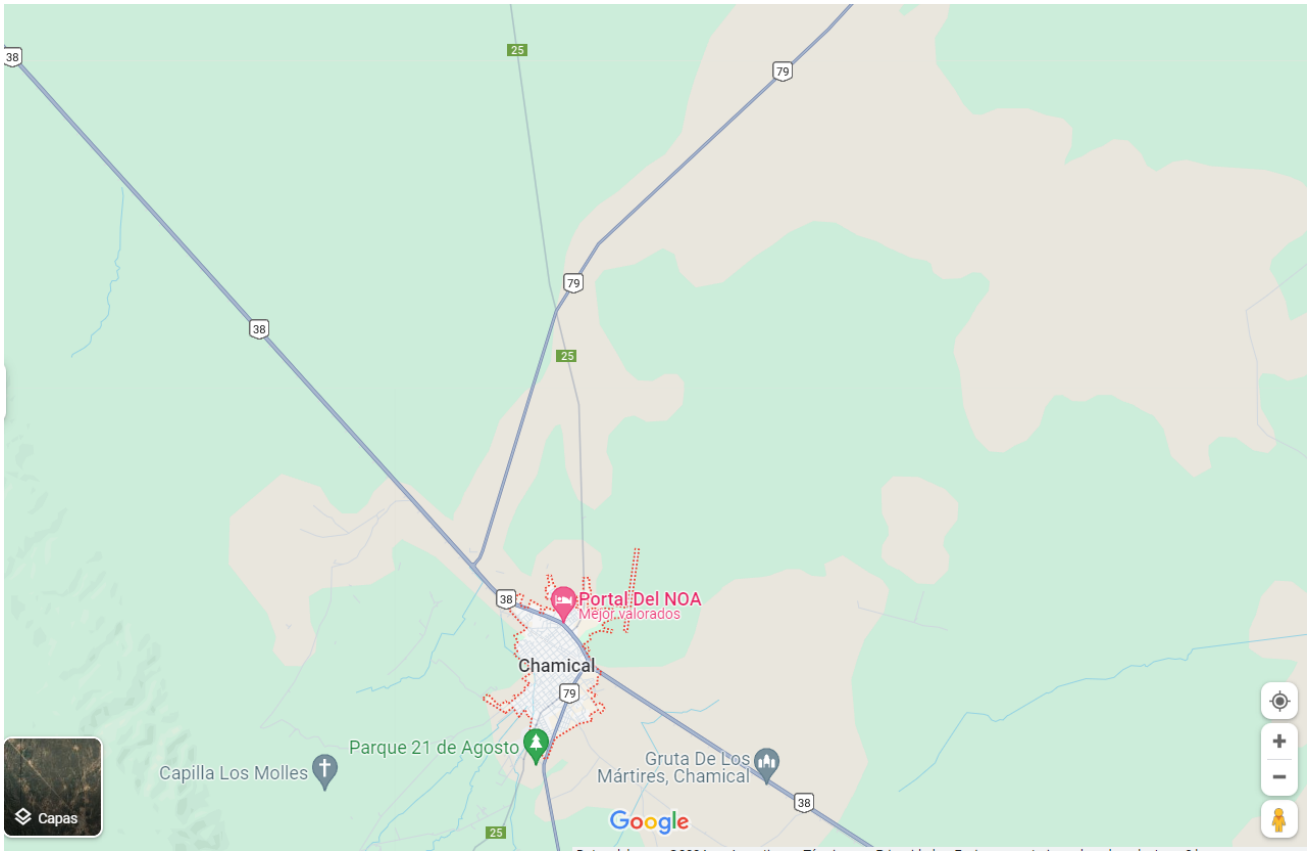

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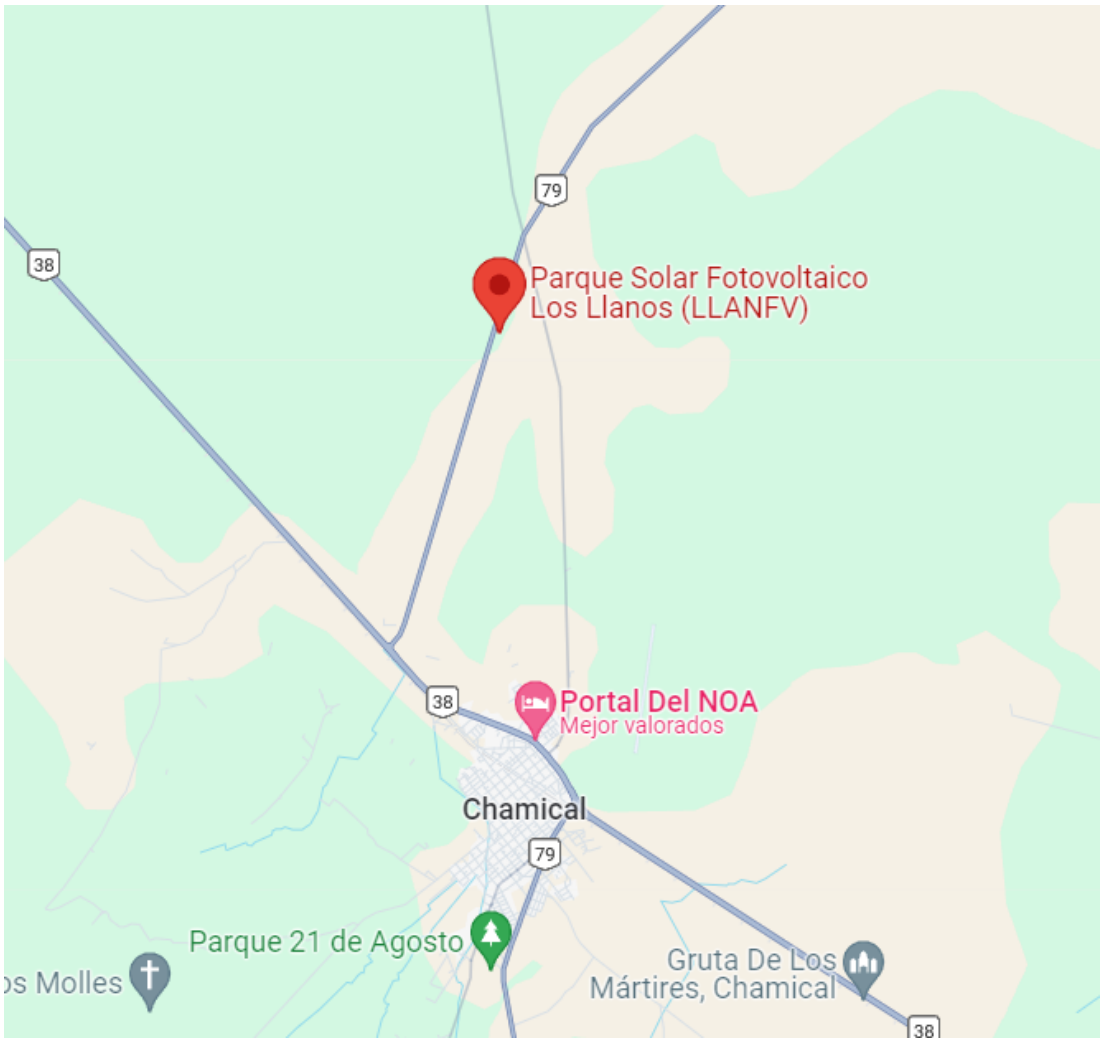

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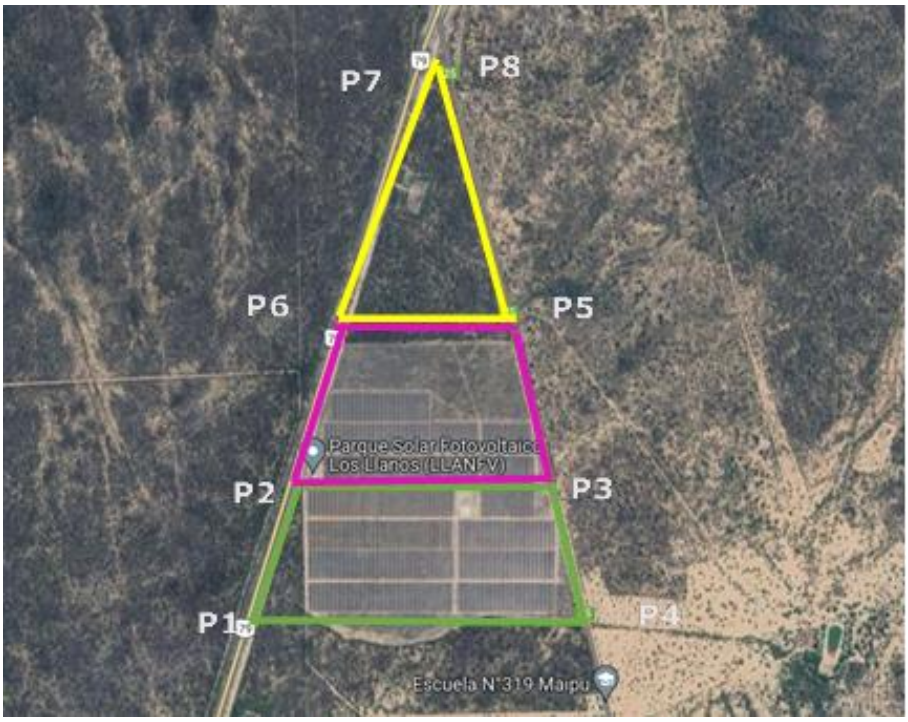


Parque de los LLanos photovoltaic power plants area has the following reference coordinates:

		Latitude (S)	Longitude (W)
PLPPP I	P1	30° 17' 47.02"	66° 19' 6.37"
	P2	30° 17' 31.80"	66° 19' 6.22"
	P3	30° 17' 31.45"	66° 18' 38.47"
	P4	30° 17' 48.05"	66° 18' 35.50"
PLPPP II	P2	30° 17' 31.80"	66° 19' 6.22"
	P3	30° 17' 31.45"	66° 18' 38.47"
	P5	30° 17' 21.35"	66° 18' 41.22"
	P6	30° 17' 22.02"	66° 19' 2.58"
PLPPP III	P5	30° 17' 21.35"	66° 18' 41.22"
	P6	30° 17' 22.02"	66° 19' 2.58"
	P7	30° 16' 53.97"	66° 18' 52.65"
	P8	30° 16' 53.33"	66° 18' 49.03"

A.3 Technologies and/or measures

According to the electrical studies, the situation prior to the implementation of the project was that the network adjacent to the interconnection point resulted in the need for forced thermal dispatch and implementation of load cuts in all scenarios without the

project. This arose for enable network operation with demand levels predicted by TRANSNOA.
Additionally, it operated with high voltage levels in La Rioja Sur 132kV making use of the maximum capacity that the taps under load of the transformers of said ET can provide.
The commissioning of the Project collaborates with the supply to local loads, producing a substantial reduction in the levels of power transfer from the 132kV network.
In scenarios without a project and with thermal generation in the area, the reduction of 22MW and 4MW of forced dispatch in conditions of demand and peak conditions is feasible, respectively, improving the economic operation of the system.
The access of the Parque de los Llanos photovoltaic Power Plants does not result in inconveniences for the surrounding operation in the face of simple contingencies, presenting a positive impact on the control of zonal tension in case of failures when the power plants remains in service and improving the conditions of the network prior to its access.
In conclusion, the PLPPP I, PLPPP II and PLPPP III plants improve the local behavior of the area in the event of contingencies that do not cause their separation. In this sense, the tension control offered by the projects collaborates directly with the maintenance of the tension in the area, improving conditions from the surrounding network.
In accordance with the above, compliance with SDG 9 "Build resilient infrastructure, promote sustainable industrialization and foster innovation" is verified.

- **Project PLPPP I:**

The first phase to be installed is based on photovoltaic technology, with a total of 12 MW of nominal power. According to technical requirements of CAMMESA the apparent power to be installed is 13.2 MVA, consisting of 3 solar fields (CS) of 4.4 MVA of power each. Each solar field consists of 13,770 panels of 325Wp of power each, that is to say 4,475MWp. The total of panels to be installed is 41,310 with a total of 13.4 MWp on a property with a total area of 92 ha. In addition, each CS of 4.4 MVA have 2 inverters modules of 2.2 MVA each and a 4.4MVA transformer, located in kits on skids called “Inverter and Transformation Centers”, suitable for outdoor operation, in which are the cells MT (medium voltage), BT (low voltage), SSAA (auxiliary services) and DC connection.

- **Photovoltaic modules**: The photovoltaic modules are manufactured by GCL with a nominal power of 325Wp. The module technology is poly-crystalline Silicon. Main features of the photovoltaic module and parameters used with Schneider inverters:

Model	GCL-P6/72H
Manufacturer	GCL
Technology	Polycrystalline silicon
Peak power	325 Wp
Voltage (STC)	37.6 V
Intensity (STC)	8.64 A
Open Circuit Voltage	46 V
Dead short Current	9.24 A

- **Tracker**: The panels are installed mounted on structure with movement to an axis. Each structure is prepared for the installation of two rows of vertical position panels, which are oriented to the north to obtain the maximum production of the plant for the chosen place. The tracking system is carried out with ARRAY multifilage structures, DuraTrack Hz v3 model, with 5.5m of separation between each row and with a capacity of 25 and 26 rows of 90 modules for each tracking system. Main features and parameters of tracker:

Model	DuraTrack HZ v3 - 1500V
Manufacturer	Array Technologies
Technology	Multirow
Number of rows	25/26 Rows
Segment Angle	+/- 52°
Backtracking	Si
Longitude Row	90 Modules
Pitch (distance between them)	5.5
Module Position	2 Vertical (2V)

- **Inverters**: are grouped in pairs in conversion centers, which have 33kV / 600V transformers of 4.4MVA each. Two types of Schneider Conext SmartGen type inverters, which have the following main characteristics:

Quantity	**6**
Brand	Schneider
Type	**Context SmartGen**
Model	CS2200
Power [MVA] (40°C)	**2200**
Maximum Input Voltage DC [kV]	1.5
Nominal Output Voltage AC [KV]	**0.6**
Maximum Output Current [A]	2,117
Frequency [Hz]	**50**
Short Circuit Support [pu]	1.06

- **MT / BT transformers (medium and low voltage)**: Each inverter module is associated with a transformer that raises its voltage from the low voltage generation level at the medium voltage collection and distribution level. The project has transformers with the following main characteristics:

Transformers MT/BT	
Quantity	**3**
Brand	Partiluz
Winding Capacity [kVA]	**4.4/2.2/2.2**
Nominal Voltages [kV]	33/0.6/0.6
Stop Changers (side 33 kV)	**2 x 2.5%**
Frequency [Hz]	50
Connection Type	**Dy11y11**
Vacuum losses [W]	6,600
Load Losses [W]	**37400**
Impedance [%]	5.75
Vacuum current [%]	**0.8**

➢ **Project PLPPP II:**

This plant is based on photovoltaic technology, with a total of 8 MW of nominal power. The plant configuration is in line with the technical requirements of CAMMESA to be able to deliver active energy and reactive energy if requested to compensate for grid voltage.

- **Photovoltaic modules**: The photovoltaic modules are manufactured by Up Solar with 26,730 units of a nominal power of 340 Wp each (9.08 MWp total). The PLPPP II plant has 2 solar fields (CS): field number 4 has 7,380 panels and field number 5 has 19,350 panels. The module technology is polycrystalline

Silicon. Main features of the photovoltaic module and parameters used with SMA inverters:

Model	UP340M
Manufacturer	UP SOLAR
Technology	Polycrystalline silicon
Peak power	340 Wp
Voltage (STC)	37.5 V
Intensity (STC)	9.07 A
Open Circuit Voltage	47.2 V
Dead short Current	9.32 A

- **Tracker**: The panels are installed mounted on structure with movement to an axis. Each structure is prepared for the installation of two rows of vertical position panels, which are oriented to the north to obtain the maximum production of the project for the chosen place. The tracking system is carried out with ARRAY multifilage structures, DuraTrack Hz v3 model, with 5.5m of separation between each row and with a capacity of 25 and 26 rows of 90 modules for each tracking system. Main features and parameters:

Model	DuraTrack HZ v3 - 1500V
Manufacturer	Array Technologies
Technology	Multirow
Number of rows	25/26 Rows
Segment Angle	~ 52°
Backtracking	Si
Longitude Row	90 Modules
Pitch (distance between them)	5.5
Module Position	2 Vertical (2V)

- **Inverters**: are grouped 2 of them with a 33kV / 655V transformer of 6MVA (2 X 3MVA), while 1 inverter has a 33kV / 655V transformer of 3MVA. Three (3) photovoltaic inverters SMA SC 3000, with 3MVA capacity, resulting in 9 MVA apparent power and an installed capacity of 8MW (nominal power).

➢ **Project PLPPP III:**

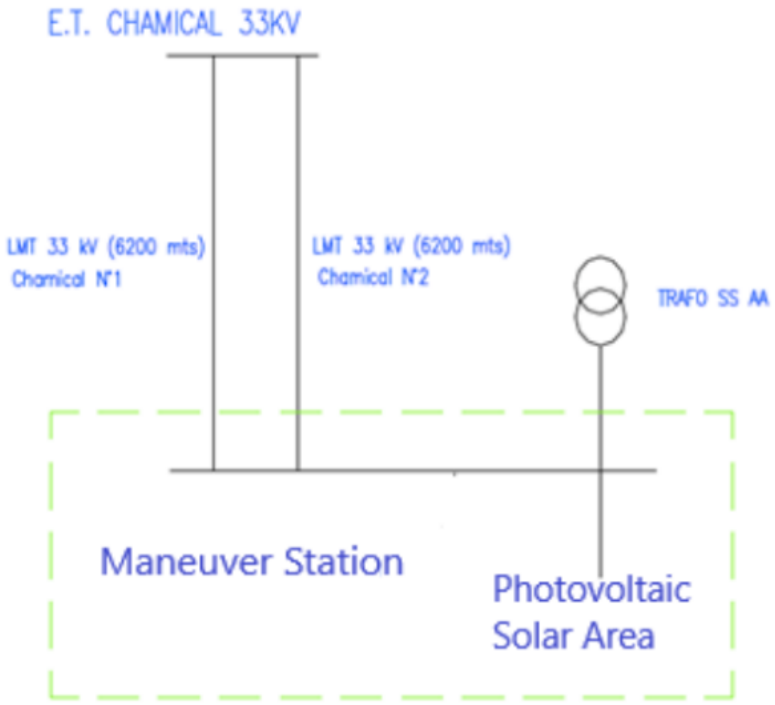
The final design will be determined at the time of the construction, most likely using similar or equivalent equipment to the other two plants.

- **Medium voltage line and connection to SADI (Argentina interconnection system)**

Regarding the joint operation of the projects, it has a single joint control system that allows the control of electrical variables at its interconnection point. The measurement of the electrical variables necessary for the control is carried out in 33kV MT in its sectioning center.

The projects will be linked from its maneuvering station to the ET Chamical through a double aerial route. Each list will have conductors of the ACSR 150 / 25mm2 Al / Ac type, with a length of 6.2km and will share the structure along its laying.

The connection point to the SADI corresponds to the PDI # 4081 - Chamical.



A.4 Scale of the project

The project activity is 30 MW (three new photovoltaic power plants: PLPPP I, II & III) and thus qualifies under large scale projects.

A.5 Funding sources of project

There are no public funds involved in the implementation of the proposed project activity. The shareholders of the projects are Inverclub, Dagma (through Correon S.A. y Da Silvano S.A.) and Halkkon Capital Partners (formerly Nortia), who contribute

equally to society to finance the development and construction of the projects (33.33% each).

SECTION B. APPLICATION OF APPROVED GOLD STANDARD METHODOLOGY (IES) AND/OR DEMONSTRATION OF SDG CONTRIBUTIONS

B.1. Reference of approved methodology (ies)

- ACM0002 "Grid-connected electricity generation from renewable sources" (version 21.0);
- TOOL07 Tool to calculate the emission factor for an electricity system (version 07.0);
- TOOL 11 Tool to assess the validity of the original/current baseline and to update the baseline at the renewal of a crediting period (version 3.0.1)

Further information pertaining to the methodology can be obtained at:
https://cdm.unfccc.int/methodologies/DB/HF3LP6O41YY0JIP1DK6ZRJO9RSCX3S

B.2. Applicability of methodology (ies)

The project activity meets the applicability conditions of the selected methodology ACM0002, Version 21.0, Sectoral Scope 01, as described below:

ACM0002 "Grid-connected electricity generation from renewable sources" (version 21.0) Applicability criteria	ACM0002 (version 21.0) Applicability to the project activity	Documentation that has been used as a basis of justification
1. This methodology is applicable to grid connected renewable energy power generation project activities that: (a) Install a Greenfield power plant; (b) Involve a capacity addition to (an) existing plant(s); (c) Involve a retrofit of (an) existing operating plants/units; (d) Involve a rehabilitation of (an) existing plant(s)/unit(s); or (e) Involve a replacement of (an) existing plant(s)/unit(s).	The project activity consists in a grid-connected solar energy power generation project activity that installs a Greenfield power plant (option a).	The renewal of the Environmental Impact Study has been approved through Resolution No. 058 of March 19th of 2022.
2. In case the project activity involves the integration of a BESS, the	Not applicable.	Not applicable.

	methodology is applicable to grid-connected renewable energy power generation project activities that: (a) Integrate BESS with a Greenfield power plant; (b) Integrate a BESS together with implementing a capacity addition to (an) existing solar photovoltaic1 or wind power plant(s)/unit(s); (c) Integrate a BESS to (an) existing solar photovoltaic or wind power plant(s)/unit(s) without implementing any other changes to the existing plant(s); (d) Integrate a BESS together with implementing a retrofit of (an) existing solar photovoltaic or wind power plant(s)/unit(s).	The project activity does not involve the integration of a BESS.	
3.	The methodology is applicable under the following conditions: (a) Hydro power plant/unit with or without reservoir, wind power plant/unit, geothermal power plant/unit, solar power plant/unit, wave power plant/unit or tidal power plant/unit; (b) In the case of capacity additions, retrofits, rehabilitations or replacements (except for wind, solar, wave or tidal power capacity addition projects) the existing plant/unit started commercial operation prior to the start of a minimum historical reference period of five years, used for the calculation of baseline emissions and defined in the baseline emission section, and no capacity expansion, retrofit, or rehabilitation of the plant/unit has been undertaken between the start of this minimum historical reference period and the implementation of the project activity;	(a) The project activity includes a solar power plant. (b) Not applicable. The project activity consists of a Greenfield project. (c) Not Applicable. The project activity does not involve the integration of a BESS. (d) Not Applicable. The project activity does not involve the integration of a BESS.	The renewal of the Environmental Impact Study has been approved through Resolution No. 058 of March 19th of 2022.

(c) In case of Greenfield project activities applicable under paragraph 2 (a) above, the project participants shall demonstrate that the BESS was an integral part of the design of the renewable energy project activity (e.g. by referring to feasibility studies or investment decision documents); (d) The BESS should be charged with electricity generated from the associated renewable energy power plant(s). Only during exigencies 2 may the BESS be charged with electricity from the grid or a fossil fuel electricity generator. In such cases, the corresponding GHG emissions shall be accounted for as project emissions following the requirements under section 5.4.4 below. The charging using the grid or using fossil fuel electricity generator should not amount to more than 2 per cent of the electricity generated by the project renewable energy plant during a monitoring period. During the time periods (e.g. week(s), months(s)) when the BESS consumes more than 2 per cent of the electricity for charging, the project participant shall not be entitled to issuance of the certified emission reductions for the concerned periods of the monitoring period.		
4. In case of hydro power plants, one of the following conditions shall apply: (a) The project activity is implemented in existing single or multiple reservoirs, with no change in the volume of any of the reservoirs; or	Not applicable. The project activity consists of a grid-Connected photovoltaic power plant.	Not applicable.

(b) The project activity is implemented in existing single or multiple reservoirs, where the volume of the reservoir(s) is increased and the power density, calculated using equation (7), is greater than 4 W/m2 ; or (c) The project activity results in new single or multiple reservoirs and the power density, calculated using equation (7), is greater than 4 W/m2 ; or (d) The project activity is an integrated hydro power project involving multiple reservoirs, where the power density for any of the reservoirs, calculated using equation (7), is lower than or equal to 4 W/m2 , all of the following conditions shall apply: (i) The power density calculated using the total installed capacity of the integrated project, as per equation (8), is greater than 4 W/m2 ; (ii) Water flow between reservoirs is not used by any other hydropower unit which is not a part of the project activity; (iii) Installed capacity of the power plant(s) with power density lower than or equal to 4 W/m2 shall be: a. Lower than or equal to 15 MW; and b. Less than 10 per cent of the total installed capacity of integrated hydro power project.		
5. In the case of integrated hydro power projects, project participants shall:	Not applicable. The project activity consists of a grid-	Not applicable.

	(a) Demonstrate that water flow from upstream power plants/units spill directly to the downstream reservoir and that collectively constitute to the generation capacity of the integrated hydro power project; or (b) Provide an analysis of the water balance covering the water fed to power units, with all possible combinations of reservoirs and without the construction of reservoirs. The purpose of water balance is to demonstrate the requirement of specific combination of reservoirs constructed under CDM project activity for the optimization of power output. This demonstration has to be carried out in the specific scenario of water availability in different seasons to optimize the water flow at the inlet of power units. Therefore, this water balance will take into account seasonal flows from river, tributaries (if any), and rainfall for minimum of five years prior to the implementation of the CDM project activity.	connected photovoltaic power plant.	
6.	The methodology is not applicable to: (a) Project activities that involve switching from fossil fuels to renewable energy sources at the site of the project activity, since in this case the baseline may be the continued use of fossil fuels at the site; (b) Biomass fired power plants/units.	The project activity does not consist of: (a) or (b).	The renewal of the Environmental Impact Study has been approved through Resolution No. 058 of March 19th of 2022.
7.	In the case of retrofits, rehabilitations, replacements, or capacity additions, this	Not applicable. The project activity	The renewal of the Environmental Impact Study has

methodology is only applicable if the most plausible baseline scenario, as a result of the identification of baseline scenario, is "the continuation of the current situation, that is to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance".	consists of a Greenfield grid-connected photovoltaic power plant.	been approved through Resolution No. 058 of March 19th of 2022.
8. In addition, the applicability conditions included in the tools referred to below apply.	The project activity meets the applicability conditions included in the tools referred in the methodology.	See table below.

TOOL11 - Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period (Version 03.0.1) Applicability criteria	**TOOL 11 applicability to the project activity**	**Documentation that has been used as a basis of justification**
This tool provides a stepwise procedure to assess the continued validity of the baseline and to update the baseline at the renewal of a crediting period, as required by paragraph 49 (a) of the modalities and procedures of the clean development mechanism.	The project activity meets the applicability conditions since it is at the renewal of the crediting period.	The present PDD, Section B.4.
The tool consists of two steps. The first step provides an approach to evaluate whether the current baseline is still valid for the next crediting period. The second step provides an approach to update the baseline in case that the current baseline is not valid anymore for the next crediting period.	The project activity meets the applicability conditions since it is at the renewal of the crediting period.	The present PDD, Section B.4.

TOOL07 - "Tool to calculate the emission factor for an electricity system" (Version 07.0) Applicability criteria	Grid emission factor tool applicability to the project activity	Documentation that has been used as a basis of justification
This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity that substitutes grid electricity that is where a project activity supplies electricity to a grid or a project activity that results in savings of electricity that would have been provided by the grid (e.g. demand-side energy efficiency projects).	The project activity substitutes grid electricity by supplying clean and renewable electricity to the Argentinean Electricity System (SADI).	Argentinean Ministry of Energy grid emission factor calculations[1].
Under this tool, the emission factor for the project electricity system can be calculated either for grid power plants only or, as an option, can include off-grid power plants.	The emission factor for the project activity electricity system is calculated for grid power plants only.	Argentinean Ministry of Energy grid emission factor calculations[2].
In case of CDM projects the tool is not applicable if the project electricity system is located partially or totally in an Annex I country.	The project activity electricity system (SADI) is located exclusively in Argentina.	Argentinean Ministry of Energy grid emission factor calculations.
Under this tool, the value applied to the CO_2 emission factor of biofuels is zero.	A value of zero will be applied to the CO_2 emission factor of biofuels power plants if connected to SADI.	Argentinean Ministry of Energy grid emission factor calculations.

[1] https://datos.gob.ar/el/dataset/energia-calculo-factor-emision-co2-red-argentina-energia-electrica

[2] http://www.energia.gob.ar/contenidos/verpagina.php?idpagina=2311

B.3. Project boundary

According to ACM0002 Version 21.0, PLPPP photovoltaic power plants boundary includes the three project power plants and all power plants/units connected physically to the electricity system that the PLPPP Project is connected to; i.e.: the SADI.

The project activity consists of three greenfield power plants. Thus, according to ACM0002 Version 21.0: "the baseline scenario is electricity delivered to the grid by the project activity that would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described in TOOL07 (Tool to calculate the emission factor for an electricity system).
The project activity is a photovoltaic power plants and do not use fossil fuel. Thus, no project emissions are expected to happen.

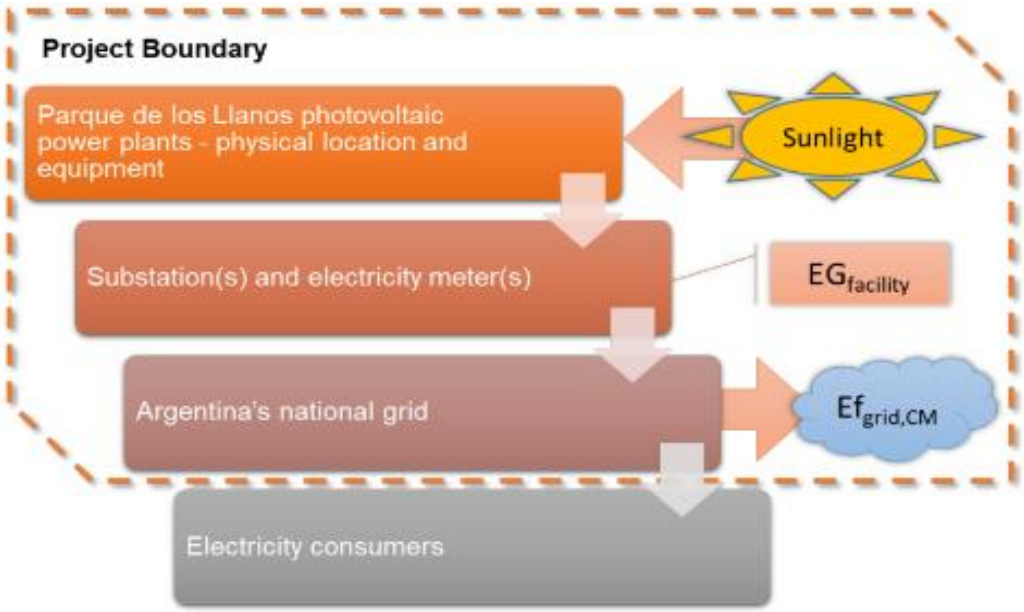


Figure: Schematic representation of the project boundary.

Based on the above explanations, the greenhouse gases and emission sources included in or excluded from the project boundary are described in the table below.

Source		GHGs	Included?	Justification/Explanation
Baseline		CO_2	Yes	Main emission source.

	CO2 emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity	CH_4	No	Minor emission source
		N_2O	No	Minor emission source
Project scenario	For geothermal power plants, fugitive emissions of CH4 and CO2 from non-condensable gases contained in geothermal steam	CO_2	No	Not applicable. The project consists of a photovoltaic power plant.
		CH_4	No	Not applicable. The project consists of a photovoltaic power plant.
		N_2O	No	Not applicable. The project consists of a photovoltaic power plant.
	CO2 emissions from combustion of fossil fuels for electricity generation in solar thermal power plants and geothermal power plants	CO_2	No	Not applicable. The project consists of a photovoltaic power plant.
		CH_4	No	Not applicable. The project consists of a photovoltaic power plant.
		N_2O	No	Not applicable. The project consists of a photovoltaic power plant.
	For hydro power plants, emissions of CH4 from the reservoir	CO_2	No	Not applicable. The project consists of a photovoltaic power plant.
		CH_4	No	Not applicable. The project consists of a photovoltaic power plant.
		N_2O	No	Not applicable. The project consists of a photovoltaic power plant.

B.4. Establishment and description of baseline scenario

According to the applicable methodology ACM0002 "Grid-connected electricity generation from renewable sources" (version 21.0), Baseline scenario for Greenfield power plant, "If the project activity is the installation of a Greenfield power plant with or without a BEES as described under paragraph 4(a) or paragraph 5(a), the baseline

scenario is electricity delivered to the grid by the project activity that would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described in the TOOL07 (Tool to calculate the emission factor for an electricity system, Version 07.0)".

The project displaces electricity generated in the SADI (Sistema Argentino de Interconexión) and therefore SADI is chosen as the baseline scenario boundary. Prior to the start of the implementation of the project activity the electricity delivered to the SADI by the project activity would have otherwise been generated by the operation of grid - connected power plants and by the addition of new generation sources.

In order to assess the validity of the original baseline mentioned before, the **TOOL 11** is applied (Version 03.0.1). This tool consists of two steps. The first one provides an approach to evaluate whether the current baseline is still valid for the next crediting period. The second step provides an approach to update the baseline in case that the current baseline is not valid anymore.

Step 1: Assess the validity of the current baseline for the next crediting period

- ***Step 1.1: Assess compliance of the current baseline with relevant mandatory national and/or sectoral policies***
  Since the current baseline is "electricity delivered to the grid by the project activity that would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources" and neither new national nor sectorial policies have been approved, the project complies with Step 1.1.

- ***Step 1.2: Assess the impact of circumstances***
  The current baseline scenario identified at this PDD is the continuation of the current practice without any changes in market characteristics (CAMMESA). As a consequence, this Step 1.2 is applied.

- ***Step 1.3: Assess whether the continuation of use of current baseline equipment(s) or an investment is the most likely scenario for the crediting period for which renewal is requested.***
  Not applicable since the project activity is a Greenfield power plant. Nevertheless, the baseline scenario of the project activity is the continuation of use of the current equipments without any investment.

- ***Step 1.4: Assessment of the validity of the data and parameters***
  The only values fixed ex-ante are $EF_{grid,CM,y}$ and the parameters used for its calculation which were updated for this crediting period.

The application of the Steps above has verified the ongoing validity of the current baseline for the second crediting period and that a fixed parameter has been introduced.

As there were parameters updated for the 2nd crediting period, Step 2 is applied.

Step 2: Update the current baseline and the data and parameters

- ***Step 2.1: Update the current baseline***
  The current baseline scenario is valid, though the baseline emissions were updated as stated in Step 1.4 due to the update of the parameters used for the calculation of $EF_{grid,CM}$[3], as a fixed parameter for the 2nd crediting period.

- ***Step 2.2: Update data and parameters***
  As mentioned above, the parameter $EF_{grid,CM}$ has been updated (Combined margin emission factor) as all parameters necessary for its calculations. These are:
  - $FC_{i,y}$: Amount of fuel type i consumed by the project electricity system in year y;
  - $NCV_{i,y}$: Net calorific value (energy content) of fuel type i in year y;
  - $EF_{CO2,i,y}$: CO_2 emission factor of fuel type i used in power unit m in year y.

As per the methodology ACM0002 "Grid-connected electricity generation from renewable sources" (v. 21.0), the Baseline Scenario for Greenfield power plant is **"Electricity delivered to the grid by the project activity that would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations".** This baseline scenario is still valid as per the assessment against TOOL11.

B.5. Demonstration of additionality

The project hereby undergoes the Design Certification Renewal process. Since the Baseline Scenario for Greenfield power plants remains the same (see B.4) and impacts that are additional as compared to the Baseline Scenario also remains the same to the ones described on the Project Design Document submitted on 2020, for the demonstration of additionality of the project, the arguments set out in the previous PDD are reiterated.

The Parque de los Llanos Photovoltaic Power Plants (PLPPP) began to develop in an absolutely new framework for renewable energy: Resolution 281[4], regulated August 2017 which allows the commercialization of renewable electricity between private companies, setting their own conditions and without state intervention.

EFE S.A. set itself the objective of being the first photovoltaic plant to enter into commercial operation within the framework of this new regulation.

It should be noted that within the framework of Resolution 281, CAMMESA quarterly called public tenders to assign dispatch priority in the respective connection nodes. The

[3] ER Calculator 2024_Emission Factor

[4] https://servicios.infoleg.gob.ar/infolegInternet/anexos/275000-279999/278429/norma.htm

requirement to participate was to commit through a guarantee a date of entry into commercial operation in exchange for predictability and priority in the dispatch of energy. Of a total of 1,154 MW dispatch priorities assigned to date (December 2019), less than half (467 MW) are operating commercially (as indicated in the following table), being Parque de los Llanos among the first.

Below is the list of wind and photovoltaic plants commercially enabled under the aforementioned regulatory framework (Res. 281/2017), where it is observed that the Parque de los Llanos was the first in its category.

Período de Asignación	Proyecto	RAZÓN SOCIAL SOLICITUD	Potencia Con Prioridad de Desp. [MW]	Potencia Habilitada TOTAL [MW]	PDI ID	PDI DESCRIPCIÓN	CORREDOR	PROVINCIA	TEC.	Fecha de Habilitación Comercial
4° Trim. 2017	P.E. DE LA BAHÍA	PARQUES EÓLICOS DEL FIN DEL MUNDO S.A.	28	28.8	1160	LÍNEA 132 KV BAHÍA BLANCA - MONTE HERMOSO - CORONEL DORREGO	COMAHUE	BUENOS AIRES	EOL	10/5/2019
4° Trim. 2017	P.E. La Castellana II	CPR Energy Solutions S.A.U.	15.75	14.4	1240	CHAÑARES	COMAHUE	BUENOS AIRES	EOL	17/7/2019
4° Trim. 2017	P.E. PAMPA ENERGÍA	PAMPA ENERGÍA S.A.	50.4	50.4	1250	BAHÍA BLANCA 132 KV	COMAHUE	BUENOS AIRES	EOL	10/5/2019
4° Trim. 2017	P.E. MANANTIALES BEHR	YPF ENERGÍA ELÉCTRICA S.A.	99	99	3011	LÍNEA 132 KV DIADEMA - PAMPA DE CASTILLO	PATAGONIA	CHUBUT	EOL	22/12/2018
4° Trim. 2017	P.E. RAWSON III	GENNEIA S.A.	24	25.05	3150	RAWSON	PATAGONIA	CHUBUT	EOL	21/12/2017
1° Trim. 2018	P.E. POMONA II	GENNEIA S.A.	11.7	11.7	1120	LÍNEA 132 KV CHOELE CHOEL - BELTRAN	COMAHUE	RÍO NEGRO	EOL	29/8/2019
1° Trim. 2018	P.E. DE LA BAHÍA - A	PARQUES EÓLICOS DEL FIN DEL MUNDO SA	20.51	21.6	1160	LÍNEA 132 KV BAHÍA BLANCA - MONTE HERMOSO - CORONEL DORREGO	COMAHUE	BUENOS AIRES	EOL	7/6/2019
1° Trim. 2018	P.E. VILLALONGA II	GENNEIA S.A.	3.45	3.45	1210	LÍNEA 132 KV CARMEN DE PATAGONES - LURO	COMAHUE	BUENOS AIRES	EOL	22/2/2019
1° Trim. 2018	P.E. LA GENOVEVA II	VIENTOS LA GENOVEVA II S.A.U.	41.8	41.8	1241	LÍNEA 132 KV BAHÍA BLANCA - CORONEL PRINGLES	COMAHUE	BUENOS AIRES	EOL	14/9/2019
1° Trim. 2018	P.E. ENERGETICA I - FASE II	ENERGETICA ARGENTINA S.A.	19.15	19.95	1140	LÍNEA 132 KV BAHÍA BLANCA - TORNQUIST	COMAHUE	BUENOS AIRES	EOL	11/10/2019
1° Trim. 2018	P.E. DEL BICENTENARIO II	PARQUE EÓLICO DEL BICENTENARIO S.A.	21.6	25.2	3070	LÍNEA 132 KV PETROQUÍMICA - PUERTO DESEADO	PATAGONIA	SANTA CRUZ	EOL	19/4/2019
1° Trim. 2018	P.E. ALUAR I	ALUAR ALUMINIO S.A.I.C.	50.4	50.4	3191	ARRIBO 3 - T3 132 KV PLANTA ALUAR	PATAGONIA	CHUBUT	EOL	20/2/2019
1° Trim. -2018	P.S. PARQUE DE LOS LLANOS	EMPRESA FEDERAL DE ENERGIA S.A. (EFESA)	12	12	4081	CHAMICAL	NOA	LA RIOJA	SFV	23/2/2019
1° Trim. 2018	P.E. MANQUE - (Ex ACHIRAS II 1er T2018)	CP MANQUE S.A.U.	57	38	5030	LÍNEA 132 KV VILLA MERCEDES - MARANZANA II	CENTRO	CÓRDOBA	EOL	7/12/2019 (Parcial)
2° Trim. 2018	P.S. ULLUM SOLARGEN 2	SOLARGEN ULLUM S.A.	6.5	6.5	6412	SOLAR ULLUM (#)	CUYO	SAN JUAN	SFV	24/7/2019
3° Trim. 2018	P.S. Chepes	Ledlar SAPEM	2	2	4081	CHAMICAL	NOA	LA RIOJA	SFV	4/10/2018
3° Trim. 2018	P.S. La Cumbre II	Diaser Energía S.A.S.	4	4	5017	LA CUMBRE SL	CENTRO	SAN LUIS	SFV	28/2/2019
			467.3	454.3						

Source: CAMMESA

Until then, renewable energy supply contracts were concluded through public tenders (called RENOVAR programs), where the private generator sells its production to the state (CAMMESA).

The general framework is the National law 27.191/2015 "National Development Regime for the use of Renewable Sources of Energy Destined for the Production of Electric

Energy" that establishes all Electric Power Users must contribute to the Compliance with the Objectives of the Development Regime. For these purposes, each obligated subject must achieve the minimum incorporation of eight percent (8%) of the total consumption of electricity, with energy from renewable sources, as of December 31, 2017, and twenty percent (20%) as of December 31, 2025. Compliance with the obligations must be done gradually.

Large users of the Wholesale Electricity Market with power demands equal to or greater than three hundred kilowatts (300 kW) must effectively and individually comply with the objectives indicated in the preceding article.

An important barrier of the project was EFESA's decision to begin construction in a context where there were still regulatory issues to be defined. This meant facing many risks to the project. On the one hand, a resolution with a certificate in favor of the project to import photovoltaic equipment without import duties of 14% had not yet been issued. The delay in the sanction meant a significant economic loss since the teams were more than a month in customs waiting for the regulation. On the other hand, the decision to move forward was in spite of not yet having signed PPA contracts with industrial companies, who had to decide to buy renewable electricity from a private generating company instead of from CAMMESA (administrator of the wholesale electricity market).

On the other hand, EFE S.A. had no experience in generating electricity with renewable energy sources. In fact, its shareholders are companies with other core business that have decided to enter this market.

Based on the context above, the assessment and demonstration of additionality is carried out following the guidelines provided in the latest version of the "Tool for the demonstration and assessment of additionality" (TOOL01, Version 07.0.0).

The tool provides a step-wise approach to demonstrate and assess additionality. These steps include:

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

b) Step 1: Identification of alternatives to the project activity;

c) Step 2: Investment analysis;

d) Step 3: Barriers analysis;

e) Step 4: Common practice analysis.

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

Outcome of Step 0: The project activity is not first-of-its-kind. Thus, step 1 is applied.

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

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

  Given that, the proposed project activity is the installation of a Greenfield power plant, two realistic and credible alternatives that provide comparable outputs or services have been identified:

  a) The proposed project activity undertaken without being registered as a GS project;

  b) Continuation of the current situation, i.e. no project activity undertaken. This would imply, as per the provisions contained in the methodology ACM0002 (version 21.0) that "electricity delivered to the grid by the project activity that would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described in the TOOL07".

  Outcome of Step 1a: As presented above, the identified realistic and credible alternative scenario(s) to the project activity are: a) The proposed project activity undertaken without being registered as a GS project; and b) Continuation of the current situation, i.e. no project activity undertaken.

- *Sub-step 1b: Consistency with mandatory laws and regulations*

  Outcome of Step 1b: The identified alternative scenarios comply with all applicable mandatory legal and regulatory requirements of Argentina on national and/or sectoral policies and regulations.

Step 2: Investment analysis

The purpose of this step is to determine that the proposed project activity is not the most economically or financially attractive alternative or not economically or financially feasible, without the revenue from the sales of carbon credits.

- *Sub-step 2.a: Determine appropriate analysis method*

  An appropriate investment analysis shall be determined according to the proposed project activity characteristics in order to assess additionality under sub-step 2 guidelines and requirements.

  Given that the proposed umbrella project activity–power generation to be delivered to the SADI by means of three photovoltaic power plants – is expected to generate incomes by itself once implemented and operational, a simple cost analysis would not be suitable.

On the other hand, based on the "Guidelines on the assessment of investment analysis", according to the following statement:

"If the alternative to the project activity is the supply of electricity from a grid this is not to be considered an investment and a benchmark approach is considered appropriate."

Taking into account that any other private or state owned company would have had the chance to invest or not in power plants to deliver electricity to the SADI and that any other investment rather than the proposed project activity is out of the control of the project proponent, it becomes clear that an investment comparison is not the approach that should be applied in order to assess the proposed umbrella project activity additionality.

The selected approach is Option III (benchmark analysis) of the "Tool for the demonstration and assessment of additionality", which is considered the appropriate investment analysis method.

- *Sub-step 2.b: Option III – Benchmark analysis*

The benchmark analysis requires the selection of an adequate financial indicator. For the assessment of the proposed project activity, the Project Internal Rate of Return (Project IRR, or IRR) is chosen as the financial indicator that would adequately reflect the project type and decision context.

Following paragraph 17 statement provided in section VI "Selection and Validation of Appropriate Benchmarks" of the "Methodological tool of investment analysis" establishing that:

"In the cases of projects which could be developed by an entity other than the project participant the benchmark should be based on parameters that are standard in the market". A benchmark that leads to an adequate comparison and representativeness with the market is used.

Thus, the benchmark rate has been developed with publicly available information. A WACC (weighted average cost of capital) based on public information has been selected as a benchmark to be compared with the Project IRR according to paragraph 15 section VI "Selection and Validation of Appropriate Benchmarks" of the "Methodological tool of investment analysis establishing that: "WACC are appropriate benchmarks for a project IRR".

$$WACC = \frac{E}{C} \times k_e + \frac{D}{C} \times k_d \times (1-T)$$

where

E = equity
D = financial debt
C = capital
k_e = cost of equity
k_d = cost of debt
T = income tax

Following paragraph 25 y 26 statement provided in section VI "Selection and Validation of Appropriate Benchmarks" of the "Methodological tool of investment analysis", the equity/debt ratio is 50%/50% may be assumed as a default. This capital structure is used because in Argentina there is no defined capital structure for these projects. There are no development banks like in other countries. Large wind and solar projects are mostly financed by ECAs (export credit agencies) from other countries under the project finance scheme.
The income tax in Argentina is 25% by law 20,628.

For the calculation of WACC, a financing rate for the issuance of corporate debt of the energy item in the long term and at the beginning of 2018. The cost of debt in nominal terms is 6.9%.
The data corresponds to the issuance of a negotiable obligation in the capital market of a major energy company (the group consisting of Rio Energy SA, UGEN SA and UENSA SA) for a term of 85 months at a nominal rate of 6.9%. According to what was reported in January 2018 by the National Securities Commission of the Argentine Republic. Considering an annual inflation rate of US of 2.1% in January 2018, the cost of debt in real terms is 4.71%. So, kd=4.71% is the value used.

Additionally, the cost of equity ke=15.24% which arises from the "Table. Default value for the cost of equity (expected return on equity), Group 1" of the "Methodological tool of investment analysis".

Thus, the benchmark rate value that is used in order to assess the power plants under the umbrella Project activity additionality is given by:

$$Benchmark = 50\% \; x \; 15.24\% + 50\% \; x \; 4.71\% \; x \; (1 - 25\%) = 9.39\%$$

The benchmark proposed is expressed in real terms, after taxes and compatible for comparison with a project IRR cashflow in real terms after taxes from values existing at the time of project decisions.

The following charts reflects the main considerations taken into account to perform the investment analysis of Parque de los Llanos Power Plants as part of the proposed umbrella project activity.

Investment costs (Capex) were taken from signed contract for photovoltaic panels (per PLPPP I 12 MW) and various quotes of other items (most for PLPPP I 12 MW). Further, the report published by IRENA "Renewable Power Generation Costs in_2018" was used as a cross-check (page 46) demonstrating that the reference used (1.209 USD/kW) is much lower than the reference for Argentina indicated in the report (1.433 USD/kW). Thus, the CAPEX is being conservative.

The electricity price is taken from CAMMESA projections according to "Renewable Report" from February 2018.

The energy generation considered in the additionality analysis arises from Megajoule Production Report March 2018: 62,649 MWh / yr (table 10 – 20 years production estimate and associated uncertainty P50). The plant is dimensioned at 33 MW according to CAMMESA's technical requirements for the delivery of reactive power in case of being requested (the latter is not remunerated). Likewise, a conservative position is assumed since the remunerated generation could be less than 62,649 MWh / yr since it is required to inject reactive power to stabilize the network to the detriment of the active power (remunerated sale).

The financial analysis and the parameters considered corresponds to the PLPPP (30 MW), what includes PLPPP I, PLPPP II and PLPPP III.

Ref	Parameter	Total Value	Unit	Source	Comments Argentina	Document date
1	*Installed Capacity*	30	MW	Project Developer	Environment Impact Study	December 2017
2	*Capex*	36,258	kUSD	Signed contract for photovoltaic panels (per PLPPP I) and various quotes (most for PLPPP I)	See sheet "CAPEX 30 MW"	2017 and 2018
3	*Equity Portion*	50%	%	TOOL27. Methodological tool Investment Analysis version 10.0	Paragraph 25 suggest the use of 50/50 Equity/Debt in case information is not readily available.	
4	*Debt Portion*	50%	%	TOOL27. Methodological tool Investment Analysis version 10.0	Paragraph 25 suggest the use of 50/50 Equity/Debt in case information is not readily available.	
5	*Cost of Debt (nominal terms)*	6.9%	%	CNV - Argentine Capital Markets	Document: "Informe Mensual de Financiamiento en el Mercado de Capitales" (Page 12)	January 2018
6	*Inflation Rate (USD)*	2.1%	%	US Bureau of labor statistics	https://fred.stlouisfed.org/series/CPIAUCSL. Average 2017	January 2018
7	*Cost of Equity (real terms)*	15.24%	%	TOOL27. Methodological tool Investment Analysis version 10.0	Table: Default values for the cost of equity (expected return on equity). Group 1. Argentina Page 12	
8	*Electricity Generation*	62.649	GWh/y	Megajoule	Average 20 years production estimate and associated uncertainty (P50 value)	March 2018
9	*Electricity Price*	75	USD/MWh	CAMMESA (Administrator of the Wholesale Eletric Market)	Renewable Report (Page 8)	February 2018
10	*Cashflow Period*	20	years	Megajoule	20 years according to Megajoule Report and the major PPA terms in Argetina	March 2018
11	*Income Tax rate*	25%	%	Undersecretary of tax policy. Ministry of Public Revenue. Treasury. Presidency of the Nation	Current Taxes in Argentina.pdf (page I.1.7)	2018
12	*O&M costs*	15	kUSD/MW/yr	IRENA	IRENA_Renewable Power Generation Costs in 2017 (Page 69)	2018

Based on the above discussion and information provided in table above, the proposed investment analyses show the following results for PLPPP power plant:

	Scenarios	Project IRR	Benchmark IRR
Base Case	S0	7.81%	9.39%

In conclusion, the project IRR is lower than the benchmark, indicating that the investment on it, without any incentives from carbon credits revenues is not attractive for a rational investor.

- *Sub-step 2d.Sensitivity analysis*

A sensitivity analysis is conducted by altering the following parameters in order to show that the conclusion of the investment analysis is robust to reasonable variations in the critical assumptions:

- - CAPEX decrease;
- - Revenues increase;
- - Operation & Maintenance (O&M) decrease;

As per the TOOL27 Investment analysis (version 10.0) these parameters were selected as they constitute more than 20% of either total project costs or total project revenues, are the most likely to fluctuate over time and can significantly affect the financial attractiveness of the project.

The sensitivity analysis was performed by altering these parameters +/- 10% and by calculating the variation necessary to reach benchmark.

The tables below summarize the results of the sensitivity analysis.

Sensitivities (FV Los Llanos)

	Scenarios	Project IRR	Benchmark IRR
Base Case	S0	7.81%	9.39%
Opex +10%	S1	7.68%	
Opex -10%	S2	7.93%	
CAPEX +10%	S3	6.73%	
CAPEX -10%	S4	9.08%	
Revenues +10%	S5	9.07%	
Revenues -10%	S6	6.49%	

The likelihood of the variations for each parameter is discussed below based on the market projections, articles and/or technical data:

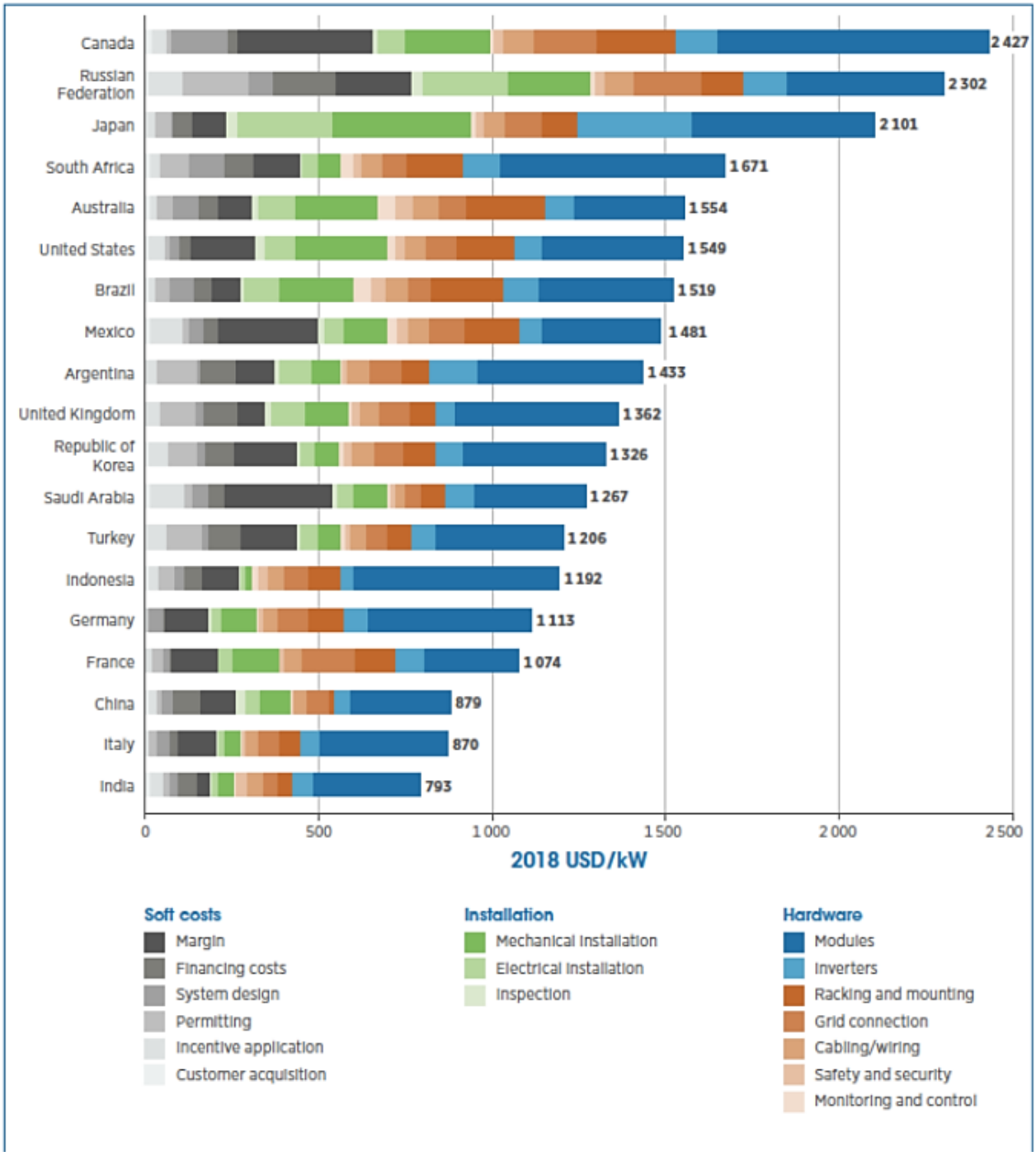
1. Investment (Capex):

The project CAPEX for 30 MW based on a signed GLC panel contract for PLPPP I 12 MW and various quotes received (most for PLPPP I 12 MW) before project start date. The contract signed and the quotations for 12 MW were extrapolated to 30 MW. The result for PLPPP is 1.209 USD/kW . The table below shows the CAPEX values of PLPPP plants with an opening of its main items:

	CAPEX	
	PLPPP - 30 MW	%
Equipments	22,218,856	61%
BOS (Balance of System)	10,155,409	28%
Land	274,960	1%
Transformer Substation and medium voltage line	1,672,995	5%
Others	1,935,711	5%
TOTAL CAPEX - USD	**36,257,932**	**100%**
TOTAL CAPEX - USD/kW	**1.209**	

Below are the comparative CAPEX values between the different countries according to the report published by IRENA is called "Renewable Power Generation Costs in 2018", source highly recognized and internationally validated by experts. This report was used as a cross check.

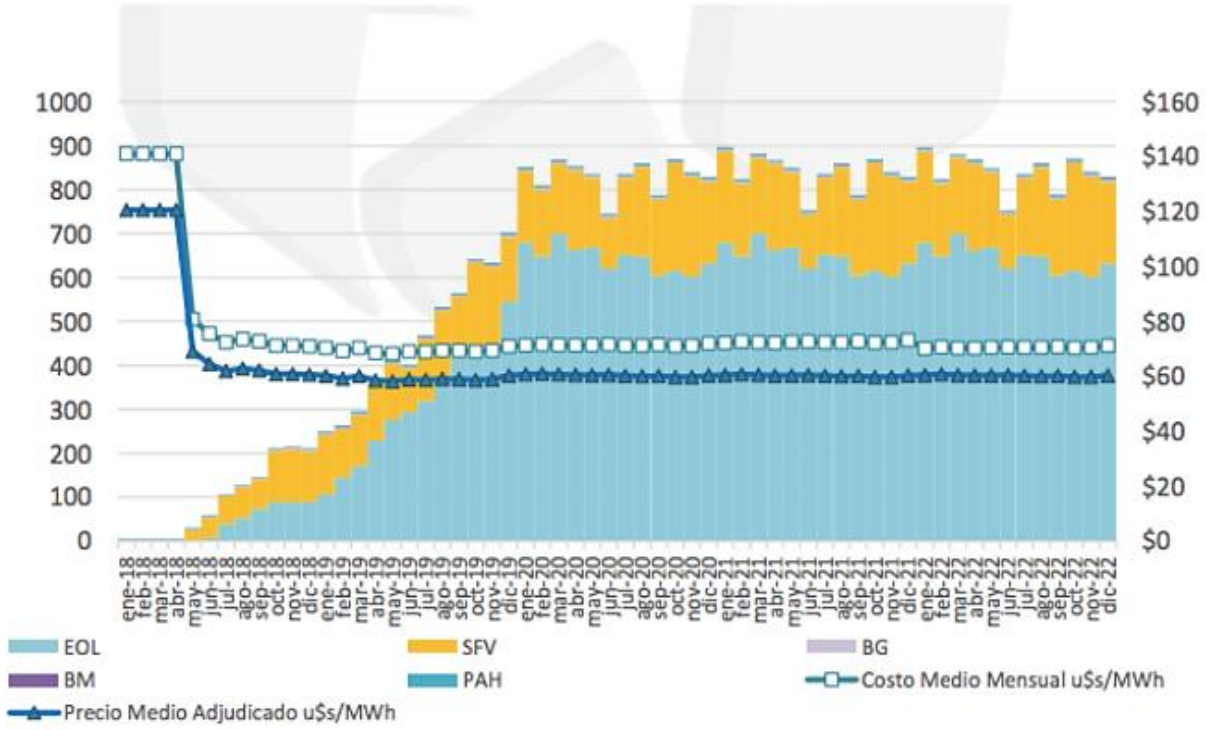
Figure 2.4 Detailed breakdown of utility-scale solar PV total installed costs in G20 countries, 2018



2. Revenues:

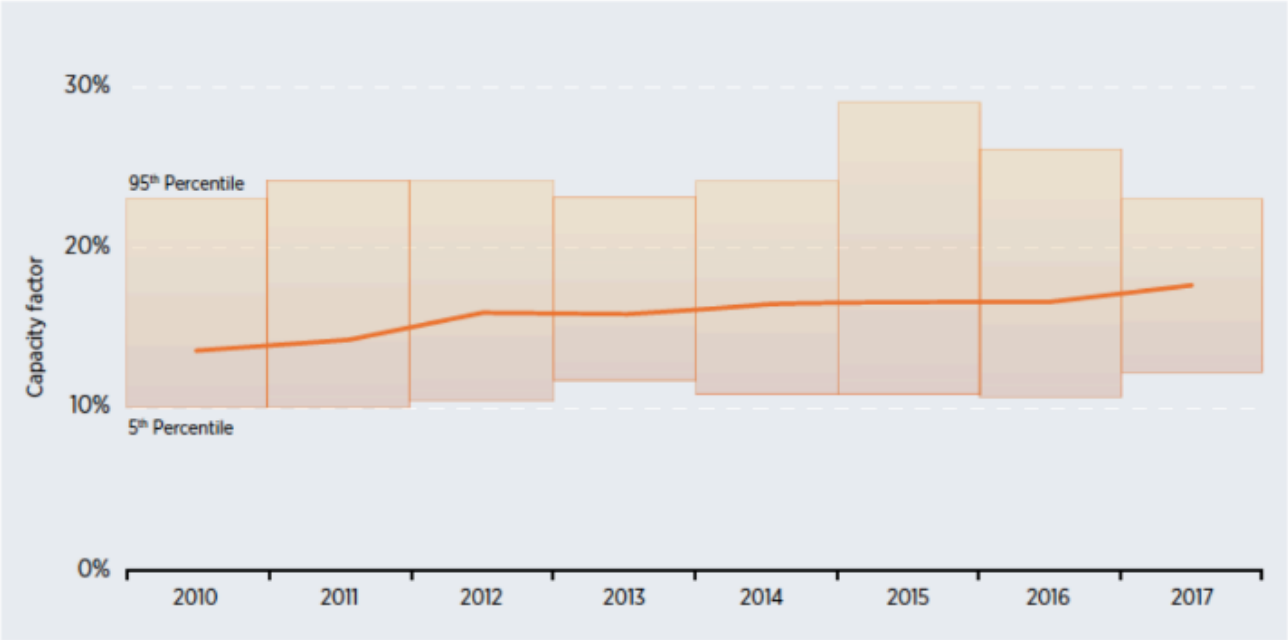
To reach the benchmark the electricity price should increase by 13% equivalent to 84.4 USD/MWh. This value in the renewable energy market in Argentina is not feasible. In fact, the following graphs prepared by CAMMESA in February 2018 show the projection of future revenues from renewable generation plants that have already set their long

term prices for PPAs with CAMMESA. A curve of average monthly cost in USD / MWh (see "costo medio mensual" in English "average monthly cost") is observed around 75 USD / MWh in the long term at most.



Electricity generation (load Factor): the electricity generation would need to increase 13%, equivalent to reach the benchmark. Also, the benchmark would lead to a load factor of almost 25% which has never been seen for solar projects. According to the latest report published by IRENA "Renewable Power Generation Costs in 2017" (page 69), the average load factor of the representative countries with photovoltaic investments shows increasing values due to the technological improvement of recent years. However, on average in 2018 the load factor is located at 18%, much lower than almost 25% mentioned.

Figure 3.9 Global weighted average capacity factors for utility-scale PV systems, 2010-2016



Source: IRENA Renewable Cost Database.

3. Opex:

The operating and maintenance cost of solar power plants is in average 15 USD/kW per year along the project lifetime. Even assuming the project will incur no Opex, the project IRR remains below the benchmark.

The above illustrated results prove that only with highly unrealistic and very favourable circumstances the project IRR could reach the benchmark.

Therefore, the present project is not financially attractive, without the revenue from the sale of carbon credits.

Outcome of Step 2: After the sensitivity analysis, it is concluded that the proposed component project activity is unlikely to be financially/economically attractive. Thus, step 4 is applied.

Step 3: Barrier Analysis

The project developer has opted to use the investment analysis to demonstrate the additionality of this project. Therefore, the barrier analysis is not addressed.

Outcome of Step 3: As Step 3 (Barrier Analysis) is not being used, then proceed to Step 4 (Common practice analysis).

Step 4: Common practice Analysis

The proposed projects applies measures that are listed in the definitions' section of the TOOL01 Tool for the demonstration and assessment of additionality (version 07.0.0). Therefore, the analysis should refer to the latest version of TOOL24 Methodological tool: Common practice" (version 03.1).

According to the Tool, the applicable geographical area should be the entire host country by default. Therefore, the geographical area of the common practice analysis is limited to Argentina.

The tool provides the following stepwise approach for common practice:

- **Step 1:** Calculate applicable capacity or output range as +/-50% of the total design capacity or output of the proposed project activity.

  The reference project installed capacity is 30 MW (the total size of the three plants, 8, 10 and 12), hence, the applicable capacity range is: 15 MW – 45 MW.

- **Step 2:** identify similar projects (both CDM and non-CDM) which fulfil all of the following conditions:

  a) The projects are located in the applicable geographical area (Argentina);

  b) The projects apply the same measure as the proposed project activity (Renewable Electricity Generation);

  c) The projects use the same energy source/fuel and feedstock as the proposed project activity, if a technology switch measure is implemented by the proposed project activity (The project is a greenfield plant, no technology switch involved);

  d) The plants in which the projects are implemented produce goods or services with comparable quality, properties and applications areas (e.g. clinker) as the proposed project plant;

  e) The capacity or output of the projects is within the applicable capacity or output range calculated in Step 1 (15 MW – 45 MW);

  f) The projects started commercial operation before the project design document (CDM-PDD) is published for global stakeholder consultation or before the start date of proposed project activity, whichever is earlier for the proposed project activity (The start date of the proposed project activity is 16/03/2018).

The common practice analysis has been conducted based on data from CAMMESA[5]. In total, 44 full scale grid connected renewable energy power plants were operational in Argentina before the project starting date.

Table: Operational Renewable Energy power plants in Argentina before the start date.

Type	Plant Name	Installed Capacity (MW)	Start date of operations	Emission Reduction Project
Wind	EÓLICO RAWSON III GENNEIA	25.05	21/12/2017	CDM Project 8228
Hydro	PUNTA NEGRA	31.64	01/04/2017	CDM Project 10225
Hydro	PUNTA NEGRA	31.64	01/04/2017	CDM Project 10225
Wind	PARQUE EOLICO ARAUCO I S.A. (Etapa 2)	25.2	01/02/2014	

[5] https://portalweb.cammesa.com/MEMNet1/Pages/Informes%20por%20Categor%C3%ADa%20Publico/Programaci%C3%B3n/estacional.aspx (in Spanish, under option "Base Generadores")

Biomass	AG TABACAL	40	08/11/2011	-
Wind	EÓLICO RAWSON II	31.15	03/11/2011	CDM Project 8583
Hydro	CONSORCIO POTRERILLOS	15	15/04/2011	-
Hydro	CONSORCIO POTRERILLOS	15	15/04/2011	-
Hydro	CONSORCIO POTRERILLOS	24.4	15/04/2011	-
Wind	PARQUE EOLICO ARAUCO I S.A. (Etapa 1)	25.2	27/01/2011	-
Biomass	INGENIO STA. BARBARA	16.2	06/07/2010	-
Biomass	A.G. ALTO PARANA	38	15/08/2009	-
Renewable Hydro	H. AMEGHINO	23.4	01/03/2006	-
Renewable Hydro	H. AMEGHINO	23.4	01/03/2006	-
Renewable Hydro	LAS MADERAS	15.3	29/05/2003	-
Renewable Hydro	LAS MADERAS	15.3	29/05/2003	-
Hydro	CONSORCIO POTRERILLOS	30	10/04/2002	-
Hydro	CONSORCIO POTRERILLOS	30	10/04/2002	-
Hydro	CONSORCIO POTRERILLOS	30	10/04/2002	-
Hydro	CONSORCIO POTRERILLOS	30	10/04/2002	-
Renewable Hydro	NIHUIL IV	18	01/08/1998	-
Hydro	C. DE PIEDRA	30	07/02/1996	-
Hydro	C. DE PIEDRA	30	07/02/1996	-
Hydro	CHOCON	42.6	01/11/1994	-
Hydro	CHOCON	42.6	01/11/1994	-
Hydro	CHOCON	42.6	01/11/1994	-
Hydro	HINISA	18	01/05/1994	-
Hydro	HINISA	18	01/05/1994	-
Hydro	HINISA	18	01/05/1994	-
Hydro	HINISA	18	01/05/1994	-
Hydro	HINISA	18	01/05/1994	-
Hydro	HINISA	18	01/05/1994	-
Hydro	HINISA	18	01/05/1994	-
Hydro	HINISA	18	01/05/1994	-
Hydro	HINISA	18	01/05/1994	-
Hydro	HINISA	19	01/05/1994	-
Hydro	HINISA	19	01/05/1994	-
Hydro	HINISA	21	01/05/1994	-
Hydro	HINISA	21	01/05/1994	-
Renewable Hydro	CARACOLES	45	01/05/1994	-
Hydro	HR JURAM.	33.5	30/04/1994	-
Hydro	HR JURAM.	33.5	30/04/1994	-
Hydro	HR JURAM.	33.5	30/04/1994	-
Renewable Hydro	HT SAN JUAN	21	30/04/1994	-
Renewable Hydro	HT SAN JUAN	21	30/04/1994	-

Source: CAMMESA

https://portalweb.cammesa.com/memnet1/revistas/estacional/base_gen.html

- **Step 3:** within the projects identified in Step 2, identify those that are neither registered CDM project activities, project activities submitted for registration, nor project activities undergoing validation. Note their number N_{all}.

  As described in Step 2, there are 04 (four) projects in the list registered as CDM projects inside the capacity range threshold. Therefore: **N_{all} = 40**

- **Step 4:** within similar projects identified in Step 3, identify those that apply technologies that are different to the technology applied in the proposed project activity. Note their number N_{diff}.

  As described in Step 2, all projects identified in the list are related to a different technology, i.e. does not involve photovoltaic electricity generation. Thus, all identified projects inside the capacity range threshold are different to the technology applied in the proposed project activity.

  Therefore: **N_{diff} = 40**

- **Step 5:** calculate factor F=1- N_{diff} /N_{all} representing the share of similar projects (penetration rate of the measure/technology) using a measure/technology similar to the measure/technology used in the proposed project activity that deliver the same output or capacity as the proposed project activity.

  F = 1-40/40 = 0

  Factor F is, therefore, lower than 0.2.

  In complement to this assessment, we can also determine that the calculation N_{all} - N_{diff} = 40 - 40 = 0, which is lower than 3. Therefore, the proposed project activity is not regarded as "common practice", and thus can be considered additional.

B.5.1 Prior Consideration

N/A

Since the project is a retroactive one and had already (at time of first submission) submitted the required documents for preliminary review within a year of the project start date.

At the same time, this Project has no Design Changes.

B.5.2 Ongoing Financial Need.

As preliminary and as mentioned on ➢ Sub-step 2.b: Option III – Benchmark analysis, some original references and parameters taken into account to make the financial analysis have worsened:

- Installed Capacity: Original PDD 30 MW Projected capacity vs. 20 MW current installed capacity.
- Inflation Rate (USD) The pandemic contributed to a sharp increase of inflation rate, which reached 8.00%[6] in 2022.
- Electricity Generation: Originally expected to be 62,649 GW/y while the generation for 2024 (PLPPP I and PLPPP II) is expected 41,853 (ER Calculation 2024_ Emission Factor 2021).
- Income Tax Rate: Projected 25% while actually is 35%[7]. This increase has not been originated on an increase of the sells of the company but originated on the Argentinian Peso devaluation and the inflation rate that actually is 20.6%[8] per month.

Moreover, the Emission Reduction factor has decreased from 0.4516 (1st PDD) to 0.4018 and it is publicly known that the market price of VERs has also decreased the last years.

Taking all these parameters into consideration, it can be concluded that a breach/gap from the original benchmark analysis puts the project in an even lesser favorable scenario from the one expected for the investors.

As an example, considering both the CAPEX (kUSD 36,258) and the estimated yearly generation (62,649 MWh - installed capacity of 30MW) remains almost the same, only considering the Emission Reduction value is now 0.4018 tCO2/MWh (not 0.4516), means the project may issue 25,172 VERS (aprox). In 15 years of the project keeping the Gold Standard certification, means a total of 377,585 (aprox) of VERS and, by selling each VERS by USD 5, it would mean a total income of USD 1,888,927 aprox. This amount represents 5.20% of the full investment. In conclusion, the project IRR is even lower than the benchmark, indicating that the investment on it, without any incentives from carbon credits revenues is not attractive for a rational investor.

Regarding specific facts that affected the project, the developer was not able to install PLPPP III (10 MW), which was first expected to be operative by the end of 2021 (1st Monitoring Report v5), as it has suffered several delays due to (i) the Covid-19 Pandemic situation that, in Argentina, meant obligatory social isolation from March 2020 to January 2021[9], (ii) the resulting global and local economic downturn[10].

Then, PLPPP III was planned to be installed in 2023 (1st Annual Report), however, the local economic situation worsened during that year since Argentina's government hardened the exchange and custom controls set by the previous government to prevent

[6] https://fred.stlouisfed.org/series/FPCPITOTLZGUSA
[7] https://www.argentina.gob.ar/sites/default/files/tributos_vigentes_al_31-03-2023.pdf Page I.1.7.
[8] https://www.indec.gob.ar/uploads/informesdeprensa/ipc_02_24DC34E376E0.pdf Page 3
[9] The preventive social isolation (ASPO) in Argentina was mandatory and meant the obligation of people to remain in their habitual residences without going to their workplaces. Likewise, it established the prohibition of traveling on routes, roads and public spaces, in order to prevent the circulation and contagion of the COVID-19 virus. The isolation continued with certain modifications depending on the territory, in accordance with the provisions of Decrees No. 576/20, 605/20, 641/20, 677/20, 714/20, 754/20, 792/20, 814/20 and 875/20 until January 31, 2021.
[10] https://www.bancomundial.org/es/news/press-release/2020/06/08/covid-19-to-plunge-global-economy-into-worst-recession-since-world-war-ii

escapes of the Central Bank reserves and also face the payment of the foreign debt with the IMF[11]. This prevented many companies to import several goods[12].

These restrictions affected not only the expansion of the project from 20MW to 30MW but also affected the PLPPP I and II as the project developer founded several difficulties to import several services (maintenances and stock goods) which affected the performance of the mentioned plants.

With the change of government, during 2024, Argentina is expected to eliminate this controls and restrictions to improve the competitiveness of the markets[13], including the electrical market[14]. Many changes have been proposed with the launch of the "omnibus law" which has a specific chapter of energy measures. Launch of new infrastructure mechanisms are also expected.

Despite the fact that economic prospects stills foresee high inflation, fiscal adjustment and tough financing conditions[15], the project developer is still interested in achieving its goal of installing the PLPPPIII and the revenue from GS Certification is material on the ongoing of the project.

B.6. Sustainable Development Goals (SDG) outcomes

Relevant Target/Indicator for each of the three SDGs.

The table below shows the relevant SDG targets for the SDGs addressed by the project.

SUSTAINABLE DEVELOPMENT GOALS TARGETED	MOST RELEVANT SDG TARGET	SDG IMPACT **INDICATOR (PROPOSED OR SDG INDICATOR)**
		tCO_{2e} reduced by the Project.
13 Climate Action (mandatory)	**13.2** Integrate climate change measures into national policies, strategies and planning.	The project will be integrated into national NDC´s and will reduce 23,809 t CO2e (annual average over the crediting period).

[11] https://www.bbc.com/mundo/noticias-america-latina-51540061
[12] https://www.lanacion.com.ar/economia/comercio-exterior/por-la-falta-de-divisas-2023-se-perfila-con-menos-importaciones-que-en-2022-y-con-una-recesion-nid20042023/
[13] https://tradenews.com.ar/resumen-de-las-primeras-medidas-de-milei-para-el-comercio-exterior/
[14] https://www.energiaestrategica.com/ley-omnibus-milei-plantea-un-mercado-de-derechos-de-emision-de-gases-de-efecto-invernadero/
[15] https://www.clarin.com/economia/fmi-cambio-completo-prevision-crecimiento-economia-argentina-2024_0_LPJQOMvif4.html

7 Affordable and Clean Energy	**7.2** By 2030, increase substantially the share of renewable energy in the global energy mix.	Increase in the supply of energy from renewable sources in the province and the country. MWh injected into the national grid. The three operating plants will generate an annual volume of 59,259 MWh.
8 Decent Work and Economic Growth	**8.3** Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services.	Number of people employed directly by the projects. Direct employment: during construction the project hired about 130 employees at the peak (15% specialized professionals and 85% local non-specialized) plus staff for monitoring and environmental care. During plant operation it hires 21 employees (4 operators plus 6 surveillance workers, 3 office staff and 2 for general services, plus 6 employees in the Buenos Aires office). Indirect labor (suppliers of services and products: food, transportation, containers, cleaning, etc.).

		Number of average Voltage Deviation of the Transmission Line (132kV)
9 Build resilient infrastructure, promote sustainable industrialization and foster innovation	**9.1** Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all	Improvement in the electrical infrastructure of the region causes an increase in the quality of life by having a more stable and predictable service. Chamical is located at the end of the power line (132kV) having fluctuations and imbalance problems. The park provides robustness to the system.

B.6.1 Explanation of methodological choices/approaches for estimating the SDG Impact

The table below explains the methodological approach for estimation the SDG outcome.

Corresponding SDG	Methodological choices/approaches for estimating the SDG outcome
13 Climate Action	**Measurement Method:** The emission reduction parameter is calculated as product of net electricity supplied to grid by each project and grid emission factor. The grid emission factor is ex-ante parameter and determined based on data obtained from "Argentinean Grid CO2 EF calculation 2013-2021"; Ministry of Energy and Mining; Argentinean National Government; http://datos.minem.gob.ar/dataset/calculo-del-factor-de-emision-de-co2-de-la-red-argentina-de-energia-electrica This is in line with "Tool to calculate the emission factor for an electricity system, version 7.0". The emission reductions are calculated as per registered PDD and as per methodology requirement. **QA/QC Process**: This parameter is calculated checking of generated energy and emission factor.

7 Affordable and Clean Energy	**Measurement Method**: Electricity produced and supplied to the grid by the project will be monitored through general energy meter (SMEC (LLANM71P and LLANM71C) and each plant (PLPPP I, PLPPP II and PLPPP III) will have its own measurement through investors. Other parameters used for net electricity supplied to grid are mentioned in monitoring plan. **QA/QC Process**: this parameter is monitored monthly and value of parameters will be cross checked with invoices. The meters will be calibrated on regular frequency.
8 Decent Work and Economic Growth	**Measurement Method**: employment generation will be monitored through staff register or HSE/HR records. **QA/QC Process**: This parameter is based on HR records and reports.
9 Build resilient infrastructure, Promote sustainable industrialization and foster innovation	**Measurement Method:** CAMMESA, the national company which manages the electricity market in Argentina, brings data from tension stability in the electricity line in which the project activity is connected. From this data, which comes from official and reliable source, it can be observed the influence of the implementation of the PA in the stabilization of the line. Alternatively, EDELAR (the distribution company) or TRANSNOA (the transport company) might provide similar information to support the main parameter. **QA/QC Process**: This parameter is based on data from EDELAR and TRANSNOA.

B.6.2 Data and parameters fixed ex ante

SDG13

Data/parameter Unit	$EF_{grid,CM,y}$ tCO_2/MWh
Description Source of data	Combined Margin Emissions factor Argentinean Grid CO2 EF calculation 2019, 2020, 2021; Ministry of Energy and Mining; http://datos.energia.gob.ar/dataset/calculo-del-factor-de-emision-de-co2-de-la-red-argentina-de-energia-electrica

Value(s) applied	0.4018
Choice of data or Measurement methods and procedures	Calculated according to the Tool to calculate the emission factor for an electricity system.
Purpose of data	Calculation of baseline emissions
Additional comment	-

Data/parameter	$FC_{i,y}$
Unit	Mass or volume unit
Description	Amount of fuel type i consumed by the project electricity system in year y
Source of data	Ministry of Energy and Mining of Argentina (MEM)[16]
Value(s) applied	
Choice of data or Measurement methods and procedures	Simple OM: once for each crediting period using the most recent three historical years for which data is available at

Fuel consumption	2019	2020	2021
Natural Gas [m dam3]	17,211	16,298	16,350
Fuel Oil [kTon]	186	580	750
Gas Oil [mm3]	404	852	2,024
Coal [kTon]	222	475	866
Biodiesel [kTon]	0	0	0

[16] http://datos.energia.gob.ar/dataset/calculo-del-factor-de-emision-de-co2-de-la-red-argentina-de-energia-electrica

	the time of submission of the PDD for validation (ex ante option)
Purpose of data	Calculation of baseline emissions
Additional comment	-

Data/parameter	$NCV_{i,y}$
Unit	GJ/mass or volume unit
Description	Net calorific value (energy content) of fuel type i in year y
Source of data	National Energy Balance, Historical Synthesis 1960-2021[17]
Value(s) applied	
Choice of data or Measurement methods and procedures	Simple OM: once for each crediting period using the most recent three historical years for which data is available at the time of submission of the PDD for validation (ex ante option)
Purpose of data	Calculation of baseline emissions
Additional comment	-

	Density	NCV	NCV	NCV
Fuel	**kg/ l(m3)[1]**	**kcal/ kg(m3)**	**GJ/t(1000 m3)**	**TEP/ t(1000 m3)**
Natural Gas	-	8300	34.73	0.829
Fuel Oil	0.945	9800	41.00	0.979
Gas Oil	0.845	10300	43.10	1.029
Coal	-	5900	24.69	0.59
Biodiesel	0.878	8900	37.24	0.889

[17] https://www.argentina.gob.ar/econom%C3%ADa/energ%C3%ADa/planeamiento-energetico/balances-energeticos

Data/parameter	$EF_{CO2,i,y}$
Unit	t CO_2/GJ
Description	CO_2 emission factor of fuel type i used in power unit m in year y
Source of data	IPCC
Value(s) applied	**Fuel** / **EF CO_2 tCO₂/TJ** Natural Gas: 54300 Fuel Oil: 75500 Gas Oil: 72600 Coal: 89500
Choice of data or Measurement methods and procedures	Simple OM: once for each crediting period using the most recent three historical years for which data is available at the time of submission of the PDD for validation (ex ante option)
Purpose of data	Calculation of baseline emissions
Additional comment	-

B.6.3 Ex ante estimation of SDG Impact

SDG 13: Climate Action

Baseline Emissions: *According to ACM0002 Version 21.0 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 would have been generated by existing grid-connected power plants and 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 fed into the grid as a result of the implementation of the 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 the latest version of the "Tool to calculate the emission factor for an electricity system" (tCO2/MWh).

Calculation of $EG_{PJ,y}$

As the project activity is the installation of a Greenfield power plant, then:

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

Where:

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

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

Calculation of the combined margin CO_2 emission factor for grid connected power generation in year y ($EF_{grid,CM,y}$)

The Ministry of Energy and Mining of Argentina that calculates the Combined Margin (CM) emission factor of the Argentinean Interconnection System (SADI) according to the different methods provided in the "Tool to calculate the emission factor for an electricity system" and makes it available to the public.[18]

Therefore, the EFgrid,CM,y for the present project activity is obtained from the Ministry of Energy and Mining (MEM) of Argentina. The description of the EFgrid calculation below shows the calculation method according to the CDM TOOL07, where is requested that the calculation should follow a stepwise approach as follows:

[18] Available at: http://datos.minem.gob.ar/dataset/calculo-del-factor-de-emision-de-co2-de-la-red-Argentina-de-energia-electrica ; Accessed on: 15/01/2020.

Step 1: Identify the relevant electricity systems

For determining the electricity emission factors, the relevant project electricity system should be identified. The EFgrid as calculated by MEM considers the entire Argentinean Interconnection System (SADI) for calculations. This system is administered and regulated by the National Electricity Regulatory Entity (ENRE) and by the Compañía Administradora del Mercado Eléctrico Mayorista Eléctrico Sociedad Anónima (CAMMESA). On the CAMMESA website[19] it is possible to access the map of the grid to visualize the different components of the system: lines, transfer stations, power stations, etc. There is no interconnection with other countries and the grid is located totally inside a non-annex I country. Therefore, the option chosen to define the grid is **Option 2**.

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

Since only grid power plants are included in the calculation, the option chosen is **Option I**.

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

According to the MEM 2019-2021 EF_{grid} calculator, which is the latest version available at the time of submission of the project to validation, low-cost/must-run contributes to less than 50% of total grid generation. Therefore, for the present project activity the simple OM method (option a) from the TOOL07 is applied based on ex-ante data vintage (2019, 2020 and 2021). Regarding the following years (2022 and 2023) no information is available.

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

The simple OM emission factor is calculated as the generation-weighted average CO_2 emissions per unit net electricity generation (t CO_2/MWh) of all generating power plants serving the system, not including low-cost/must-run power plants/units. The best data available consider the total net electricity generation of all power plants serving the SADI and the fuel types and total fuel consumption of the SADI. Since Only nuclear and

[19] https://aplic.cammesa.com/geosadi/?x=-5284626.119642097&y=6807067.280524422&z=5&layers=5;6;1&labels=;1;&transp=1;1;1&filter=

renewable power generation are considered as low-cost/must-run power sources and the quantity of electricity supplied to the grid by these sources is known, and off-grid power plants are not included in the calculation, the option chosen is **Option B**.

Option B: Calculation based on total fuel consumption and electricity generation of the system

Under this option, the simple OM emission factor is calculated as follows:

$$EF_{grid,OMsimple,y} = \frac{\sum_i FC_{i,y} \times NCV_{i,y} \times EF_{CO2,i,y}}{EG_y}$$

Where:

$EF_{grid,OMsimple,y}$	=	Simple operating margin CO_2 emission factor in year *y* (t CO_2/MWh)
$FC_{i,y}$	=	Amount of fuel type *i* consumed in the project electricity system in year *y* (mass or volume unit)
$NCV_{i,y}$	=	Net calorific value (energy content) of fuel type *i* in year *y* (GJ/mass or volume unit)
$EF_{CO2,i,y}$	=	CO_2 emission factor of fuel type *i* in year *y* (t CO_2/GJ)
EG_y	=	Net electricity generated and delivered to the grid by all power sources serving the system, not including low-cost/must-run power plants/units, in year *y* (MWh)
i	=	All fuel types combusted in power sources in the project electricity system in year *y*
y	=	The relevant year as per the data vintage chosen in Step 3

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

In terms of vintage of data, project participants choose Option 1: for the first crediting period, calculate the build margin emission factor ex ante based on the most recent information available on units already built for sample group m at the time of CDM-PDD submission to the DOE for validation. For the second crediting period, the build margin emission factor should be updated based on the most recent information available on units already built at the time of submission of the request for renewal of the crediting period to the DOE. For the third crediting period, the build margin emission factor calculated for the second crediting period should be used. This option does not require monitoring the emission factor during the crediting period.

For calculating the Build Margin (BM) emission factor, the option 1 (ex-ante) of the tool has been chosen. Thus, the Build Margin emission factor for 2021 as published by the Ministry of Energy and Mining of Argentina, is utilized and fixed ex-ante for the crediting period.

The sample group of power units m used to calculate the build margin is determined according to the CDM TOOL07 using items (a), (b), (c) and (d).The build margin emissions factor is the generation-weighted average emission factor (t CO_2/MWh) of all power units m during the most recent year y for which electricity generation data is available, calculated as follows:

$$EF_{grid,BM,y} = \frac{\sum_m EG_{m,y} \times EF_{EL,m,y}}{\sum_m EG_{m,y}}$$

Where:

$EF_{grid,BM,y}$	=	Build margin CO_2 emission factor in year *y* (t CO_2/MWh)
$EG_{m,y}$	=	Net quantity of electricity generated and delivered to the grid by power unit *m* in year *y* (MWh)
$EF_{EL,m,y}$	=	CO_2 emission factor of power unit *m* in year *y* (t CO_2/MWh)
m	=	Power units included in the build margin
y	=	Most recent historical year for which electricity generation data is available

Step 6: Calculate the combined margin emissions factor

According to the Tool to calculate the emission factor for an electricity system the combined margin is calculated as a weighted average as follows:

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

Where:

$EF_{grid,BM,y}$ = Build margin CO2 emission factor in year y (tCO2/MWh)

$EF_{grid,OM,y}$ = Operating margin CO2 emission factor in year y (tCO2/MWh)

w_{OM} = Weighting of operating margin emissions factor (%)

w_{BM} = Weighting of build margin emissions factor (%)

For solar or wind power projects the weighting OM and BM factors are:

Weighting factor	Solar or Wind power generation projects
w_{OM}	0.75
w_{BM}	0.25

Project Emissions: According to the methodology project emissions (PEy) for solar or wind projects that do not use fossil fuels for electricity generation are zero.

Therefore: $PE_y = 0$

Leakage: According to the methodology ACM0002 (version 21.0), the following is stated: "No leakage emissions are considered. The emissions potentially arising due to activities such as power plant construction and upstream emissions from fossil fuel use (e.g. extraction, processing, transport) are neglected".

Therefore: $L_y = 0$

Net GHG Emission Reductions and Removals: According to ACM0002 Version 21.0 the quantification of net GHG emission reductions is as follow:

$$ER_y = BE_y - PE_y$$

Where:

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

BE_y = Baseline emissions in year y (tCO2e/yr);

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

The ex-ante calculation of emission reductions is calculated based on the above formula and based on the data parameters illustrated in the table below.

Variable	Value	Data Source

Operating Margin Emissions Factor ($EF_{grid,OM,y}$, in tCO_2/MWh)	0.4299	Simple OM ex ante (2019, 2020, 2021 average), Argentinean Grid CO2 EF calculation 2019, 2020, 2021; Ministry of Energy and Mining; Argentinean National Government; http://datos.energia.gob.ar/dataset/calculo-del-factor-de-emision-de-co2-de-la-red-argentina-de-energia-electrica
Build Margin Emissions Factor ($EF_{grid,BM,y}$, in tCO_2/MWh)	0.3174	Ex ante BM 2021; Argentinean Grid CO_2 EF calculation 2021; Ministry of Energy and Mining; Argentinean National Government; http://datos.energia.gob.ar/dataset/calculo-del-factor-de-emision-de-co2-de-la-red-argentina-de-energia-electrica
Weighting of operating margin emission factor (w_{OM})	0.75	Tool to calculate the emission factor for an electricity system, solar project.
Weighting of building margin emission factor (w_{BM})	0.25	Tool to calculate the emission factor for an electricity system, solar project
Combined Margin Emissions Factor ($EF_{grid,CM,y}$ in tCO_2/MWh)	0.4018	Calculated.
Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the project activity in year y ($EG_{facility,y}$ in MWh/yr)	59,259	Average for the 5-year crediting period.

Therefore, annual average over the crediting period of emission reductions are:

ER_y = 23,809 tCO_2e/year

SDG 7 : Affordable and Clean Energy

For a given year, the projects will have a total installed capacity of 30 MW (12 MW PLPPP I, 8 MW PLPPP II and 10 MW PLPPP III). The plant load factor is equivalent to 21.3%, generating 62,780 MWh/yr.

SDG 8 : Decent Work and Economic Growth

The project leads to employment opportunities which would not have been possible in the baseline scenario. The project provides employment to 21 people during the 20 years of the operation and maintenance phase. In the photovoltaic plant there are 4 operators plus 6 surveillance workers, 3 office staff and 2 for general services. In addition, the administration office located in Buenos Aires consists of 6 employees.

SDG 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

The project has produced an improvement in the electrical infrastructure of the region by providing a more stable and predictable service with fewer power outages evidenced in the reduction of the tension instability of the transmission line (132 kV). This in turn has caused an increase in the quality of life of the city of Chamical, which is located at the end of the power line (132 kV). The improvement in Chamical's city electrical infrastructure due to the project is evidenced in the improvement in the voltage level and the stabilization (less fluctuations) of the 132 kV network in Chamical. To conclude, the indicator demonstrates the evolution into less volatility in voltage levels and greater stability in the network and provision of electrical energy.

B.6.4 Summary of ex ante estimates of each SDG Impact

SDG 13: Climate Action

The baseline emissions are the product of electrical energy baseline $EG_{PJ,y}$ expressed in MWh of electricity produced by the renewable generating unit multiplied by an emission factor.

YEAR	BASELINE ESTIMATE	PROJECT ESTIMATE	NET BENEFIT
Year 6: since 23/02/2024	14,421	0	14,421
Year 7: 2025	25,224	0	25,224

Year 8: 2026	25,224	0	25,224
Year 9: 2027	25,224	0	25,224
Year 10:2028	25,294	0	25,294
Year 11: until 22/02/2029	3,663	0	3,663
Total	119,050	0	119,050
Total number of crediting years		5 years	
Annual average over the crediting period	23,809		23,809

SDG 7 : Affordable and Clean Energy

The net renewable energy supplied to the grid is expressed in MWh/Year

YEAR	BASELINE ESTIMATE	PROJECT ESTIMATE	NET BENEFIT
Year 6: since 23/02/2024	0	35,891	35,891
Year 7: 2025	0	62,780	62,780
Year 8: 2026	0	62,780	62,780
Year 9: 2027	0	62,780	62,780
Year 10: 2028	0	62,952	62,952
Year 11: until 22/02/2029)	0	9,116	9,116
Total	0	296,299	296,299
Total number of crediting years		**5 years**	
Annual average over the crediting period	**0**	**59,259**	**59,259**

SDG 8 : Decent Work and Economic Growth

The estimate is expressed in jobs created

YEAR	BASELINE ESTIMATE	PROJECT ESTIMATE	NET BENEFIT
Year 6: since 23/02/2024	0	21[20]	21
Year 7: 2025	0	21	21
Year 8: 2026	0	21	21
Year 9: 2027	0	21	21
Year 10:2028	0	21	21
Year 11: until 22/02/2029	0	21	21
Total	0	21	21
Total number of crediting years		5 years	
Annual average over the crediting period	0	21	21

B.7. Monitoring plan

B.7.1 Data and parameters to be monitored

SDG 13

Data / Parameter	**ER_y**
Unit	tCO_2e/year
Description	Emission reductions achieved per year
Source of data	As per Estimated ER spreadsheet. During the verification, the results shall be obtained from the Actual ER spreadsheet.
Value(s) applied	23,809 (average for the 5-year crediting period)
Measurement methods and procedures	The baseline emissions are the product of electrical energy baseline $EG_{PJ,y}$ expressed in MWh of electricity

[20] The jobs are not new, however the project will maintain 21 employees involved (direct jobs) for all years.

	produced by the renewable generating unit multiplied by an emission factor.
Monitoring frequency QA/QC procedures	As per monitoring period Not Applicable
Purpose of data	To Monitor the SDG 13 Indicator
Additional comment	Data will be archived in paper & electronic form for two years after the end of crediting period or of the last issuance of GS-VERs for this project activity, whichever occurs later.

SDG 7

Data / Parameter	$EG_{facility,y}$ (or $EG_{PJ,y}$)
Unit Description	MWh/yr Quantity of net electricity generation supplied by the project plant/unit to the grid in year y
Source of data	Electricity meter
Value(s) applied Measurement methods and procedures	59,259 (average for the 5-year crediting period) This parameter will be monitored using bi-directional energy meter Class 0.2S[21]
Monitoring frequency QA/QC procedures	Continuous measurements and monthly recorded. Meter calibration will be performed once a year according to CAMMESA procedures[22]. In case of failures CAMMESA

[21] CAMMESA Procedures Version XXVI, Anexo 24 (Sistema de operacion y despacho (SOD)); 1.2.1. (Características de equipos y clase de medición); Meters of power utilities with installed capacity equal or greater than 20 MW; http://portalweb.cammesa.com/Pages/Institucional/Empresa/procedimientos.aspx

[22] The verification (calibration) frequency is currently no longer than once per year according to CAMMESA, Technical Procedure PT-14 (Auditoría Externa de SMEC); http://portalweb.cammesa.com/Pages/Institucional/Empresa/procedimientos.aspx

	procedure will be followed[23]. The electricity generation (gross or net) shall be cross-checked permanently with the public records of CAMMESA. Besides it will be cross-checked with records of electricity sale (e.g. sales receipt and by DTE (economic transactions document issued monthly by CAMMESA).
Purpose of data	To Monitor the SDG 7 Indicator
Additional comment	-

SDG 8

Data / Parameter	Number of employment generation
Unit Description	Number Number of people employed directly due to the project activity
Source of data	EFESAs HR records on employment generation/ DOE interview with employees, local stakeholders etc. HR policies regarding health insurance/social security will be checked.
Value(s) applied	21 for the remaining years
Measurement methods and procedures	The total number of persons working in the plant would be calculated based on the monthly payroll.
Monitoring frequency	Monthly monitoring and annual compilation
QA/QC procedures	The number of employees would be reflected in the company payroll, which can be crossed checked with attendance register. The information required for this parameter can be checked by VVB during site visit through interview with people or through relevant supporting documents.

[23] CAMMESA Technical Procedure N°3, Technical Procedure PT-N°3; Commercial Measurement System (SMEC) Procedure of data collection in emergency; http://portalweb.cammesa.com/Biblioteca%20de%20Documentos/P_3_.pdf

Purpose of data	To Monitor the SDG 8 Indicator
Additional comment	-

SDG 9

Data / Parameter	Voltage Deviation
Unit	kV
Description	Average Voltage Deviation (grid voltage stability) per year in the city of Chamical (132 kV voltage line)
Source of data	CAMMESA records the voltage parameters of the grid network. The local power distributing company EDELAR has an internal registry on the number of annual electricity outages
Value(s) applied	Not estimated
Measurement methods and procedures	Hourly voltage level data is used and the average deviation is calculated. CAMMESA will be contacted annually to check the average voltage deviation of the transmission line.
Monitoring frequency	Monthly monitoring and annual compilation
QA/QC procedures	This parameter is based on data from EDELAR and TRANSNOA.
Purpose of data	To Monitor the SDG 9 Indicator
Additional comment	The data achieved is used to calculate the average voltage deviation of the transmission line (132 kV) in order to demonstrate the reduction in the tension instability of the transmission line of the city of Chamical.

Monitoring plan of Safeguarding Principles

Please see section D for more information.

Principle 3.1.2

Data / Parameter	**Waste generation**
Unit	Kg/month
Description	Kilograms of waste generated per month (hazardous and non-hazardous).
Source of data	Information recorded monthly in the Registry of measurement of waste (RE-GA-07)
Value(s) applied	Not estimated
Measurement methods and procedures	The waste generated in the plants is measured and recorded monthly in a Registry Excel sheet called RE-GA-07 annually.
Monitoring frequency	Monthly monitoring and annual compilation
QA/QC procedures	Not Applicable
Purpose of data	To Monitor the Safeguarding Principle 3.1.2
Additional comment	-

Principle 9.4

Data / Parameter	**Noise**
Unit	NSCE (dBA)
Description	Noise monitoring records
Source of data	PROGRESS REPORT on the ENVIRONMENTAL PLANNING of PSFV de Los Llanos
Value(s) applied	Not Estimated
Measurement methods and procedures	The report is a study that consists of taking samples from different places in the plants and measuring the noise.

Monitoring frequency	Every 2 years according to Environmental Planification
QA/QC procedures	These values can be compared with the reference values established in IRAM 4062.
Purpose of data	To Monitor the Safeguarding Principle 9.4
Additional comment	The frequency of this measurement is set by the Environmental Planification (approved by the Environmental Impact Assessment).

Principle 9.5

Data / Parameter	**Waste generator registration**
Unit	Number
Description	"Certificado Ambiental Anual" (Annual environmental accreditation) of province of La Rioja´s Resolution obtained.
Source of data	"Certificado Ambiental Annual" or Annual Environmental Certificate provided by the La Rioja´s Environmental Secretariat.
Value(s) applied	1 Certificate per year
Measurement methods and procedures	To obtain the Certificate the project developer must be in compliance with the requirements established in current legislation (Provincial Law Nº 8.735 which adheres to Law Nº 24.051).
Monitoring frequency	Annual compilation of Certificates.
QA/QC procedures	The information required for this parameter can be checked by VVB through relevant documents.
Purpose of data	To Monitor the Safeguarding Principle 9.5
Additional comment	The Annual Environmental Accreditation registers the Project Developer as a hazardous waste generator, and it

	is obtained with a resolution made by the designed authority (Environmental Secretariat of La Rioja).

Principle 9.6

Data / Parameter	**Fumigation events**
Unit	Number
Description	Fumigation against insects per year.
Source of data	The complementary maintenance planification RE-OM-03 details the month when the fumigation is planned and the month when it is finally executed.
Value(s) applied	Not estimated
Measurement methods and procedures	The fumigation is planned and the date when it is done is registered.
Monitoring frequency	Annually
QA/QC procedures	Not applicable
Purpose of data	To monitor Safeguarding Principle 9.6.
Additional comment	-

Principle 9.10

Data / Parameter	**Water Consumption**
Unit	Liters/month
Description	Liters of water consumed per month.
Source of data	Information recorded monthly in the Registry of water consumption (RE-GA-13)
Value(s) applied	Not estimated

Measurement methods and procedures	The water consumed in the plants is measured and recorded monthly in a Registry Excel sheet called RE-GA-13 annually.
Monitoring frequency QA/QC procedures	Monthly monitoring and annual compilation This parameter is based on data from the water meter.
Purpose of data	To Monitor the Safeguarding Principle 9.6
Additional comment	-

B.7.2 Sampling plan

Not applicable.

B.7.3 Other elements of monitoring plan

Methods for measuring, recording, storing, aggregating, collating and reporting data and parameters.

The project electricity generation will be dispatched to the Wholesale Electricity Market ("MEM" from the Spanish Mercado Eléctrico Mayorista).

Therefore, measuring, recording, storing, aggregating, collating and reporting data and parameters must follow the Wholesale Electricity Market Administrator Company (CAMMESA) technical procedures regarding the Commercial Measurement System ("SMEC" from the Spanish Sistema de Medición Comercial) and the Real Time Operation System ("SOTR" from the Spanish Sistema de Operación en Tiempo Real).[24]

Data will be kept until two years after the end of the crediting period or the last issuance of GS-VERs whichever occurs later.

Organizational structure, responsibilities and competencies of the monitoring personnel

[24] CAMMESA Procedures Version XXVI, Anexo 24 (Sistema de operación y despacho (SOD)); http://portalweb.cammesa.com/Pages/Institucional/Empresa/procedimientos.aspx

The organizational structure of the project for the operation & maintenance, safety, health and environment and the technical staff is illustrated in the diagram below. In addition, the strategic decisions of the projects are taken by an executive committee composed of nominated directors and the project manager. A team of external and internal staff and advisors contribute to the development of the project.

The operation supervision and field assistants will have permanent presence in the control room of the plant.

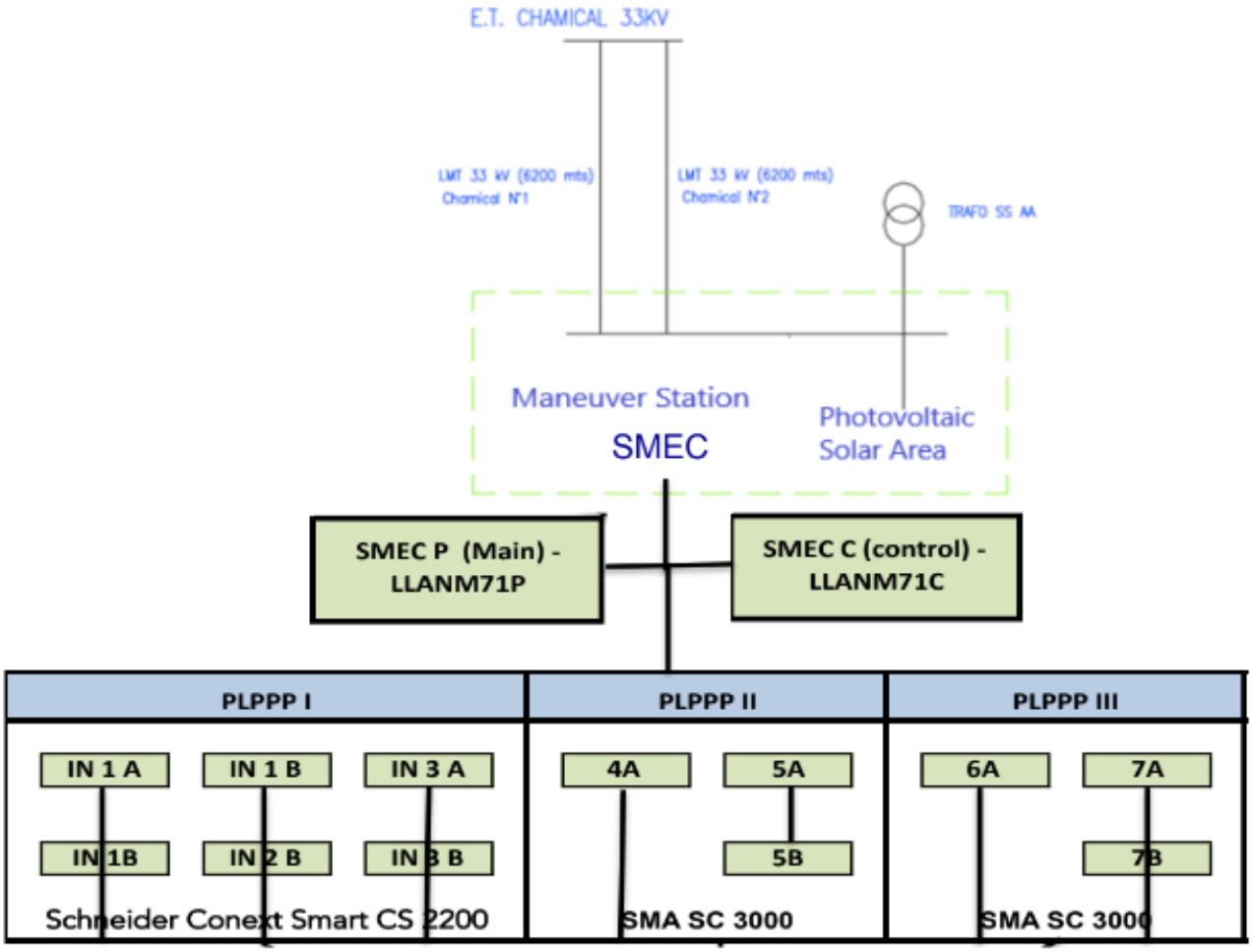
Detailed roles and responsibilities of the relevant staff involved in GS monitoring will be in place at the starting date of the crediting period. Furthermore, this staff will receive relevant training, if required, to ensure that monitoring duties will be performed by trained staff.

Quality Assurance and Quality Control

As mentioned above, the meter/s used for determining the electricity supplied to the grid will be high accuracy measurement device/s and will meet all relevant methodological requirements prescribed by CAMMESA.

Procedures for maintenance of the monitoring equipment will be conducted in accordance with national procedures and standards.

The line diagram below illustrates the measurement arrangements:



The projects will be linked to the system through the 132 / 33kV Chamical Transformer Station jurisdiction of the company TRANSNOA S.A. The link between the exit of the plant and the E.T. Chamical in 33Kv, will be done through two airlines.

The commercial measurement point (SMEC) will be located at the maneuver station inside the plant and the inverters of each project feed that measurement. According with the A.5 section, the PLPPP I plant has 6 inverters, PLPPP II has 3 inverters and PLPPP III would have 3 inverters too. Each line of inverters collects the electric generation. The end point of energy delivery is defined in the E.T. Chamical, therefore, it is necessary to make loss compensation in the aforementioned airlines. Said compensation will be carried out automatically in the SMEC meters of the Plant.

In the place an electrical and control room will be built that will contain all the measurement, protection, control and communications boards necessary for 33kV.

The technical and functional characteristics of the SMEC project that correspond to the measurement node are defined below, complying with the current CAMMESA regulations:

Responsible Agent	Federal Energy Company
Agent mnemonic	PSPLLANG
Description	Bar 33 kv exit to line E.T. Chamical
Node SMEC	LLANOM71

Energy Meters

Main energy meter	LLANM71P
Energy control meter	LLANM71C
Brand	Power Logic
Model	ION 8650

Voltage/Current Trasformers

Transformers	Voltage transformers	Current transformers
Brand	TAIT	TAIT
Model	EREM5	JRE 2030
Relation	33 kV/Raiz3/0.11/Raiz3-0.11/Raiz3 kV	300-600/5-5
Power	30 VA	20 VA
Class	0.2	0.2s

Design details:

The measurement, voltage and current transformers corresponding to the SMEC will be installed in the 33kv bar of the Plantark Outdoor Maneuver Station. In the first plant, PLPPP I, the TTIIs (current transformer) will be connected in the 300/5 amperes ratio to guarantee an adequate value of their use, and for PLPPPII and PLPPP III it should be modified to 600/5 Amp. The TTVV (voltage transformer) and TTII (current transformer) have an exclusive winding for the use of SMEC measurement.

A junction box with its corresponding terminals and fuses and another with the load resistors of the SMEC voltmeter circuit will be located near the measuring block.

The meter board will be located in the electrical and control room, it will be metallic of folded and welded steel sheet, with degree of protection IP52, color RAL7032.

The wiring will be 4mm2 for voltage and 4mm2 for current. From the junction box to the meter board will be four-wire cables of the Sintenax type.
The energy meters (main and control) will be of class 0.2s and will have auxiliary power, pulse outputs and communications ports (Ethernet, modem, optical).

All components of the measuring chain will provide for the possibility of being sealed.
The backup measurement will be carried out with a meter with similar characteristics to those used for the Smec ION 7400 which connects to the same TTVV and TTI in other windings.
The Backup meter will fulfill the function of Quality of Service registration.

SECTION C. DURATION AND CREDITING PERIOD

C.1. Duration of project

C.1.1 Start date of project

The starting date of the Parque de los Llanos Power Project was set on 16/03/2018 when EFE S.A. signed the solar panels contract with GCL for the PLPPP I plant.

On 30/01/2019, 20% was paid (510 kUSD) as a downpayment to the supplier of photovoltaic panels UP Solar for PLPPP II. Additionally, PLPPP III is expected to start implementation along 2024.

The PLPPP power plants project applied an early consideration before CDM (clean development mechanism) of United Nations (see the link https://cdm.unfccc.int/Projects/PriorCDM/notifications/index_html in September 2018. However, during the CDM documentation development, in consultation with Argentinean DNA about the letter of approval procedures, EFE SA discovered that it could not continue to register to reduce emissions because the DNA (designated national authority) does not accept more projects since the emission reductions are being accounted for national contribution and the DNA was not issuing Letters of Approval in accordance to the CDM requirements.

However, DNA allowed its registration in voluntary markets. As result, EFE SA started to look for alternatives and in 2019 we decided to apply the GS4GG.

To be more precise, at the initial stages of the project development, EFESA just made a query to the DNA regarding the possibility of issuing a LoA. This happened on August 2018, and the response from the, at that time, Climate Change National Director referred to an arbitrary clause of resolution issued by the Energy Secretariat (RESOL-2018-100-APN-SGE#MHA, https://www.boletinoficial.gob.ar/detalleAviso/primera/195941/20181115). This clause stated that all GHG emission reductions in the national territory derived from the RenovAr Program (National program to increase the renewable energy participation in the power grid), as well as all those that lead to the fulfilment of the goals established in Law 27,191 (Renewable energy national law), are included in the Argentine NDC´s goal and will be counted by the government for the fulfilment of its NDC within the framework of the Paris Agreement and the UNFCCC.

EFESA´s project does not fit entirely within this definition, not only because it does not belong to the RenovAr Program, but also because the Law 27,191 enforces power users to consume up to a certain percentage of their demand (from 8 to 20% until 2025) from renewable sources so no possibility of double counting exists and EFE SA's project does not fit in the category of projects that are obligatorily included in the Argentine NDC´s goal.

Then, regarding the possibility of certifying emission reductions under a voluntary standard the DNA´s response was that it would depend on the way each standard accounts for the voluntary carbon credits. If the accounting method is framed within the previous clause, then there would be no problem in pursuing a voluntary emission reduction certification.

Once EFESA realized that the process to obtain the LoA from the National Government was not going to be possible, and based on the DNA´s comments, the company decided not to pursue the CDM and shifted towards a voluntary standard, choosing the GS4GG. Hence, the LoA was never requested nor denied.

Finally, it is important to mention that the project would have fulfilled all DNA requirements (determined by the national, provincial and municipal laws) regarding technical or regulatory aspects in case it had requested a LoA.
Please find the main dates and milestones from the project in Appendix 5.

C.1.2 Expected operational lifetime of project
20 years, 0 months

C.2. Crediting period of project

C.2.1 Start date of crediting period
1st Crediting period: 23/02/2019 Commercial operation date (COD) of PLPPP I or two years prior to the date of Project Design Certification, whichever is later.
2nd Crediting period: 23/02/2024.

C.2.2 Total length of crediting period

5 years, 0 months

SECTION D. SUMMARY OF SAFEGUARDING PRINCIPLES AND GENDER SENSITIVE ASSESSMENT

D.1 Safeguarding Principles that will be monitored

A completed Safeguarding Principles Assessment is in Appendix 1, ongoing monitoring is summarised below.

PRINCIPLES	MITIGATION MEASURES ADDED TO THE MONITORING PLAN
Principle 3.1	To monitor this Principle, the Parameter of Waste Generation is monitored, please see section B.7.1. In addition, mitigation measures and other parameters mentioned below are implemented to preserve the workers and community safety. In the Environmental Impact Declaration, measures regarding contamination/pollution, waste and prevention that the project developers must comply with are described (Resolution No. 058/22 from the Environmental Secretariat, Ministry of Planning and Industry of La Rioja).Moreover, sound emissions, particulate matter, electromagnetic field and grounding are measured. Projects developer complies with national and provincial legislation regarding dangerous materials and has the relevant authorizations as a generator of hazardous waste. The project is an ISO 14001:2015 certified project, in this context aspects and impacts of the operation that may have an impact on the environment, therefore on the community, are identified. Among others, the project implements the following procedures to avoid and minimize potential accidents or incidents associated: - PR-GA-02, Procedure of response to incidents and contingencies; - PR-GA-02 Exhibit I, Procedure of role of action in emergencies; - PR-GA-05, Procedure of identification and evaluation of environmental aspects and impacts; - IN-SS-02 , First aid instructions; - RE-SS-01 , Delivery of personal elements of protection. The project also records any incident and the following emergency plans: - RE-SS-02, Registry of internal accident investigation; - IN-GA-01, Investigation of incidents and contingencies.
Principle 6.1	The Project developer complies with the National Working Laws. In this order; Law No. 11.544 determines the working hours (must not exceed 8 hs per day/48 hs per week), duties and tasks and extra hours; Law No. 20.744 which determines licenses and holidays; Law No. 20.744 of Employment Contract Regime; Law No. 19.587 of Occupational Health and Safety of the workers.

Principle 9.4	To monitor this Principle, the Parameter of Noise is monitored, please see section B.7.1. In addition, the project is an ISO 14001:2015 certified project and complies with national regulations as Resol. ENRE 558/2022 which demands an environmental planification in order to measure sound emissions, electromagnetic field, and radio interference. Particulate matter is not measured since project developer does not generate it. Other indicators measured are monthly water consumption (for irrigation, washing and human consumption) and records of the wastewater drainage are also kept. Moreover, the project implements a procedure for a rational management of resources (PR-GA-08) and a procedure of role of action in emergencies.
Principle 9.5	To monitor this Principle, the Parameter of Waste Generation Registration is monitored, please see section B.7.1. The projects developer is registered as a waste generator in the La Rioja´s Environmental Secretariat by Resolution No. 211/23. This Annual Environmental Accreditation allows the project developer to proceed with the transportation, treatment and final disposal system of its hazardous and non-hazardous waste. In addition, the project implements a procedure for a rational management of resources (PR-GA-08) to, among others, minimize the amount of waste generation and recycle as established in the procedure of waste management (PR-GA-01). Also, the amount of generation of waste is monthly registered.
Principle 9.6	To monitor this Principle, the Parameter of Fumigation events is monitored, please see section B.7.1. No significant volume of pesticides is foreseen. The project uses pest chemical pesticides only for mosquitoes and flies. This activity is planned twice annually at the Maintenance Plan and employees are trained in its management. The procedure is done in accordance with the safety instructions stated in the policy of hygiene and safety in the job (PL-SS-01). Also the corresponding Safety and Material sheets of the Globally Harmonized System for pest management are used.
Principle 9.10	The project developer, in compliance with national and provincial Environmental regulations, has implemented a Reforestation Project (implemented and completed in 2022) according to the Forest Law and has compensated the damage caused by the deforestation. This was done with the guidance of the Provincial Secretariat of Environment and municipal authorities. EFESA has contributed with seedlings of 6 different native species, materials/equipment such as irrigation sprinklers, containers, germination trays, and crop seeds such as lettuce, chard, onion, tomato, carrot, pepper, pumpkin, and corn for the plant nursery creation. Regarding the water body, it is not planned to be affected by the project. Despite of that, the project has implemented, under the scope of the ISO.14.001 accreditation, a procedure to ensure the rational, responsible, and efficient use of natural resources, including water. Under this procedure, to follow defined KPI´s, the project developer records monthly water consumption (for irrigation, washing and human consumption), see Monitoring Plan section B.7.1.

Please find all the Monitoring Parameters for the Safeguarding Principles in section B.7.1.

D.2. Assessment that project complies with GS4GG Gender Sensitive requirements

Question 1 - Explain how the project reflects the key issues and requirements of Gender Sensitive design and implementation as outlined in the Gender Policy?	The projects activities do not endorse any form of discrimination based on gender. The projects owner/developer is a certified B Corporation, being gender equality a priority. Women will be able to participate in the projects with the same opportunities as with men, and they will equally be able to benefit from the energy supply. Jobs created through the projects are open to everyone regardless of their gender identity. The Projects shall not directly or indirectly lead to/contribute to adverse impacts on gender equality and/or the situation of women. Every employee is treated with respect and afforded equitable treatment. The projects proponent has a grievance registry which would look after complaints.
Question 2 - Explain how the project aligns with existing country policies, strategies and best practices	The Argentine legislation has a vast range of norms related to Gender equality and Women´s rights. The projects will comply with all these legislations: - National Law 26485- Violence Against Women - Prevention, sanction and eradication - National Decree 254/98 | Plan for Equal - Opportunities Between Men and Women in the Workplace - Decree 936/2011 | Integral Protection for Women - National Law 24012 | Female quota. - National Law 25087 | Crimes Against Sexual Integrity - National Law 25273 | Creation of a system of absences justified by reasons of gravity - National Law 26618 | Equality marriage - National Law 26743 | Gender Identity Law
Question 3 - Is an Expert required for the Gender Safeguarding Principles & Requirements?	No. However, the project developer implements an Integrity and Compliance Program and has a Responsible in Charge.

Question 4 - Is an Expert required to assist with Gender issues at the Stakeholder Consultation?	N/A

SECTION E. SUMMARY OF LOCAL STAKEHOLDER CONSULTATION

The below is a summary of the 2 step GS4GG Consultation for monitoring purposes made on December 19th. Please refer to the separate Stakeholder Consultation Report for a complete report on the initial consultation and stakeholder feedback round.

Hereunder a reproduction of the original validation report is made.

E.1 Summary of stakeholder mitigation measures

Below are listed some of the main topics and mitigation measures that were discussed with the participants of the consultation held on December 19th of 2019 from 6 pm to 9:30 pm (more information can be found on the Stakeholder Consultation Report[25]).

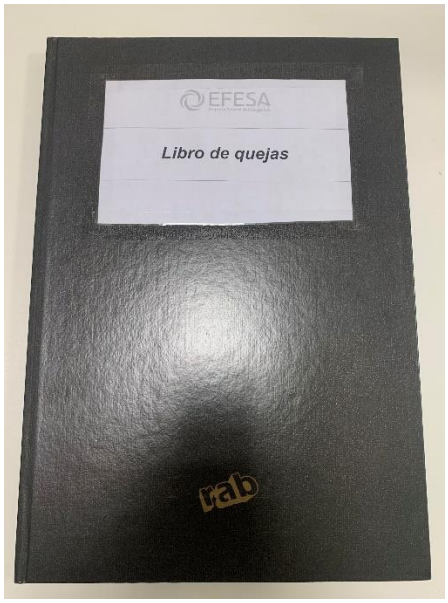
- Concern for green cover removal during project construction. It was explained that this vegetation removal was approved by the provincial authority after the Environmental Impact Assessment was presented and that the project developer committed to deliver to the local authorities two seedlings for every removed tree. In total this represents about 8000 seedlings. Then the provincial authorities would define which is the best destination for those seedlings. This was confirmed by the provincial authority who was participating at the meeting.
- During the meeting there was a proposal from the participants representing the INTA that these seedlings could be used to improve the urban forest. This project could be carried out between EFESA, the municipality of Chamical and the INTA. They agreed to meet in the next months to define the details of the project.
- During the discussion it was explained that the water and wind erosion risk was going to be mitigated through the regeneration of natural grass and pastures on the ground below the photovoltaic panels. On this regard, other suggestion from the INTA representative was to use sheep and goats to mow the grass instead of using mechanical mowers.
- Finally, the INTA representative suggested to use the seedlings the Project developer will hand in to the provincial authority to plant native tree curtains along the road that runs by the project site. The Project developer confirmed that this will be done.

[25] https://www.efe-sa.com.ar/wp-content/uploads/2020/07/101.1-T-SCR-EFE-SA-Parque-de-los-Llanos-umbrella-project.pdf

- The non-use of agrichemicals and fertilizers during the project construction and maintenance was highly appreciated.
- Also the improvement on energy infrastructure since the project stabilizes the electricity supply reducing the number of power cuts off throughout the year.
- Some participants were interested in analyzing the possibility of making agreements with local education institutions (technical high schools, universities, etc.) so they could receive training and information on photovoltaic panel installation and maintenance. Also the possibility for apprenticeships. The project developer explained that they have already received visits from local rural school and that they would be more than willing to analyze the possibility of cooperating with other local education institutions.
- Another participant asked if the project developer could assist technically and economically 66 rural families that have installed isolated solar panels on their homes. These families received the photovoltaic panels through the National Government Permer Program but they have not received further assistance to maintain the batteries. The project developer explained that they do not have the necessary expertise or legal capacity to do so. The same happened when other participant requested assistance to improve the city of Chamical street lightning and roads.
- Regarding the grievance expression methods, the Project Developer confirmed that there will be an email, a phone number and a web page through which the stakeholders could present a query or complaint and all meeting participants agreed that those would be adequate ways of communication.

E.2 Final continuous input / grievance mechanism

METHOD	INCLUDE ALL DETAILS OF CHOSEN METHOD (S) SO THAT THEY MAY BE UNDERSTOOD AND, WHERE RELEVANT, USED BY READERS.

Continuous Input / Grievance Expression Process Book (mandatory)	Telephone access. All stakeholders have access to a telephone; therefore they were given EFESA´s office landline number +54 11 57896800 and EFESA´s Operation and Maintenance Chief cel number +54 9 382 654-1079. The Grievance Expression Process Book is available at the site manager office to give full access to the community and stakeholders to complain/suggest information about the project. In addition, any complaint/suggestion received either by telephone, email, social networks or in person regarding continuous input/grievance will be noted therein. Photo of the Grievance book: 
Continuous Input / Grievance Expression Process Book	Internet, email and social media access. All stakeholders have access to internet, email or social media. Therefore the method chosen includes EFESA´s webpage (http://www.efe-sa.com.ar), EFESA´s Facebook (@EFESA.AR), EFESA´s Instagram (@EFESA.AR) or LinkedIn (https://lnkd.in/e6-zM7b), EFESA´s Operation and Maintenance Chief, Mr. Abraham Elias email (abraham.bazan@efe-sa.com.ar), and Gold Standard (info@goldstandard.org)
GS Contact (mandatory)	help@goldstandard.org
Other	N/A

APPENDIX 1 - SAFEGUARDING PRINCIPLES ASSESSMENT

Complete the Assessment below and copy all Mitigation Measures for each Principle into SECTION D above. Please refer to the instructions in the Guide to Completing this Form.

SOCIAL SAFEGUARDING PRINCIPLES		
Reference requirement	Question	Response
P.1 | HUMAN RIGHTS		
P.1.1.1 |	Does the project developer, its representatives and the Project disrespect internationally proclaimed human rights?	☐ YES ☒ NO
P.1.1.1 |	Is the project involved or complicit in violence or human rights abuses of any kind as defined in the Universal Declaration of Human Rights?	☐ YES ☒ NO
P.1.1.2 |	Have local communities or individuals raised human rights concerns regarding the project (e.g., during the stakeholder engagement process, grievance processes, public statements)?	☐ YES ☒ NO
P.1.1.3 |	Is there a risk that rights-holders (e.g., Project-affected stakeholders) do not have the capacity to claim their rights?	☐ YES ☒ NO
P.1.1.3 |	Does this project undermine national or regional measures for the realisation of the right to development?	☐ YES ☒ NO
If the answer to any of the questions above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.		
N/A		
Would the project potentially involve or lead to:		
P.1.1.1 |	adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalised groups?	☐ YES ☐ POTENTIALLY ☒ NO
P.1.1.2 |	inequitable or discriminatory impacts on affected populations, particularly people living in poverty or marginalised or excluded individuals or groups, including persons with disabilities?	☐ YES ☐ POTENTIALLY ☒ NO
P.1.1.3 |	restrictions in availability, quality of and/or access to resources or basic services, in particular to marginalised individuals or groups, including persons with disabilities?	☐ YES ☐ POTENTIALLY ☒ NO

P.1.1.3 |	exacerbation of conflicts among and/or the risk of violence to project-affected communities and individuals?	☐ YES ☐ POTENTIALLY ☒ NO

Briefly describe below how the project incorporates a human rights-based approach.
For example, by describing how the project design:

- is informed by human rights analysis, including from UN human rights mechanisms (human rights treaty bodies, universal periodic review, special procedures)
- includes measures to assist the government to realise (respect, protect and fulfil) human rights under international law and to implement human rights-related standards in national law (whichever is higher)
- enhances the availability, accessibility and quality of benefits and services for potentially marginalised individuals and groups, and to increase their inclusion in decision-making processes that may impact them (consistent with the non-discrimination and equality human rights principle)
- provides reasonable accommodations to strengthen inclusivity and accessibility of project benefits and services to persons with disabilities.

Human rights as a policy of the Argentine State constitute one of the fundamental pillars of Argentine policy since the return of democracy. The promotion and protection of human rights is transversal to all public policies and reflects the main concerns of Argentine society. That is why its defense and promotion constitute central axes of our country's policy.

Regarding the universal system, Argentina is a member of the Human Rights Council of the United Nations Organization and works through its organs and procedures with the objective of achieving more just, inclusive, diverse societies with full enjoyment of human rights.

At the regional level, Argentina supports the Inter-American Human Rights System incorporated into the National Constitution in 1994 and which has played a key role for the victims of State terrorism and their families in the search for justice. Argentina considers the Inter-American Human Rights System as an early warning mechanism that serves within the State to make institutional improvements, as well as legislative and jurisprudential developments, privileging the friendly settlement mechanism as a preferential tool for the resolution of cases and petitions.

The project respect this and other norms of the national legislation and will not lead to violations of human rights in any kind. Participation in the projects is voluntary and open for anyone regardless of gender, race, religion, sexual orientation or any other bias.

Projects activities are not expected to cause any human rights abuse. As a member of United Nations and part of UN Agreement on Human Rights, it is ensured by law in Argentina that no action can be taken against human rights.

Furthermore, EFESA implements and Integrity Program and has approved an Ethic Code applicable to all shareholders, executives and directors, employees, suppliers, partners and clients. This Code states that, for its elaboration, international human rights treaties were considered and that human rights have to be respected based on the Article 75 inc. 22 of the Constitution of the Argentine Nation.

P.2 | GENDER EQUALITY AND WOMEN'S EMPOWERMENT

P.2.1.1 |	Have women's groups/leaders raised gender equality concerns regarding the project, (e.g., during the stakeholder engagement process, grievance processes, public statements)?	☐ YES ☒ NO
P.2.1.2 |	Does the project undermine the principles of non-discrimination, equal treatment, and equal pay for equal work?	☐ YES ☒ NO
P.2.1.2 |	Does the project prevent men and women from having equal opportunities to participate in identified tasks and activities, whether through paid work, volunteer work, or community contributions, as appropriate?	☐ YES ☒ NO
P.2.1.2 |	Does the project limit the participation of women or men based on pregnancy, maternity/paternity leave, or marital status?	☐ YES ☒ NO
P.2.1.2 |	Is information about project objectives being communicated in a way that is inappropriate for the local context and not tailored to the methods of understanding of both women and men, which could hinder their participation?	☐ YES ☒ NO
P.2.1.3 |	Has the project assessed gender risks without referencing the country's gender strategy or equivalent national commitment?	☐ YES ☒ NO
P.2.1.4 |	Has expert stakeholder(s) been involved, and has their input been requested for the project design on gender equality and women's empowerment?	☐ YES ☒ NO

If the answer to any of the questions above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.

N/A

Would the project potentially involve or lead to:		
P.2.1.1 |	adverse impacts on gender equality and/or the situation of women and girls?	☐ YES ☐ POTENTIALLY ☒ NO
P.2.1.1 |	exacerbation of risks of gender-based violence? For example, through the influx of workers to a community, changes in community and household power dynamics, increased exposure to unsafe public places and/or transport, etc.	☐ YES ☐ POTENTIALLY ☒ NO
P.2.1.2 |	reproducing discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	☐ YES ☐ POTENTIALLY ☒ NO
P.2.1.2 |	limitations on women's ability to use, develop and protect natural resources, taking into account different roles and	☐ YES ☐ POTENTIALLY

	positions of women and men in accessing environmental goods and services? For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well-being.	☒ NO

Briefly describe below how the project is addressing any identified risk to gender equality and women's empowerment.

The projects activities do not endorse any form of discrimination based on gender. Women are able to participate in the projects with the same opportunities as with men, and they will equally be able to benefit from the energy supply. Jobs created through the projects are open to everyone regardless of their gender identity.
(a) The projects owner/developer is a certified B Corporation[26] movement under which gender equality is a priority. The Projects shall not directly or indirectly lead to/contribute to adverse impacts on gender equality and/or the situation of women. Every employee is treated with respect and afforded equitable treatment. The projects proponent has a grievance registry which would look after complaints.
(b) The projects do not involve any slavery, imprisonment, physical and mental drudgery, punishment or coercion of women and girls. There is no such risk for the projects since participation is 100% voluntary. The projects proponent has a grievance cell which would look into complaints.
(c) The projects do not restrict of women´s rights or access to resources.
(d) The projects recognize women´s ownership rights regardless of marital status.
Projects do not disconsider gender roles and in fact actively engages both women and men. The projects do not discriminate on basis of gender nor religion or any other aspect. Both women and men in the projects are encouraged to make use of the provided energy and to take part in the training given. The projects aim to improve the livelihood of the entire community. The projects do not reproduce or deepen discrimination against women. Women are actively encouraged to participate in the projects. A secure and reliable energy supply benefits equally both women and men. Furthermore, jobs created through the projects are open for both women and men.
(a) Projects applies the principles of nondiscrimination, equal treatment, and equal pay for equal work.
(b) The projects provide equal opportunities for both men and women. The projects will have a thorough HR policy on these regards. The projects owner/developer is a certified B Corporation, movement under which gender equality is a priority.
(c) There is no limit to the access of women or men to Projects´ participation and benefits.
The Argentine legislation has a vast range of norms related to Gender equality and Women´s rights. The projects complies with all these legislations:
- National Law 26.485[27]- Violence Against Women - Prevention, sanction and eradication
- National Decree 254/98[28] | Plan for Equal Opportunities Between Men and Women in the Workplace
- Decree 936/2011[29] | Integral Protection for Women
- National Law 24.012[30] | Female quota.
- National Law 25.087[31] | Crimes Against Sexual Integrity

[26] https://sistemab.org/efesa/
[27] http://servicios.infoleg.gob.ar/infolegInternet/anexos/150000-154999/152155/norma.htm
[28] https://servicios.infoleg.gob.ar/infolegInternet/anexos/45000-49999/49613/norma.htm
[29] https://servicios.infoleg.gob.ar/infolegInternet/verNorma.do?id=184133
[30] https://servicios.infoleg.gob.ar/infolegInternet/anexos/0-4999/411/norma.htm
[31] https://servicios.infoleg.gob.ar/infolegInternet/verNorma.do?id=57556

- National Law 25.273[32] | Creation of a system of absences justified by reasons of gravity
- National Law 26,618[33] | Equality marriage
- National Law 26,743[34] | Gender Identity Law

Furthermore, EFESA implements and Integrity Program and has approved an Ethic Code applicable to all shareholders, executives and directors, employees, suppliers, partners and clients. This Code states that the project developer promotes a space free of harassment and intimidation is promoted, including sexual proposals or suggestions, jokes and offensive conversations. Company members must conduct themselves with respect and courtesy, refraining from any discriminatory conduct, whether due to race, religious, political or union beliefs, national or social origin, gender, sexual orientation, marital status, disability or any other reason. personal differences.
The company promotes training and reporting spaces for these actions.

P.3 | COMMUNITY HEALTH AND SAFETY

P.3.1.1 |	Does the project involve potential risks to the health and safety of affected communities during its life cycle?	☐ YES ☒ NO
P.3.1.2 |	Does the project involve any potential risks to the workers' safety and health?	☐ YES ☒ NO

If the answer to any of the questions above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.

N/A

Would the project potentially involve or lead to:

P.3.1.1 |	construction and/or infrastructure development (e.g., roads, buildings, dams)?	☐ YES ☒ NO
P.3.1.2 |	air pollution, noise, vibration, traffic, injuries, physical hazards, poor surface water quality due to runoff, erosion, sanitation?	☐ YES ☒ POTENTIALLY ☐ NO
P.3.1.2 |	harm or losses due to failure of structural elements of the project (e.g., collapse of buildings or infrastructure)?	☐ YES ☐ POTENTIALLY ☒ NO
P.3.1.2 |	risks of water-borne or other vector-borne diseases (e.g., temporary breeding habitats), communicable and noncommunicable diseases, nutritional disorders, mental health?	☐ YES ☐ POTENTIALLY ☒ NO

[32] https://servicios.infoleg.gob.ar/infolegInternet/anexos/60000-64999/63777/norma.htm#:~:text=Cr%C3%A9ase%20un%20R%C3%A9gimen%20Especial%20de,Promulgada%3A%20Julio%2024

[33] https://servicios.infoleg.gob.ar/infolegInternet/anexos/165000-169999/169608/norma.htm

[34] https://servicios.infoleg.gob.ar/infolegInternet/anexos/195000-199999/197860/norma.htm#:~:text=sancionan%20con%20fuerza%20de%20Ley,Toda%20persona%20tiene%20derecho%3A&te

P.3.1.2 |	transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g., explosives, fuel and other chemicals during construction and operation)?	☒ YES ☐ POTENTIALLY ☐ NO
P.3.1.2 |	adverse impacts on ecosystems and ecosystem services relevant to communities' health (e.g., food, surface water purification, natural buffers from flooding)?	☐ YES ☐ POTENTIALLY ☒ NO

Briefly describe below how the project is addressing any identified risk related to community health and safety.

The projects activities doesn't expose the workers and community to increased health risks and safety. Concerning the workers' health and safety, projects developer complies with national legislation on this regard, the Occupational Health and Safety Law No.19.587[35].
The project is an ISO 14001:2015 certified project. Potential risks are identified and many procedures have been implemented according the national, local and internal standards to avoid, minimize and mitigate them. The project also implements procedures to avoid and minimize potential accidents or incidents associated. The project also records any incident and has emergency plans.
The dangerous materials generated by the project are stored in a deposit which consists of a restricted enclosure, with secondary containment against possible spills, enclosures, roof, ventilation and natural lighting, signage and fire protection in accordance with Resolution 177/2017[36]. In addition, the generation of these hazardous materials is registered monthly. For their correct treatment the services of a Transporter and an Operator (registered and authorized by the provincial and national Environment Secretariat) will be hired.
The project put measures in place to protect workers from inherent risk of the nature of their work/sector.

P.4 | CULTURAL HERITAGE, INDIGENOUS PEOPLE, DISPLACEMENT AND RESETTLEMENT

P.4.1 |Sites of Cultural and Historical Heritage

P.4.1.1 |	Does the project involve altering, damaging, or removing sites, objects, or structures of significant cultural heritage?	☐ YES ☒ NO

If the answer to question above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.

N/A

Would the project potentially involve or lead to:

P.4.1.1 |	activities adjacent to or within a cultural heritage site?	☐ YES ☐ POTENTIALLY ☒ NO

[35] http://servicios.infoleg.gob.ar/infolegInternet/anexos/15000-19999/17612/norma.htm#:~:text=EL%20PRESIDENTE%20DE%20LA%20NACION,en%20su%20consecuencia%20se%20dicten.
[36] https://servicios.infoleg.gob.ar/infolegInternet/anexos/270000-274999/273675/norma.htm

P.4.1.1 |	significant excavations, demolitions, movement of earth, flooding or other environmental changes?	☐ YES ☐ POTENTIALLY ☒ NO
P.4.1.1 |	alterations to landscapes and natural features with cultural significance?	☐ YES ☐ POTENTIALLY ☒ NO
P.4.1.1 |	adverse impacts to sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g., knowledge, innovations, practices)? (Note: projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts)	☐ YES ☐ POTENTIALLY ☒ NO
P.4.1.2 |	utilisation of tangible and/or intangible forms (e.g., practices, traditional knowledge) of Cultural Heritage for commercial or other purposes?	☐ YES ☐ POTENTIALLY ☒ NO
P.4.1.2 |	If answer to question above is "YES" or "POTENTIALLY" - are the communities made aware of their right under the law, scope and nature of proposed development and its potential consequences?	☐ YES ☐ NO ☒ NA
P.4.1.3 |	If answer to question above is "YES" - does the project provide equitable sharing of benefits from commercialization of such knowledge, innovation, or practice, consistent with their customs and traditions?	☐ YES ☐ NO ☒ NA
P.4.1.4 |	If answer to question above is "YES" - are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ NA
P.4.1.4 |	If answer to question above is "YES", has project design been changed, modified, updated considering opinions and recommendations of an Expert Stakeholder?	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

N/A

P.4.2 |*Forced Eviction and Displacement*

P.4.2.1 |	Does the project involve any risks related to involuntary relocation of people?	☐ YES ☒ NO

If the answer to question above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.

N/A

Would the project potentially involve or lead to:		
P.4.2.1 |	risk of forced evictions or involuntary relocation of people?	☐ YES ☐ POTENTIALLY ☒ NO
P.4.2.2 |	temporary or permanent and full or partial physical displacement (including people without legally recognisable claims to land)?	☐ YES ☐ POTENTIALLY ☒ NO
P.4.2.2 |	economic displacement (e.g., loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	☐ YES ☐ POTENTIALLY ☒ NO
P.4.2.2 |	If answer to question above is "YES" or "POTENTIALLY", - has the project developed Resettlement Action Plan or Livelihood Action Plan in consultation and agreement with affected individual, group or community? - has the project integrated Resettlement Action Plan or Livelihood Action Plan into the Project design?	☐ YES ☐ NO ☒ NA
P.4.2.3 |	If answer to question above is "YES" - are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ NA
P.4.2.3 |	If answer to question above is "YES", have project design been changed, modified, updated considering opinions and recommendations of an Expert Stakeholder?	☐ YES ☐ NO ☒ NA
If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.		
N/A		

P.4.3 | LAND TENURE AND OTHER RIGHTS		
P.4.3.1 |	Does the project involve any risks related to identifying and managing legitimate tenure rights that may be affected by the project?	☐ YES ☒ NO
If the answer to question above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.		
N/A		
Would the project potentially involve or lead to:		
P.4.3.1 |	impacts on or changes to land tenure arrangements and/or community-based property rights/customary rights to land, territories and/or resources?	☐ YES ☐ POTENTIALLY ☒ NO

P.4.3.1 |	uncertainties with regards to land tenure, access rights, usage rights or land ownership? Examples include, but are not limited to water access rights, community-based property rights and customary rights.	☐ YES ☐ POTENTIALLY ☒ NO
P.4.3.2 |	Changes in legal arrangements, if yes, are the changes done in line with relevant laws and regulations?	☐ YES ☐ NO ☒ NA
P.4.3.2 |	Changes in legal arrangements, if yes, are these changes agree with free, prior and informed consent of the involved stakeholders?	☐ YES ☐ NO ☒ NA
P.4.3.3 |	Does some other entity (other than the project developer) hold uncontested land title for the entire Project Boundary?	☐ YES ☐ NO ☒ NA
P.4.3.4 |	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ NA
P.4.3.4 |	If answer to question above is "YES", have project design been changed, modified, updated considering opinions and recommendations of an Expert Stakeholder?	☐ YES ☐ NO ☒ NA
P.4.3.5 |	Have project developer in consultation with stakeholders established a functioning mechanism to receive, process, resolve, communicate and record grievances?	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

N/A

P.4.4 |INDIGENOUS PEOPLES

P.4.4.1 |	Does the project involve Indigenous People within the Project area of influence who may be affected directly or indirectly by the Project?	☐ YES ☒ NO

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

N/A

Would the project potentially involve or lead to:

P.4.4.1 |	affect areas where indigenous peoples are present (including project area of influence)	☐ YES ☐ POTENTIALLY ☒ NO

P.4.4.1 |	affect areas, land and territory claimed by indigenous peoples?	☐ YES ☐ POTENTIALLY ☒ NO
P.4.4.1 |	impacts (positive or negative) to the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples?	☐ YES ☐ POTENTIALLY ☒ NO
P.4.4.7 |	If answer to above questions is ''YES'' or "POTENTIALLY", - Is it determined that the proposed project may affect the rights, lands, resources, or territories of indigenous people? - Has an "Indigenous People Plan" (IPP) or "Indigenous People Plan Framework" been elaborated and included in the project documentation? - Was the plan developed in accordance with the effective and meaningful participation of indigenous peoples and in accordance with UNDP Guidelines?	☐ YES ☐ NO ☒ NA
P.4.4.3 |	risk of forcibly removing indigenous people from their lands and territories?	☐ YES ☐ POTENTIALLY ☒ NO
P.4.4.4 |	utilisation and/or commercial development of natural resources on lands and territories claimed by indigenous peoples? Consider, and where appropriate ensure, consistency with the answers under Principle 4.1 above	☐ YES ☐ POTENTIALLY ☒ NO
P.4.4.5 | P.4.4.6 |	If answer to question above is "YES" or "POTENTIALLY" - Did the project obtain free, prior and informed consent from indigenous people before taking their cultural, intellectual, religious, and/or spiritual property? - Does the project ensure that the indigenous people receive an equitable sharing of benefits resulting from the use of their traditional knowledge and practices? ? - Does the project ensure that the sharing of benefits resulting from the use of indigenous peoples' traditional knowledge and practices is culturally appropriate and inclusive? - Does the project ensure that the provision of equitable sharing of benefits does not impede land rights or equal access to basic services including health services, clean water, energy, education, safe and decent working conditions, and housing?	☐ YES ☐ NO ☒ NA

P.4.4.8 |	Does the project lack appropriate feedback and grievance channels for Indigenous Peoples and their representatives?	☐ YES ☐ NO ☒ NA
P.4.4.8 |	Has a grievance mechanism not been established at the beginning of programme or project implementation with due consideration given to customary dispute settlement mechanisms among the Indigenous Peoples concerned and will it remain operational throughout the project cycle?	☐ YES ☐ NO ☒ NA
P.4.4.9 |	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ NA
P.4.4.9 |	If answer to question above is "YES", have project design been changed, modified, updated considering opinions and recommendations of an Expert Stakeholder?	☐ YES ☐ NO ☒ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

N/A

P.5 | CORRUPTION

P.5.1.1 |	Does the project involve, or is it complicit in, contributing to or reinforcing corruption or corrupt projects?	☐ YES ☒ NO
P.5.1.1 |	Does the project have a risk of encouraging bribery, kickbacks, or other unethical behavior?	☐ YES ☒ NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

N/A

ECONOMIC SAFEGUARDING PRINCIPLES

P.6 | ECONOMIC IMPACTS

P.6.1 | LABOUR RIGHTS AND WORKING CONDITIONS

P.6.1.1 |	Does the project involve, facilitate, or condone forced labor, or pose a potential risk of forced labor?	☐ YES ☒ NO
P.6.1.1 |	Does the project violate any labor or health and safety laws, international obligations, or ILO conventions?	☐ YES ☒ NO
P.6.1.2 |	Does the project violate the principles of equal opportunity and fair treatment in its employment decisions?	☐ YES ☒ NO

P.6.1.3 |	Does the project violate national laws, if available regarding non-discrimination in employment?	☐ YES ☒ NO
P.6.1.4 | P.6.1.5 |	Does the project allow child labor?	☐ YES ☒ NO
P.6.1.7 | P.6.1.8 |	Does the project have insufficient processes and measures in place to ensure the safety and health of project workers?	☐ YES ☒ NO
P.6.1.9 |	Does the project have insufficient measures to safeguard and support vulnerable project workers, such as women, people with disabilities, migrant workers, and young workers, and to prevent any kind of harassment, abuse, bullying, or exploitation, including gender-based violence (GBV)?	☐ YES ☒ NO
P.6.1.10 |	Does the project have no grievance mechanism available for workers to voice workplace concerns? Is information about this mechanism not provided to workers at the time of recruitment, or is it not easily accessible?	☐ YES ☒ NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

N/A

Would the project potentially involve or lead to:
(NOTE: APPLIES TO BOTH PROJECT AND CONTRACTOR WORKERS)

P.6.1.1 |	use of forced labour?	☐ YES ☐ POTENTIALLY ☒ NO
P.6.1.1 |	working conditions that do not meet national labour laws and international commitments?	☐ YES ☐ POTENTIALLY ☒ NO
P.6.1.1 |	working conditions that may deny freedom of association and collective bargaining?	☐ YES ☐ POTENTIALLY ☒ NO
P.6.1.1 |	absence of documented working agreements with all individual workers *if such agreements do not exist, or do not address working conditions and terms of employment, the project developer shall provide reasonable working conditions and terms of employment.*	☐ YES ☒ POTENTIALLY ☐ NO
P.6.1.1 |	use of migrant workers?	☐ YES ☐ POTENTIALLY ☒ NO

	if engaged, the developer shall ensure that they are engaged substantially equivalent terms and conditions to non-migrant workers carrying out similar work.	
P.6.1.1 |	having no arrangements for basic services[37] for workers? *the project developer shall put in place and implement policies on the quality and management of the accommodation and provision of basic services in a manner consistent with the principles of non-discrimination and equal opportunity. Workers' accommodation arrangements should not restrict workers' freedom of movement or of association*	☐ YES ☐ POTENTIALLY ☒ NO
P.6.1.2 |	any form of discrimination or harassment based on factors unrelated to job requirements, such as gender, race, nationality, ethnicity, social or indigenous origin, religion or belief, disability, age, or sexual orientation?	☐ YES ☐ POTENTIALLY ☒ NO
P.6.1.2 |	any form of discrimination in any aspect of employment, such as recruitment, compensation, working conditions, training, job assignment, promotion, termination, or discipline?	☐ YES ☐ POTENTIALLY ☒ NO
P.6.1.2 |	harassment, intimidation, and/or exploitation, especially in regard to women?	☐ YES ☐ POTENTIALLY ☒ NO
P.6.1.3 |	discriminatory working conditions and/or lack of equal opportunity where national law provides provision to address non-discrimination in employment?	☐ YES ☐ POTENTIALLY ☒ NO
P.6.1.4 |	use of child labour? (including third-party engaged workers)	☐ YES ☐ POTENTIALLY ☒ NO
P.6.1.4 |	inadequate and verifiable mechanisms for age verification?	☐ YES ☒ NO
P.6.1.7 |	no processes and measures in place for the safety and health of project workers?	☐ YES ☒ NO
P.6.1.7 |	No provision of safety and health training provisions, including on the proper use and maintenance of personal protective equipment conducted by competent persons and the maintenance of training records?	☐ YES ☒ NO
P.6.1.7 |	No provision to record and document accidents, diseases, incidents, and any resulting injuries, illnesses, or deaths?	☐ YES ☒ NO
P.6.1.8 |	occupational health and safety risks due to physical, chemical, biological and psychosocial hazards (including violence and harassment) throughout the project life-cycle?	☐ YES ☒ NO

[37] Basic services requirements refer to minimum space, supply of water, adequate sewage and garbage disposal system, appropriate protection against heat, cold, damp, noise, fire, and disease-carrying animals, adequate sanitary and washing facilities, ventilation, cooking and storage facilities and natural and artificial lighting, and in some cases basic medical services.

P.6.1.9 |	No measures to protect vulnerable project workers from harassment, exploitation, and gender-based violence (GBV)? This includes women, people with disabilities, migrant workers, and young workers.	☐ YES ☒ NO
P.6.1.10 |	No grievance mechanism available for workers to voice workplace concerns.	☐ YES ☒ NO
P.6.1.11 |	No measures for due diligence and the establishment of policies and procedures to manage and monitor the performance of third-party employees in the project?	☐ YES ☒ NO

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

The project has reasonable working conditions and terms of employment. The project respects the Labor Law (Law N° 20.477) which establishes the limit of working hours, termination and annual leaves. Tasks are described at job profiles of the company and remuneration and health insurance at the worker registration form (provided by the government).

P.6.2 | NEGATIVE ECONOMIC CONSEQUENCES

P.6.2.1 |	Is there a risk of project failure during implementation or after project certification due to a lack of financial resources?	☐ YES ☒ NO
P.6.2.2 |	Does the project have potential negative impacts or pose a risk to the local economy?	☐ YES ☒ NO
P.6.2.2 |	Are there any potential risks or negative impacts this project may have on vulnerable or marginalised social groups, despite the benefits it may bring?	☐ YES ☒ NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

N/A

Would the project involve or lead to:

P.6.2.2 |	economic impacts (negative/detrimental) to the local economy?	☐ YES ☐ POTENTIALLY ☒ NO
P.6.2.2 |	negative economic consequences during and after project implementation, e.g., for vulnerable and marginalised social groups in targeted communities?	☐ YES ☐ POTENTIALLY ☒ NO

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

N/A

P.7 |CLIMATE AND ENERGY

P.7.1 |GHG EMISSIONS

P.7.1.1 |	Does the project have a risk of increasing greenhouse gas emissions over the Baseline Scenario?	☐ YES ☒ NO

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

N/A

Would the project involve or lead to:

P.7.1.1 |	increase greenhouse gas emissions over the Baseline Scenario?	☐ YES ☐ POTENTIALLY ☒ NO

If the answer is "yes" or "potentially" to the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

N/A

P.7.2 |ENERGY SUPPLY

P.7.2.1 |	Does the project pose a risk to the availability and reliability of energy supply to other users?	☐ YES ☒ NO

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

N/A

Would the project involve or lead to:

P.7.2.1 |	negative impact on the availability and reliability of energy supply to other users?	☐ YES ☐ POTENTIALLY ☒ NO

If the answer is "yes" or "potentially" to the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

N/A

P.8 |WATER

P.8.1 |IMPACT ON NATURAL WATER PATTERNS/FLOWS

P.8.1.1 |	Does the project increase water usage to a level that will not allow for the maintenance of environmental flows?	☐ YES ☒ NO

P.8.1.1 |	Does the project result in the discharge of wastewater that does not meet the required standard for beneficial reuse and could therefore negatively impact the environmental flow?	☐ YES ☒ NO
P.8.1.1 |	Does the project have the potential risk to exceed the rate of recharge for the groundwater source?	☐ YES ☒ NO
P.8.1.1 |	Does the project involve any processes or activities that could contaminate the groundwater and render it unsuitable for use?	☐ YES ☒ NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

N/A

Would the project involve or lead to:

P.8.1.1 |	affect the natural or pre-existing pattern of watercourses, groundwater and/or the watershed(s) such as high seasonal flow variability, flooding potential, lack of aquatic connectivity or water scarcity?	☐ YES ☐ POTENTIALLY ☒ NO
P.8.1.1 |	Wastewater discharge of quality that does not meet the required standard for beneficial reuse?	☐ YES ☐ POTENTIALLY ☒ NO
P.8.1.1 |	significant extraction, diversion of ground water? For example, construction of dams, reservoirs, river basin developments, groundwater extraction	☐ YES ☐ POTENTIALLY ☒ NO
P.8.1.2 |	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ N/A

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

N/A

P.8.2 |EROSION AND/OR WATER BODY INSTABILITY

P.8.2.1 |	Does the project have a risk of negatively impacting the catchment and has it been assessed and addressed?	☐ YES ☒ NO

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

N/A

Would the project involve or lead to:

P.8.2.2 |	negatively impact on the catchment area?	☐ YES

- P.8.2.5 |	*If yes, Erosion prevention measures, including soil and slope protection measures, must be implemented before project commencement. These measures should involve natural terracing, infiltration strips, permanent ground cover, hedge and tree rows, and effective slope length assessment. Regular reassessment of these measures is necessary.*	☐ POTENTIALLY ☒ NO
P.8.2.6 |	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ N/A

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

N/A

P.9 | ENVIRONMENT, ECOLOGY AND LAND USE

P.9.1 | LANDSCAPE MODIFICATION AND SOIL

P.9.1.1 | - P.9.1.3 |	Is there any risk of soil resource degradation or loss of ecosystem services provided by soils in the project? *If yes, the project shall maintain healthy soils by minimising negative impacts on soil health, productivity, structure, and water retention. Steps to minimise soil degradation include crop rotation, composting, using N-fixing plants, and reducing tillage and ecologically harmful substances.*	☐ YES ☒ NO

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

N/A

Would the project involve or lead to:

P.9.1.4 |	production, harvesting, and/or management of living natural resources by small-scale landholders and/or local communities?	☐ YES ☐ POTENTIALLY ☒ NO
P.9.1.4 |	if answer to above question “yes” or “potentially”, does project adopt appropriate and culturally sensitive sustainable resource management practices?	☐ YES ☐ NO ☒ N/A

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

N/A

P.9.2 | VULNERABILITY TO NATURAL DISASTER

P.9.2.1 |	Does the project have any risks associated with natural or man-made hazards that could result from land use changes due to the project?	☐ YES ☒ NO

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

N/A

Would the project involve or lead to:

P.9.2.2 |	any potential risks that require emergency preparedness and response planning?	☐ YES ☐ POTENTIALLY ☒ NO
P.9.2.2 |	if answer to above question "yes" or "potentially", did the project developer disclose appropriate information about emergency preparedness and response to affected communities?	☐ YES ☐ NO ☒ N/A

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

The project has no risks identified that could result from its activity. However, it has identified potential natural hazards that may occur and that may affect the project, the workers and the environmental. The project has also implemented procedures to identify that kind of hazards and action plans in case they are verified.

P.9.3 |BIOSAFETY AND GENETIC RESOURCES

P.9.3.1 |	Does the project involve the transfer, handling, and use of genetically modified organisms/living modified organisms that may result in adverse effects on biological diversity?	☐ YES ☒ NO

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

N/A

Would the project involve or lead to:

P.9.3.1 |	the transfer, handling and use of genetically modified organisms/living modified organisms (GMOs/LMOs) that result from modern biotechnology	☐ YES ☐ POTENTIALLY ☒ NO
P.9.3.1 |	If answer to above question is "yes" has a risk assessment by a competent Expert stakeholder been carried out in accordance with Annex iii of the Cartagena protocol on biosafety to the convention on biological diversity?	☐ YES ☐ NO ☒ N/A
P.9.3.2 |	If answer to above question is "yes" has any risks identified in the risk assessment?	☐ YES ☐ NO ☒ N/A
P.9.3.3 |	Forestry (for example Afforestation/Reforestation) involving GMO planting?	☐ YES ☐ NO

	Note - Forestry projects (for example Afforestation/ Reforestation) involving GMO planting are not eligible for Certification under Gold Standard for the Global Goals.	☒ N/A

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

N/A

P.9.4 |RELEASE OF POLLUTANTS

P.9.4.1 |	Does the project have a risk of releasing pollutants to air, water, and land in routine, non-routine, or accidental circumstances?	☒ YES ☐ NO

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

The project has identified its potential risks in accidental circumstances. The project has an environmental annual planification (monitoring plan) where ensures preventives controls and its frequency and state practices consistent with national regulation.

Would the project involve or lead to:

P.9.4.1 |	any potential risk of pollutant release that cannot be avoided?	☐ YES ☒ POTENTIALLY ☐ NO
P.9.4.3 |	If answer to above question is "Yes" or "potentially", has the project identified all potential pollution sources that may degrade the quality of soil, air, surface, and groundwater in the project area?	☒ YES ☐ NO ☐ NA
P.9.4.2 |	If answer to above question is "Yes" or "potentially", do the pollution prevention and control technologies and practices applied during the project life cycle align with national regulations or international best practices?	☒ YES ☐ NO ☐ NA
P.9.4.3 |	If answer to above question is "Yes", is there a monitoring plan to ensure that mitigation measures are implemented, and resources are protected?	☒ YES ☐ NO ☐ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

Considering that the term "pollution" refers to both hazardous and non-hazardous pollutants in the solid, liquid, or gaseous phases, and includes other components such as pests, pathogens, thermal discharge to water, GHG emissions, nuisance odours, noise, vibration, radiation, electromagnetic energy, and the creation of potential visual impacts including light; and that the project developer is obliged to monitor noise, electromagnetic field, particulate matter, grounding, and waste (hazardous and non-hazardous), it is considered that the project has the potential risk of pollutant release if the values of the

measurement results do not correspond to the reference values (Resolution SE 77/98 ENRE[38], IRAM 4062, CE marking). All of the above complies with the national regulation *Resolution ENRE 558/2022[39].*

P.9.5 |HAZARDOUS AND NON-HAZARDOUS WASTE

P.9.5.1 |	Does the project involve the generation of waste materials (both hazardous and non-hazardous)?	☒ YES ☐ NO
P.9.5.3 |	Does the project involve risk of release of hazardous materials resulting from their production, transportation, handling, storage, or use?	☒ YES ☐ NO
P.9.5.5 |	Does the project involve the use of any chemicals or materials subject to international bans or phase-outs?	☐ YES ☒ NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

The project is registered as hazardous waste generator at the provincial Secretariat. At the same time, is ISO 14001:2015 certified. According to National regulations (Resolution ENRE 558/2022), the project submits annual plans to ensure all environmental risks are monitored. The project has records of generation and its relation to sector/activity.

Would the project involve or lead to:

P.9.5.1 |	the generation and management of waste materials?	☒ YES ☐ POTENTIALLY ☐ NO
P.9.5.1 |	treatment, destruction, or disposal of waste material?	☒ YES ☐ NO ☐ NA
P.9.5.1 |	If answer to above question is “Yes”, does the project involve an environmentally friendly method that includes appropriate control of emissions and residues resulting from the handling and processing of waste material?	☒ YES ☐ NO ☐ NA
P.9.5.3 |	risk of release of hazardous materials resulting from their production, transportation, handling, storage, or use?	☒ YES ☐ NO ☐ NA
P.9.5.3 |	If answer to above question is "yes”, does project has measures in place to address health risks?	☒ YES ☐ NO ☐ NA
P.9.5.4 |	Involve manufacture, trade, and use of chemicals and hazardous materials subject to international bans or phase-outs due to their high toxicity to living organisms, environmental persistence, potential for bioaccumulation, or potential for depletion of the ozone layer	☐ YES ☐ POTENTIALLY ☒ NO

[38] https://www.argentina.gob.ar/normativa/nacional/resoluci%C3%B3n-77-1998-49781/texto
[39] https://www.argentina.gob.ar/normativa/nacional/resoluci%C3%B3n-558-2022-374325

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

The project implements procedures that establishes how the resources have to be use, re-used, classified and segregated (resource management procedure). The project has records any the different kind of waste generation.

P.9.6 |PESTICIDES & FERTILISERS

P.9.6.1 |	Does the project involve the use of chemical pesticides?	☒ YES ☐ NO
P.9.6.5 |	Does the project involve purchase, store, manufacture, trade or use products that fall in Classes IA (extremely hazardous) and IB (highly hazardous)	☐ YES ☒ NO
P.9.6.6 |	Does the project use fertilisers, and if so, are measures being taken to minimise their use and nutrient losses to the environment?	☐ YES ☒ NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

The project uses chemical pesticides for pest management (mosquitoes and flies) and uses the corresponding safety and Material sheets (Globally Harmonized System).

Would the project involve or lead to:

P.9.6.1 |	chemical pesticides use for pest management?	☒ YES ☐ POTENTIALLY ☐ NO
P.9.6.4 |	If answer to question above is "yes" or "potentially", does project has documented Chemical Pesticides Policy in place?	☐ YES ☒ NO ☐ NA
P.9.6.5 |	purchase, store, use, manufacture, or trade in Class II (moderately hazardous) pesticides?	☐ YES ☒ POTENTIALLY ☐ NO
P.9.6.5 |	If answer to question above is "yes" or "potentially", does project has appropriate controls on manufacture, procurement, or distribution and/or use of these chemicals?	☒ YES ☐ NO ☐ NA

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

The project implements suppliers controls to determine its suitability (for ex if it complies with environmental regulations). At the same time, the project evaluates the supplier's performance once a year. The environmental performance is a key role to determine its eligibility.

P.9.7 |HARVESTING OF FORESTS		
P.9.7.1 |	Does the project have a risk of unsustainable forest management, including timber harvesting?	☐ YES ☒ NO
P.9.7.1 |	Does the project pose a risk of depleting biodiversity and ecosystem functionality in areas where improved forest management is undertaken?	☐ YES ☒ NO
P.9.7.1 |	Does the project risk not meeting requirements for environment-friendly, socially beneficial, and economically viable plantations using native species whenever possible?	☐ YES ☒ NO
If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.		
N/A		

P.9.8 |FOOD SECURITY		
P.9.8.1 |	Does the project involve the risk of negatively influencing access to and availability of food for people affected?	☐ YES ☒ NO
If the answer to the question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.		
N/A		
Would the project involve or lead to:		
P.9.8.1 |	modification of the quantity or nutritional quality of food available such as through crop regime alteration or export or economic incentives?	☐ YES ☐ POTENTIALLY ☒ NO
If the answer is "yes" or "potentially" to the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.		
N/A		

P.9.9 | ANIMAL WELFARE		
P.9.9.1 |	Does the project involve any risks to animal welfare? Animal welfare shall be ensured by providing access to water and food, appropriate environment, humane treatment, and staff training. Evidence of mistreatment will be treated as an immediate non-conformity.	☐ YES ☒ NO
P.9.9.2 |	Does the project involve any potential risk of excessive or inadequate use of veterinary medicines?	☐ YES ☒ NO
P.9.9.4 |	Does the project involve the risk of administering synthetic growth promoters, including hormones?	☐ YES ☒ NO
If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.		

N/A

Would the project involve or lead to:

P.9.9.1 |	animal husbandry or harvesting of fish populations or other aquatic species?[40]	☐ YES ☐ NO ☒ N/A
P.9.9.1 |	limiting access for animals to basic needs like drinking water, adequate food, daylight, appropriate shelter etc.?	☐ YES ☐ POTENTIALLY ☒ NO
P.9.9.3 |	inadequate measures to isolate sick animals and control the spread of disease, especially zoonotic diseases?	☐ YES ☐ NO ☒ N/A
P.9.9.5 |	inadequate low-stress methods, equipment, and facilities that facilitate calm animal movement.	☐ YES ☐ NO ☒ N/A
P.9.9.6 |	inadequate measures to ensure that animals are exposed to the least stress possible during transportation and slaughtering?	☐ YES ☐ NO ☒ N/A
P.9.9.7 |	inappropriate spacing per animal and stocking rates per land unit?	☐ YES ☐ NO ☒ N/A
P.9.9.8 |	inadequate measures to address the specific needs of aquatic animals?	☐ YES ☐ NO ☒ N/A
P.9.9.9 | P.9.9.10 |	primary production of living natural resources such as animal husbandry, aquaculture, and fisheries? If the answer is yes, implement industry-standard sustainable management practices in line with to one or more relevant and credible standards and utilise available technologies.	☐ YES ☐ NO ☒ N/A

If the answer is "yes" or "potentially" to any of the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

N/A

P.9.10 |HIGH CONSERVATION VALUE AREAS AND CRITICAL HABITATS

P.9.10.1 |	Does the project have the risk of negatively impacting HCV areas and/or critical habitats?	☐ YES ☒ NO

[40] 'Involve' means if the project mechanism and/or impact(s) are achieved via changing animal husbandry practices in some way.

P.9.10.2 |	Does the project in the project area or area of downstream impacts have risks to the following: native tree patches, individual native trees, freshwater resources (including rivers, lakes, swamps, temporary water bodies, and wells), habitats of rare, threatened, and endangered species, and biodiversity-enhancing areas?	☒ YES ☐ NO

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

The land where the project will be implemented has individual trees and fresh water resources. The impact on the native trees have been treated by the local Environmental Secretariat (see the EIA, Environmental Impact Assessment). The measure to restore the impact was implement a reforestation plan together with the local and provincial authority which has been achieved on 2021. The water body is not planned to be affected by the project.

Would the project involve or lead to:

P.9.10.1 |	identified habitats as HCV areas and or Critical habitats?	☐ YES ☐ POTENTIALLY ☒ NO
P.9.10.1 |	If answer to above question is "yes", does the project have any risks that could negatively impact the catchment, project success, and surrounding HCV and ecological assets, as well as any measurable adverse impacts on the criteria or biodiversity values for which the critical habitat was designated, and on the ecological processes supporting that biodiversity?	☐ YES ☐ NO ☒ NA
P.9.10.1 |	If answer to above question is "yes", is a robust, appropriately designed, and long-term Habitats and Biodiversity Action Plan absent which will make the project unable to achieve net gains of those biodiversity values for which the critical habitat was designated?	☐ YES ☐ NO ☒ N/A
P.9.10.2 |	Does the project area or area of downstream impacts have native tree patches, individual native trees, freshwater resources (including rivers, lakes, swamps, temporary water bodies, and wells), habitats of rare, threatened, and endangered species, and biodiversity-enhancing areas?	☒ YES ☐ POTENTIALLY ☐ NO
P.9.10.2 |	If the answer to the above question is "yes", will the project have any adverse effects on these areas?	☐ YES ☒ No ☐ N/A
P.9.10.3 |	If the answer to above question is "yes", does the project has opportunities to minimise unwarranted conversion or degradation of the habitat and to enhance the habitat as part of its development?	☐ YES ☐ No ☒ NA
P.9.10.4 |	Is the project applying Land Use & Forest Activity Requirements and managing a minimum 10% of the project area to protect or enhance the biological diversity of native	☐ YES ☐ NO ☒ N/A

	ecosystems following HCV approach as per the given requirements?	
P.9.10.5 |	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☒ YES ☐ NO ☐ N/A

If the answer is "yes" or "potentially" to any of the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

The land where the project will be implemented has individual trees and fresh water resources. The impact on the native trees have been treated by the local Environmental Secretariat (see the EIA, Environmental Impact Assessment). The measure to restore the impact was implement a reforestation plan together with the local and provincial authority which has been achieved on 2021. The water body is not planned to be affected by the project.

P.9.11 |ENDANGERED SPECIES

P.9.11.1 |	Does the project lead to the reduction or negative impact on any recognised Endangered, Vulnerable or Critically Endangered species?	☐ YES ☒ NO

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

N/A

Would the project involve or lead to:

P.9.11.2 |	distortion of habitats of endangered species?	☐ YES ☐ POTENTIALLY ☒ N/A
P.9.11.2 |	If answer to the above question is “yes”, does the project plan to protect and enhance them?	☐ YES ☐ POTENTIALLY ☐ NO ☒ N/A
P.9.11.2 |	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES ☐ NO ☒ N/A

If the answer is "yes" or "potentially" to any of the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

N/A

P.9.12 |INVASIVE ALIEN SPECIES

P.9.12.1 |	Does project introduce any alien species (not currently established in the country or region of the project) into new environments?	☐ YES ☒ NO

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.

N/A

Would the project involve or lead to:

P.9.12.1 |	risk of introducing any alien species with a high risk of invasive behaviour regardless of whether such introductions are permitted under the existing regulatory framework?	☐ YES ☐ POTENTIALLY ☒ NO
P.9.12.1 |	risk of potential accidental or unintended introductions including the transportation of substrates and vectors (such as soil, ballast, and plant materials) that may harbour alien species.	☐ YES ☐ POTENTIALLY ☒ NO
P.9.12.2 |	risk of spreading alien species into areas in which they have not already been established?	☐ YES ☐ POTENTIALLY ☒ NO

If the answer is "yes" or "potentially" to any of the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.

N/A

APPENDIX 2 - CONTACT INFORMATION OF PROJECT DEVELOPER(S)

Organization name	Empresa Federal de Energía S.A.
Registration number with relevant authority	CUIT 30-71572949-7
Street/P.O. Box	Reconquista
Building	144 floor 11th
City	Ciudad Autónoma de Buenos Aires (CABA)
State/Region	Buenos Aires
Postcode	1003
Country	Argentina
Telephone	+54 11 5789 6800
E-mail	administracion@efe-sa.com.ar
Website	http://www.efe-sa.com.ar
Contact person	Francisco Muro
Title	Mr.
Salutation	Dear
Last name	Muro
Middle name	N/A
First name	Francisco
Department	President
Mobile	+54 9 11 5564 9412
Direct tel.	N/A

Personal e-mail	francisco.muro@efe-sa.com.ar

APPENDIX 3 - LUF ADDITIONAL INFORMATION

Not Applicable.

Risk of change to the Project Area during Project Certification Period:	
Risk of change to the Project activities during Project Certification Period:	
Land-use history and current status of Project Area:	
Socio-Economic history:	
Forest management applied (past and future)	
Forest characteristics (including main tree species planted)	
Main social impacts (risks and benefits)	
Main environmental impacts (risks and benefits)	
Financial structure	
Infrastructure (roads/houses etc):	
Water bodies:	
Sites with special significance for indigenous people and local communities - resulting from the Stakeholder Consultation:	
Where indigenous people and local communities are situated:	

Where indigenous people and local communities have legal rights, customary rights or sites with special cultural, ecological, economic, religious or spiritual significance:	

APPENDIX 4 - DESIGN CHANGES

A4.1. Details of proposed or actual design change

>> N/A

A4.2. Describe the impacts of design change on the following

a. Additionality

>> N/A

b. Applicability of methodology and other methodological regulatory documents with which the project activity has been certified

>> N/A

c. Compliance with the monitoring plan of the applied methodology

>> N/A

d. Level of accuracy and completeness in the monitoring of the project activity compared with the requirements contained in the registered monitoring plan

>>N/A

e. Scale of the project activity

>>N/A

f. Stakeholder consultation

>>N/A

g. Sustainable development criteria

>>*N/A*

h. Safeguarding assessment

>>*N/A*

i. Compliance with applicable legislation

>>*N/A*

j. Only for LUF Projects: Transparent summary of all approved changes in Project Area, Eligible Area and accompanying changes in ex-ante emissions removals.

N/A

DATE OF APPROVED DESIGN CHANGE (MM/DD/YYYY)	PROJECT AREA (HA)		ELIGIBLE AREA (HA)		EX-ANTE ESTIMATE (TCO2E)	
	INCREASE OR DECREASE ?	VALUE (HA)	INCREASE OR DECREASE?	VALUE (HA)	INCREASE OR DECREASE ?	PERCENTAGE (%)

APPENDIX 5 - MAIN PROJECT MILESTONES AND DATES

Below we attach a table with the main milestones of PLPPP I, PLPPP II and PLPPP III plants as required by Gold Standard during the preliminary review.

Date	Project	Milestones	Contract Value	% of total investment	Disbursement	% of total investment
16/3/18	PLPPP I: 12 MW	Panels Contract Signing - GLC	4.466.089	34%		
27/3/18	PLPPP I: 12 MW	Downpayment Panels - GLC (Payment 10%)			446.609	3%
9/4/18	PLPPP I: 12 MW	Inverters Contract Signing - Schneider	663.130	5%		
17/4/18	PLPPP I: 12 MW	Structure and Trackers Contract Signing - Array	2.004.547	15%		
19/4/18	PLPPP I: 12 MW	Downpayment Structure and Trackers - Array (Payment 25%)			489.609	4%
19/4/18	PLPPP I: 12 MW	Downpayment inverters - Schneider (Payment 90%)			596.817	4%
24/5/18	PLPPP I: 12 MW	EFE SA wins a tender; Obtains dispatch priority; Must commit a operation start date of PLPPP I (23/02/19) through the insurance	3.000.000	35%		
7/6/18	PLPPP I: 12 MW	Panels FOB - GLC (Payment 60%)			2.621.096	20%
15/6/18	PLPPP : 30 MW	EFE SA by national resolution agent of the MEM (wholesale electric market)				
15/6/18	PLPPP I: 12 MW	Panels FOB - GLC (Payment 30%)			1.398.384	10%
18/6/18	PLPPP I: 12 MW	The assembly of structure and trackers begins				
30/6/18	PLPPP I: 12 MW	Structure and Trackers FOB - Array (Payment 20%)			399.836	3%
2/7/18	PLPPP I: 12 MW	Inverters CIF - Schneider (Payment 10%)			66.313	0%
3/7/18	PLPPP I: 12 MW	Start of tasks in 33kv maneuvering station				
6/7/18	PLPPP : 30 MW	EFE SA obtains the Declaration of Access to Transport Capacity by ENRE National Resolution				
18/7/18	PLPPP I: 12 MW	Start of tasks in the medium voltage line and chamical transformer station				
17/8/18	PLPPP I: 12 MW	Start tasks in distribution center (inverters, tarsformers, etc)				
27/8/18	PLPPP II: 8 MW	EFE SA wins a tender; Obtain dispatch priority; Commit a operation start date of PLPPP II (13/03/2020) through the insurance	2.000.000	24%		
16/8/18	PLPPP I: 12 MW	Structure and Trackers FOB - Array (Payment 40%)			755.102	6%
16/9/18	PLPPP : 30 MW	**CDM United Nation - Prior Consideration**				
21/9/18	PLPPP I: 12 MW	The assembly of inverts begins				
22/10/18	PLPPP I: 12 MW	The assembly of solar panels begins				
23/10/18	PLPPP I: 12 MW	The electromechanical assembly of Chamical transformer station begins				
20/1/19	PLPPP II: 8 MW	Inverters Contract Signing - SMA	537.944	6%		
25/1/19	PLPPP II: 8 MW	Panels Contract Signing - Up Solar	2.552.774	30%		
30/1/19	PLPPP II: 8 MW	Downpayment Panels - Up Solar (Payment 20%)			510.555	6%
4/2/19	PLPPP I: 12 MW	Structure and Trackers FOB - Array (Payment 15%)			360.000	4%
19/1/19	PLPPP I: 12 MW	Commisioning				
29/1/19	PLPPP I: 12 MW	Signature of the PPA 1				
31/1/19	PLPPP I: 12 MW	Signature of the PPA 2				
22/2/19	PLPPP I: 12 MW	Commercial Operation Date (COD) 12 MW				
5/4/19	PLPPP II: 8 MW	Inverters CIF - SMA (Payment 45%)			259.836	3%
26/4/19	PLPPP II: 8 MW	Structure and Trackers Contract Signing - Array	1.319.465	16%		
3/5/19	PLPPP II: 8 MW	Inverters CIF - SMA (Payment 45%)			258.601	3%
3/5/19	PLPPP II: 8 MW	Inverters CIF - SMA (Payment 10%)			81.883	1%
3/5/19	PLPPP II: 8 MW	Structure and Trackers CIF - Array (Payment 30%)			395.840	5%
3/6/19	PLPPP II: 8 MW	Start clearing and ground pairing				
14/6/19	PLPPP II: 8 MW	Panels CIF - Up Solar (Payment 40%)			965.100	11%
12/7/19	PLPPP II: 8 MW	Panels CIF - Up Solar (Payment 15%)			402.125	5%
22/7/19	PLPPP II: 8 MW	Panels CIF - Up Solar (Payment 10%)			241.275	3%
2/8/19	PLPPP II: 8 MW	The assembly of structure and trackers begins				
8/8/19	PLPPP II: 8 MW	Panels CIF - Up Solar (Payment 8%)			201.062	2%
9/8/19	PLPPP II: 8 MW	Panels CIF - Up Solar (Payment 9%)			229.469	3%
23/8/19	PLPPP II: 8 MW	Panels CIF - Up Solar (Adjust)			3.189	0%
17/9/19	PLPPP II: 8 MW	Signature of the PPA 3				
17/9/19	PLPPP II: 8 MW	Signature of the PPA 4				
30/9/19	PLPPP II: 8 MW	Signature of the PPA 5				
30/9/19	PLPPP II: 8 MW	The assembly of panels begins				
8/10/19	PLPPP II: 8 MW	The assembly of inverters begins				
oct/nov-19	PLPPP II: 8 MW	Structure and Trackers CIF - Array (Payment 70%)			946.055	11%
2/12/19	PLPPP II: 8 MW	Commissioning				
19/12/19	PLPPP : 30 MW	Gold Standard - Stakeholders Consultation Meeting				
14/1/20	PLPPP II: 8 MW	Commercial Operation Date (COD) 8 MW				
23/1/20	PLPPP : 30 MW	Gold Standard - Start Preliminary Review				

Revision History

Version	Date	Remarks
1.5	29 June 2023	Editorial changes to match V2.1 of the Safeguarding Principles Requirements
1.4	21 June 2023	Editorial changes to match V2.0 of the Safeguarding Principles Requirements
1.3	14 April 2023	Integrated the design change memo as annex of the document. Editorial changes
1.2	14 October 2020	Hyperlinked section summary to enable quick access to key sections Improved clarity on Key Project Information Inclusion criteria table added Gender sensitive requirements added Prior consideration (1 yr rule) and Ongoing Financial Need added Safeguard Principles Assessment as annex and a new section to include applicable safeguards for clarity Improved Clarity on SDG contribution/SDG Impact term used throughout Clarity on Stakeholder Consultation information required Provision of an accompanying Guide to help the user understand detailed rules and requirements
1.1	24 August 2017	Updated to include section A.8 on 'gender sensitive' requirements
1.0	10 July 2017	Initial adoption