

MONITORING REPORT TEMPLATE¹

MONITORING REPORT TITLE

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Monitoring Report Template (Version 1.1) ²	
Name of project	Helios Santa Rosa Solar OV plant
BCR Project ID	<i>It shall match the unique registration number of the project</i>
Registration date of the project activity	<i>Date of the project registration in BioCarbon</i>
Project holder	Tassaroli S.A.
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¹ This form is for the monitoring report of projects using the BCR Program.

² The instructions in this form are a guide. Do not represent an exhaustive list of the information the preparer shall provide under each section of the template.

Monitoring Report Template (Version 1.1)²	
	Av. Mitre 3495 San Rafael (5600)- Mendoza. Argentina.
Version number of the Project Document applicable to this monitoring report	Version number 01 (9.09.2024)
Applied methodology	AMS I.D. Grid connected renewable electricity generation Version 18.0
Project location (Country, Region, City)	Ciudad de Santa Rosa, provincia Mendoza, Argentina.
Project starting date	01/04/2022
Quantification period of GHG reductions/removals	From 01/04/2022 to 31/03/2024
Monitoring period number	<i>01 of the first accreditation period.</i>
Monitoring period	<i>From 01/04/2022 to 31/03/2028</i>
Amount of emission reductions or removals achieved by the project in this monitoring period	10,016 tCO ₂
Contribution to Sustainable Development Goals	<i>SDG 4 Quality Education</i> <i>SDG 5 Gender Equality</i> <i>SDG 7 Affordable energy</i> <i>SDG 9 Industry, innovation and infrastructure</i>

Monitoring Report Template (Version 1.1)²	
	<i>SDG 13 Climate change</i>
Special category, related to co-benefits	<i>Does not apply</i>

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1 General description of project

The project activity is a greenfield project consisting of the implementation of a grid-connected solar photovoltaic plant with a total installed capacity of 10.2 MW. The Helios Santa Rosa Solar Photovoltaic Plant has 2 implementation stages with 2 years difference between them: 5 MW + 5.2 MW and is connected to the Argentinean electricity grid at two interconnection points at 13.2 kV.

The project activity generates electricity by sustainable means, without causing any negative impact on the environment, which is supplied to the Argentinean Interconnection System (SADI), which is Argentina's electricity grid. Argentina's electricity system has a mix of generation sources including hydro, nuclear, fossil fuel-based thermal generation and a small portion of wind, solar photovoltaic, biomass and biogas. Thermal power generation accounts for approximately 60% and relies mainly on natural gas, but also uses fuel oil, diesel and coal.

The project started on 01/04/2022 when the first stage of 5 MW of power was commercially commissioned on 29/03/2022. In May 2024, the second stage of Santa Rosa II of 5.2 MW of power will be approved and start operation. Due to the fact that the current verification period is until 31/3/2024 all power generation of Santa Rosa II will not be covered by the current monitoring report.

The current monitoring period includes the first period from 1 April 2022 to 31 March 2023, the second period from 1 April 2023 to 31 March 2024 and part of the third period from April 2024 - August 2024. In the first period 13,541.35 MWh were displaced from the grid, but 1780 MWh were redeemed by International REC Standard³ certificate to decrease the Carbon Footprint of electricity used in the industrial plant of Tassaroli S.A. located in San Rafael Mendoza, Argentina by 2022. Therefore, subtracting the amount of MWh redeemed by the I-REC program from the amount generated in the first period leaves 11,245.5 MWh of electricity displaced from the grid, representing 4,385 tCO₂. The proof of the amount of MWh can be viewed on the official I-Rec² website using the following activation code 23676790.

Regarding the second period 12,946 MWh were displaced, and 2,275.5 MWh were redeemed by International REC Standard certificate to decrease the carbon footprint of electricity used in the industrial plant Tassaroli S.A located in San Rafael Mendoza,

³ <https://www.trackingstandard.org/>

Argentina by the year 2023. Therefore, subtracting the amount of MWh redeemed by the I-REC program from the amount generated in the second period leaves 11,245.5 MWh of electricity displaced from the grid, representing 3,773 tCO₂. For the year 2023 the certificate can be found in the supplementary documents folder.

Finally, during period 3, only the energy generated from April 2024 to August 2024 (date on which this report was closed) is considered, where 6,200.2 MWh were injected into the grid and 790.8 MWh were redeemed by International REC Standard certificate to decrease the carbon footprint of electricity used in the industrial plant Tassaroli S.A located in San Rafael Mendoza, Argentina by the year 2024. Therefore, subtracting the amount of MWh redeemed by the I-REC program from the amount generated in the second period leaves 5,409.4 MWh of electricity displaced from the grid, representing 1,858.1 tCO₂. For the year 2024 the certificate can be found in the supplementary documents folder.

According to AMS I.D. 'Grid-connected renewable electricity generation', version 18.0, leakage in biomass projects has to be analyzed. The CCMP is a solar photovoltaic project, so leakage and own emissions are zero, so the net reductions for the monitored period are:

Monitoring Period	Emission Reductions tCO ₂ e
From 01/04/2022 to 31/03/2023 (both days inclusive)	4,385
From 01/04/2023 to 31/03/2024	3,773
From 01/04/2024 to 31/08/2024	1,858
total	10,016

1.1 Sectoral scope and project type

The project is eligible under the BCR Scope:

GHG projects using a methodology developed or approved by BioCarbon Registry, applicable to activities in the energy, transport and waste sectors.

Quantifiable reductions of GHG emissions generated by the implementation of activities in the energy, transport and waste sectors.

Type: Activities in the energy sector. Non-Conventional Renewable Sources

The project is small scale. The project will have an installed capacity of 10.2 MW, below the limit defined by the Clean Development Mechanism which is 15 MWe.

It is not a clustered project.

1.2 Project start date

01/04/2022 is the date when the commercial authorization was obtained and therefore the GHG reduction activities started.

1.3 Project quantification period

The accreditation period of the project activity is 21 years in total (7 years renewable twice).

Start date of the accreditation period: 01/04/2022. End date: 31/03/2043.

First accreditation period: 7 years. Start date: 01/04/2022.

End date: 31/03/2028

1.4 Project location and project boundaries

The solar photovoltaic power plant is located on a plot of land of approximately 27.8 hectares designated as Fraction A of the Measurement and Subdivision Plan approved by the Provincial Directorate of Cadaster No. 11-81118-6, at a distance of approximately 4,000 meters northwest of the city of Santa Rosa in the province of Mendoza, Argentina.

Geographical coordinates of the location of each stage of the Helios Santa Rosa Photovoltaic Solar Plant:

Table 2: Coordinates Santa Rosa 1

Helios Santa Rosa I	Helios Santa Rosa II
Latitude 33° 12' 51.73' South	Latitude 33° 12' 38.17' South
Longitude: 68° 10' 01.93' West	Longitude 68° 09' 56.29' West
Altitude: 621 m above sea level	Altitude: 619 m above sea level

Table 3: Coordinates Santa Rosa 2

Helios Santa Rosa I	Helios Santa Rosa II
Latitud 33° 13' 02.29" Sur	Latitud 33° 14' 57.45" Sur
Longitud: 68° 10' 08.74" Oeste	Longitud: 68° 09' 42.35" Oeste
Altitud: 622 m above sea level	Altitud: 611 m above sea level

The location of Argentina, the province of Mendoza, the project area and the spatial boundaries of the climate change mitigation project are presented in the following images:

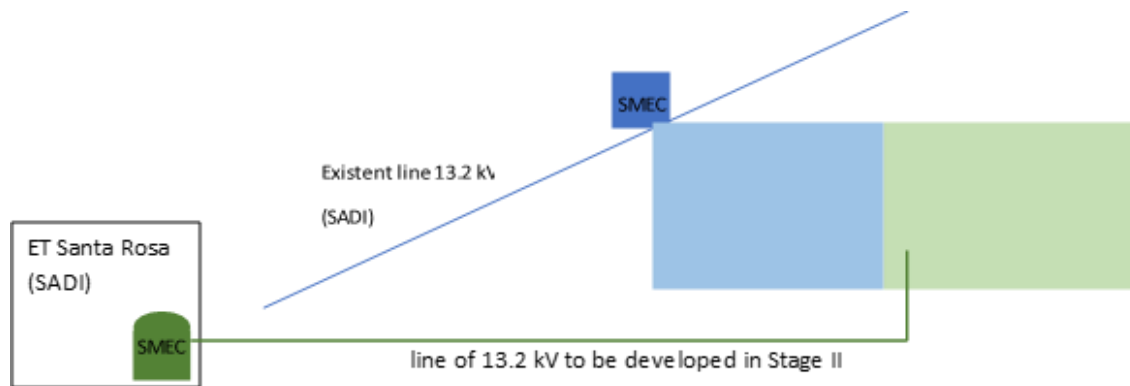
Figure 1: Project location



According to the methodology, AMS I.D. 'Grid-connected renewable electricity generation' version 18.0, the spatial extent of the project boundaries includes the project power plant and all power plants physically connected to the electricity system to which the project power plant is connected. The latter is the Argentine Interconnection System (SADI).

Also part of the project activity is the 5.16 km of the 13.2 kV line linking the Helios Santa Rosa II facilities and the interconnection point with the national grid.

Figure 2: Interconnection point



1.5 Summary Description of the Implementation Status of the Project

On 21 January 2020, the project 'Planta Solar Fotovoltaica Helios Santa Rosa (both phases)' was authorized by the environmental agency of the Government of Mendoza (Resolution 019/2020 Ministerio de Ambiente y Ordenamiento Territorial).

Tassaroli S.A. purchased the land where the Helios Santa Rosa Photovoltaic Solar Plant is installed on 05/03/2021.

The first stage of the project activity (Helios Santa Rosa I, 5 MW) has been supplying electricity to the grid since 01/04/2022 and its commercial authorization is dated 29/03/2022.

The second stage of the project activity (Helios Santa Rosa II, 5.2 MW) has been supplying electricity to the grid since May 2024. As the current verification period will only cover the first two periods (01/04/2022 to 31/03/2024) the power generation supplied by Santa Rosa II will not be covered in this document.

The baseline emissions include only CO₂ emissions from electricity generation in power plants that are displaced due to project activity.

In the first monitoring period, the project activity displaced 13,541 However, given that the Helios Santa Rosa solar farm is registered with I-REC and a remission certificate has been issued for 1780 MWh to reduce the scope 2 carbon footprint of the Tassaroli industry located in San Rafael Mendoza, the energy considered for the GHG reduction calculations for the first monitoring period is 11,245.5 MWh and the GHG reductions achieved are 4,384.5 tCO₂.

In the second period 12,946 MWh were displaced, and 2,275.5MWh were redeemed in the I-REC program or in any other program, therefore the baseline emissions were 3,773.4 tCO₂.

In the second period 6,200,2 MWh were displaced, and 790.8 MWh were redeemed in the I-REC program or in any other program, therefore the baseline emissions were 1,858 tCO₂

Therefore, in the first verification period the baseline emissions were 10,016 CO₂e

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

The UNFCCC methodology and related tools used are:

- Methodology: AMS I.D. Small scale Methodology 'Grid-connected renewable electricity generation' version 18.04:
- TOOL 07: Tool for calculating the emission factor of a power system - Version 07.05
- Tool 21: Demonstration of additionality of small-scale project activities Version 13.16.
- BCR Tool Sustainable Development Safeguards (SDSs Tool) Biocarbon Registry version 1.17
- BCR Tool Avoiding Double Counting version 2.0 8
- BCR Tool Sustainable Development Goals version
- Permanence and Risk Management Tool version 1.1

3 Registry or participation under other GHG Programs/Registries

The Climate Change Mitigation Project does not apply to other GHG Programs. However, it is registered with I-REC.

The International REC Standard has issued a certificate in favour of Tassaroli S.A. to redeem 1780 MWh in the first period, 2,275.5 MWh for the second period and 790.8 for the third period. In order to reduce the Carbon Footprint of the electricity consumed in AV. MITRE N°3495 SAN RAFAEL MENDOZA. Therefore, this volume of electricity is not considered in the calculations of emission reductions for the monitored period to avoid

double counting. The International REC Standard⁴ certificate has the following verification code for the year 2022: 23676790 and the following verification code for the year 2023

4 Contribution to Sustainable Development Goals (SGD)

SDG 4: Quality Education



Program 1: Carlos José Tassaroli Vocational Training Centre

Since the launch of the Carlos José Tassaroli Technological and Vocational Training Centre in 2023, we have made significant progress in meeting our goal of increasing technical and professional skills in young people and adults, aligning ourselves with SDG 4 target 4.4, 'Quality Education'.

In these two years, we have managed to consolidate the program, allowing students to access comprehensive training that combines theory and practice, with an innovative approach based on the German dual system, which has been key to the employability of graduates.

As stipulated in the PDD, the actions monitored during the current verification period were:

Monitoring actions:

4

<https://api.evident.app/public/certificates/es/QoXvOG2plq1U59x1y86ubKWLeY57FZciv8GS0M%2BZrHCe32iHOdMI0NaAyF19kLeo>

Elaboration of the selection criteria: the criteria for the selection of the participants of each training pathway have been elaborated. These programs are under the responsibility of the Training Centre Management.

Implementation of the training courses: Enrolment began in 2023 and continued until 2024. At the same time, the training offer has been extended to include not only students from technical schools, but also workers from metalworking companies, teachers and people who have not completed secondary education.

To date, the planned training courses have been completed, enabling participants to accumulate the hours required to obtain the certification endorsed by the Directorate of Technical Education and Labor of the province of Mendoza.

As the courses were implemented, the following indicators were monitored:

- Number of people enrolled.
- Attendance and grades.
- Number of people completing the course per number of enrolments.
- Impact on the community:

The technical and vocational training provided has enabled graduates not only to acquire competencies relevant to the industrial sector, but also soft skills that increase their opportunities in the labor market. Thanks to this comprehensive preparation, several of the graduates have already been inserted in Tassaroli's business units, contributing to the innovation and growth of the local industry.

During the current verification period, the PDD schedule was met. Timeline:

Table 4: SDG 4 actions

YEAR	2022	2023	2024
ACTION 1: Elaboration of criteria for the selection of persons eligible for enrolment.	✓		
ACTION 2: Implementation of the course / opening of enrolment.		✓	✓

SDG 5: Gender Equality



Program 2: Gender Equality

Since the launch of the Gender Equality Program, steady progress has been made towards the goal of eliminating all forms of discrimination and promoting gender equality within the organization. This has been done through the implementation of inclusive policies and the development of an equitable work environment that promotes diversity, in line with SDG 5 target 5.1 'Gender Equality'.

The goal of promoting gender equality in all aspects of the organization has been translated into concrete actions that have transformed internal policies and recruitment procedures. Through the development of an inclusive code of ethics, we were able to establish the basis for expected behavior, integrating clear policies on diversity, gender identity, religion and disability.

As stipulated in the DDA, the actions monitored during the current verification period were:

Monitoring actions:

Action 1: Gender guidelines of the code of ethics are complied with.

Development and implementation of the Code of Ethics: A code of ethics has been implemented that establishes a clear framework for the promotion of diversity and respect for gender identity and equity. This code has been essential to ensure that recruitment and promotion processes in the company are based solely on the skills and abilities of candidates, ensuring equal opportunities for all.

Job survey: From the survey carried out by external consultancies, we confirmed that positions, salaries and recruitment in the company are done on a gender-neutral basis. This has enabled corrective action to be taken where necessary, ensuring that equity guidelines are followed in all recruitment and promotion processes.

Action 2: Number of positions held by women out of the total team.

Increasing female representation: A key aspect of the program has been the commitment to achieve and maintain 30% female representation in the Helios Renewable business unit. In these two years, significant progress has been made, increasing female participation in technical and operational roles in a traditionally male-dominated sector. This increase has not only been a step towards gender equity, but has also enriched the organizational culture, promoting greater innovation and diversity of perspectives.

In 2024, 50% female participation in the Helios business unit was maintained, exceeding the target of 30%.

During the current verification period, the PDD timeline was met. Timeline:

Table 5: SDG 5 actions

YEAR	2023	2024
ACTION 1: Annual survey of compliance with the code of ethics.	✓	✓
Action 2: Annual survey of the constitution of the Helios team.	✓	✓

SDG 7: Affordable and Clean Energy



Program 3: Helios Santa Rosa

7.2 By 2030, significantly increase the share of renewable energy in the energy mix.

7.2.1 Share of renewable energy in total final energy consumption.

Objective:

‘To significantly increase the company’s renewable energy generation capacity, optimizing the use of sustainable resources and moving towards a cleaner, more efficient and environmentally friendly energy matrix.’

Program description:

The program seeks to increase the installed capacity of renewable energy through the Helios business unit, belonging to Tassaroli. The objective is to increase the installed capacity every seven years, through a regular analysis and survey of opportunities to develop new renewable energy projects.

To ensure the success of this program, the company will create a permanent position dedicated to the identification and ongoing evaluation of potential renewable energy projects.

As stipulated in the PDD, the actions monitored during the current verification period were:

Monitoring actions:

Action 1: Amount of energy generated by non-conventional renewable sources in MWh (each cycle starting on the first of April and ending on the 31st of March of the following year. This is done to coincide with the start of the current project).

A total of 26,946 MWh was generated.

During the current verification period the PDD schedule was met. Timeline:

Table 6: Action SDG 7

YEAR	2022	2023	2024
Action 1: Total electricity produced from non-conventional renewable energy sources	✓	✓	✓

SDG 9: Industry, innovation and Infrastructure



Program 4: Innovation Program

9.5 Increase scientific research and improve the technological capabilities of industrial sectors in all countries, in particular developing countries, inter alia, by promoting innovation and significantly increasing the number of research and development personnel per million inhabitants and public and private sector expenditure on research and development by 2030.

9.5.1 Research and development expenditure as a proportion of GDP.

Program description:

Innovation is one of the fundamental success factors considered by Tassaroli in its business vision and the differential key to fulfilling its mission within its stated values. In this context, Tassaroli's Management decided to create and formalize a Research, Development and Innovation Department (RDI) whose mission would be to manage the company's Integrated Innovation System in order to meet the challenges of the coming years. Tassaroli aims to cooperate with the 2030 agenda and to continue to grow steadily in oil, mining and renewable energy.

The creation of a solar park for electricity generation will enable the company to position itself among the companies cooperating with the global agenda. With internal support, the Helios business unit carries out the pre-feasibility analysis of future photovoltaic projects.

The creation of a specific business RDI area is planned for 2022.

Tassaroli manages innovation mainly in 3 ways:

Idea gathering: From the environment and internally through collaborative creation activities and events.

Prototyping: Development together with clients to streamline processes using the latest technologies.

Implementation of Solutions: Solutions are presented from conceptual design to production through agile methodologies.

As stipulated in the PDD, the actions monitored during the current verification period were:

Action Monitoring:

Action 1: Monitoring reports on alternatives: Various strategic points in the province of Mendoza have been analyzed for the development of new solar parks, evaluating factors such as solar irradiation, proximity to electricity transmission grids and the technical feasibility of each site. These evaluations are part of the company's renewable generation capacity expansion, with the aim of making the most of the solar resources available in the region and contributing to the sustainable energy transition.

The analyses are available in the supporting documentation folder.

Action 2: Supporting documentation on the Innovation Challenge:

An innovation challenge was conducted with the vision that 80% of Tassaroli's products or services in the future will be created through innovation projects and/or upgraded through disruptive or incremental innovation processes.

A challenge was set in order to focus the innovation focus 100% on its products and processes, all plant employees who wanted to participate were invited to answer the question 'How can we improve the life cycle of our products to make them more environmentally friendly?'

A program of several weeks was carried out in which a change in the process or product had to be offered, a brand and a specific prototype had to be presented. Interdisciplinary teams of company employees were formed, the projects were presented at the final event and the Jury in charge of the company's Management, Production Manager and Plant Manager voted for the best project and awarded a prize to the winning team.

The business objective is that these inventions are applicable to the company's own processes or products.

This challenge will be repeated every two years. For the next event, interested universities will be asked to participate.

Figure 3: Innovation Challenge



During the current verification period, the DDA schedule was met. Timeline:

Table 7: SDG 9 actions

YEAR	2022	2023	2024
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ACTION 1: Pre-feasibility analysis of future renewable energy projects	✓	✓	✓
ACTION 2: Innovation challenges	✓		✓

SDG 13: Climate Action

Program 5: Organizational carbon footprint measurement

Target 13.2 Incorporate climate change measures into national policies, strategies and plans.

13.2.2 Total greenhouse gas emissions per year.

Description:

Tassaroli S.A. recognizes that its operations generate greenhouse gas (GHG) emissions that contribute to climate change and has therefore decided to measure these emissions annually. This monitoring will include the industrial plant in San Rafael, Mendoza, the Helios Santa Rosa Solar Park in Santa Rosa, Mendoza, and the commercial bases in Brazil, Chile, Comodoro Rivadavia and Neuquén. The quantification of the Carbon Footprint, ranging from fossil fuel consumption to waste generation, will provide a clear picture of direct and indirect emissions, serving as a basis for designing mitigation and offset strategies.

The Carbon Footprint analysis will be aligned with IRAM-ISO 14.064-1, ensuring a standardized methodology for quantifying and reporting GHG emissions. This process is fundamental to establish a systematic approach to emissions management and to ensure consistency in data collection in future reporting.

The base year taken will be 2019. The years 2020 and 2021 will not be taken into account due to the Coronavirus pandemic, which makes the data inaccurate due to low production.

From the company's renewable energy generation, such avoided emissions from the national electricity grid can be used to offset the company's own organizational carbon footprint, accompanied by an appropriate mitigation plan.

As stipulated in the PDD, the actions monitored during the current verification period were:

Monitoring of actions:

Carbon footprint measurement report

The company started carbon footprint measurement reporting in 2022 as part of its commitment to sustainability and transparency in its operations. For the definition of the base year, it was decided to use 2019 due to the exceptional impact that the COVID-19 pandemic had on subsequent years, significantly altering activity patterns and thus the emissions generated. The year 2019 provides a more accurate and representative benchmark of the company's normal operations, allowing a solid baseline to be established for future footprint measurement and comparison. This was followed by measurement in 2022 and 2023.

The full carbon footprint measurement reports are available in the full documentation folder.

Total electricity produced from non-conventional renewable sources

A total of 26,487 MWh was generated.

During the current verification period the PDD schedule was met. Timeline:

Table 8: SDG 13 actions

YEAR	2019	2020	2021	2022	2023	2024
ACTION 1: Annual HDC measurement	✓			✓	✓	✓
ACTION 2: Electricity generated from non-conventional renewable sources				✓	✓	✓

Program 6: HDC Mitigation Plan

Target 13.2 Incorporate climate change measures into national policies, strategies and plans.

13.2.2 Total greenhouse gas emissions per year.

Description:

The program consists of developing a greenhouse gas (GHG) emissions mitigation plan that focuses on reducing and controlling the emissions that the organization releases into the atmosphere. It includes direct GHG reduction and offsetting measures to achieve carbon neutrality. The offsetting will be done through the use of carbon certificates generated by the company's energy projects, allowing it to offset its emissions.

The plan is based on the results of the carbon footprint, identifying the main sources of emissions and proposing alternatives to reduce them. A value chain analysis is included to detect optimization opportunities, and existing actions within the organization, such as waste reduction and logistical improvements, are integrated into a consolidated climate strategy.

In a last instance, the offset project will be assessed for emissions that cannot be reduced in time. With the actions defined and a baseline established, short-, medium- and long-term mitigation objectives will be set, with concrete targets and KPIs to monitor their implementation.

As stipulated in the PDD, the actions that were monitored during the current verification period were:

Monitoring actions:

Action 1: obtaining the deliverable of the mitigation plan.

The report of the mitigation plan that will be applied from next year onwards has been completed and is available on request. This report is available on request.

During the current verification period the PDD schedule was met. Timeline:

Table 9: Program actions 6 SDG 9

YEAR	2022	2023	2024
ACTION 1: Design of mitigation strategy			✓

Program 7: Joining the UN Global Compact Network

Target 13.2 Incorporate climate change measures into national policies, strategies and plans.

13.2.2 Total greenhouse gas emissions per year.

Description:

Under Tassaroli's adherence to the UN Global Compact, Tassaroli intends to affirm the commitment to sustainable development through engagement with the different areas. This means that Tassaroli will assume the requirement to integrate the ten universal principles of the Global Compact into all its business procedures and strategies.

This commitment involves a series of concrete actions that will be carried out throughout the corporate sustainability strategy, driven by the fulfilment of the 2030 Agenda:

Sustainability strategy and adherence to the Global Compact

As stipulated in the DDA, the actions monitored during the current verification period were:

Action Monitoring:

Action :1 Deliverable of sustainability strategy and apply for Global Compact membership.

Tassaroli achieved adherence to the Global Compact on 28 March 2024. The letter of acceptance to the plan is available in the supporting documentation folder.

During the current verification period, the PDD schedule was met. Timeline:

Table 10 : Actions program 7 SDG 9

YEAR	2022	2023	2024
ACTION 1: Establish corporate sustainability strategy and adherence to the Global Compact			✓

5 Compliance with Applicable Legislation

The mitigation project activity complies with all legal requirements. For detailed information, please refer to the Excel file named: REG-009 Legal Requirements Matrix_Rev 1_ available in the supplementary documents folder.

The Legal Department of the Tassaroli Group consults the Official Gazette, external advisors and web pages on a monthly basis for updates on environmental regulations and electricity generation, both at national and provincial level.

For the consultation of municipal requirements, check the website of the Municipality of Santa Rosa (Public Information) or call the Health and Environment Department.

The Legal Department is responsible for:

- Analyzing if there are new requirements or changes to existing ones.
- Verify if it is applicable to the activity and facilities of the Helios Solar Park.

- Communicate to the Head of Safety and Environment for its effective consideration.
- Update the Legal Matrix identifying the actions taken to comply with the identified requirements.
- The Administration and Finance and Legal areas receive regular information from CAMMESA and ENRE on regulatory changes in the market.

In the event that any of them are related to the environment in the photovoltaic power generation activity, the Head of Safety and Environment is informed to incorporate them into the Legal Matrix for consideration and monitoring.

An annual 'Regulatory Compliance Audit' is carried out by an external law firm to verify compliance with the environmental and photovoltaic energy generation requirements applicable to all activities carried out at Helios Solar Park.

In the event that there are requirements that are not fulfilled or partially fulfilled, they are recorded in an Action Request to provide traceability and continuity in the monitoring of this requirement and ensure compliance.

Based on the results of this assessment, the necessary corrective actions or opportunities for improvement are initiated. In all cases, records are kept of the above-mentioned activities including deviations found if applicable.

The final product obtained is a Legal Matrix that indicates all the National, Provincial and Municipal regulations that are applicable to the activity of Tassaroli as well as Tassaroli Industria and Tassaroli Generación de Energía (Helios Santa Rosa). It is differentiated between 'Compliant (C)' 'Planned Compliance (PC)' 'Not Compliant' and 'Not Applicable'.

For all legal requirements that are mandatory, the supporting documents must be indicated to ensure that the company has complied with them. Due to the extensive and thorough nature of the analysis, this legal matrix will be included in the Legal folder, which contains complementary documents.

The following are the most relevant regulations and the justification for their compliance:

Table 14: Applicable legislation

Regulation or law	Type (legal, environmental, other)	Applicability/compliance (full or partial)	Justification
-------------------	------------------------------------	--	---------------

24065. Electrical Energy Regime ⁵	Legal aspects related to the Wholesale Electricity Market and its rights and obligations	Full applicability for generation agents in Argentina. Rules for the generation, transportation and distribution of electricity, object-general policy and agent-transport and distribution. Creates the National Electrical Regulatory Entity (ENRE)	The Photovoltaic Solar Power Plant received the status of Generating Agent through resolution SE 86/2022 dated 02/15/2022. ENRE authorized the Access and Expansion of the Existing Transportation Capacity through resolution 98/2022 of 03/23/2022 for the second stage
Law 27191 (2016) Electricity Promotion Regime ⁶	Legal aspects related to the Wholesale Electricity Market and your rights and obligations	Full applicability of the national promotion regime for the use of renewable energy sources, intended for the production of electrical energy. Modification of 24,065. The Public trust fund is created and establishes 20% renewable consumption by 2025.-	As the Solar Power Plant is an agent of MEM, it is covered by said regulations, establishing the objective of using 20% renewable energy. It has an investment plan for renewable energy generators and tax benefits.

⁵ [LEY N° 24.065 del 19/12/91 \(infoleg.gob.ar\)](http://infoleg.gob.ar)

⁶ [InfoLEG - Ministerio de Economía y Finanzas Públicas - Argentina](http://infoleg.gob.ar)

SGE Resolution 90/2019 RENOVAR round 3 (miniren) ⁷	Regulatory aspects of the call for renewable projects	Full applicability for Helios Santa Rosa stage I under the RenovAr Program Round 3	Under this program, the first stage of the project was able to commit all of its generation to CAMMESA (Company Administrator of the Wholesale Electricity Market) for a period of 20 years at a price USD/mwh
Resolution 281-E/2017 MATER ⁸	Regulatory aspects of the call for renewable projects	Full applicability to the second stage of Helios Santa Rosa, under the MATER (Term Market) regulations that allow contracting and sales between private parties.	Under this program, the total energy generated by Helios Santa Rosa II is contracted to a Large User of the Wholesale Electricity Market under voluntary contractual aspects.
Provincial law 5961/1992 and 6649/1999 ⁹	Environmental requirements in Mendoza	Full Applicability	Environmental Impact Study 01/21/2020-Res 019

⁷ [Resolución E 90/2017 | Argentina.gob.ar](http://www.argentina.gob.ar/energia-y-clima/renovables/resolucion-e-90-2017)

⁸ [Resolución E 281/2017 | Argentina.gob.ar](http://www.argentina.gob.ar/energia-y-clima/renovables/resolucion-e-281-2017)

⁹ <http://www.fiscalia.mendoza.gov.ar/ley5961.htm>

Ordinance 60 2022	Municipal Authorization Compliance with Viability, Land Use, Contingency and Evacuation Plan and CEMEPACI requirements	Full Applicability	Minutes No. 327 and inspection 297 Municipal Authorization, under file No. 3474/22, 1703-T-2019 and 2237/21 according to No. 267/23
National Employment Contract Law 20744 ¹⁰	Mandatory regulation of labor relations in Argentina.	Full applicability to all personnel dependent on Tassaroli	Tassaroli dependents who are affected by the solar plant project are covered under the national Labor regulations that regulate the conditions that must be respected when hiring.

6 Climate change adaptation

According to the IPCC¹¹, adaptation to climate change is defined as the adjustment of natural or human ecosystems in response to current or expected climatic stimuli or their impacts, which reduces the harm caused and enhances beneficial opportunities.

¹⁰ <https://servicios.infoleg.gob.ar/infolegInternet/verNorma.do?id=25552>

¹¹ <https://unfccc.int/es/topics/adaptation-and-resilience/the-big-picture/que-significa-adaptacion-al-cambio-climatico-y-resiliencia-al-clima>

The project activity contributes to the achievement of the objectives set out in the Second Adaptation Communication of the Republic of Argentina¹², which identified 35 priority adaptation measures in seven sectors of the country to address the different territorial, socio-economic and environmental vulnerabilities to climate change.

Within the energy Sectoral Adaptation Measures, the project activity collaborates with two of the three proposed actions and these are: Develop measures to secure energy supply and access through the adoption of resilient and sustainable infrastructure (e.g. energy transport and distribution, fuel production and power generation, with special emphasis on water resources assessment and hydropower generation). Develop measures to secure supply through technological and territorial diversification and increased access to energy, particularly through sustainable energy sources.

7 Carbon ownership and rights

Describe the actual state of the carbon ownership and rights. Provide evidence of the carbon rights monitoring, including the follow-up to the agreements and documents that ensure the carbon rights requirement is met, during this monitoring period.

If there are new agreements, In the event that the project includes ethnic groups as participants, the project holder shall present proof that the person signing the documents, within the scope of the project, is the person with the authority in charge to do so.

If the project holder is the ethnic community, the documentation shall be submitted by the authority that legitimately represents the community.

In some cases, carbon rights are together with other ones, such as land tenure rights, i.e., in the AFOLU sector Projects. The requirement shall be accomplished and this shall be described in detail.

Individual or organization

¹² <https://unfccc.int/resource/docs/natc/argnc2s.pdf>

Contact person:	Carlos Alberto Tassaroli
Job position	President at Tassaroli S.A.
Address	Belgrano 1553 San Rafael Mendoza Argentina
Phone number	+54 9 260 456 6900
Email	carlos@tassaroli.com

Tassaroli S.A. purchased the land where the Helios Santa Rosa Photovoltaic Solar Plant is installed on 03/05/2021. The Santa Rosa I facility was built with the objective of supplying the grid with renewable energy generated with Solar PV technology and its commercial qualification is dated 29/03/2022. The Santa Rosa II facility is due to be commissioned in April 2023. Both stages of the project activity belong to Tassaroli S.A.

The carbon rights belong to Tassaroli S.A. Tassaroli S.A. does not have any agreements with third parties related to carbon rights.

8 Environmental Aspects

According to the Biocarbon Registry Standard version 3.4, the Biocarbon Registry's Sustainable Development Safeguards Tool version 1.1 (SSDs) must be applied. The objective of this tool is to be able to identify any socio-economic risks and/or negative impacts that may be generated due to the implementation of this project. The identification of these SSD requirements will help to prevent and/or mitigate the risks arising from any intervention during the project.

According to section 5 of the Tool (SDSs), project proponents shall demonstrate SDSs by identifying potential environmental and/or socio-economic risks, the potential negative impacts of project activities and, where appropriate, demonstrate management of those risks to avoid or, where avoidance is not possible, minimize each of the identified risks.

First of all, it is important to highlight that in accordance with the provisions of Law No. 8830¹³, the Secretariat of Environment and Territorial Planning is responsible for the environmental protection of the territory of the province of Mendoza as the enforcement authority of the Provincial Law No. 5961¹⁴ on Preservation, Conservation, Defense and Improvement of the Environment in order to safeguard the ecological balance and sustainable development. Article 5 of the aforementioned Law establishes the Environmental Impact Assessment Procedure for those projects that may cause modifications to the conditions of the ecological balance of the environment.

The current project was authorized by the provincial authorities to be carried out on 20 May 2019. This implies that Tasarolli submitted its Environmental Impact Assessment which demonstrated that it did not affect the environment and that it was duly approved by the competent body. This report is more comprehensive than what is required by the Sustainable Development Safeguards Tool version 1.1, including all that this tool requires and other additional aspects.

Helios Santa Rosa I's commercial authorization is dated 29 March 2022, while Helios Santa Rosa II's commercial authorization is dated 4 May 2024. Both documents are included in the complementary folder, as is the Environmental Impact Statement for both projects.

The environmental impacts of the project are mainly positive, due to the mitigation of GHG, the generation of employment in an area where previously there was no activity or population, and which has a low ecological risk. The solar park facilities are not visible from the nearby road because they are about 1.6 km away and therefore do not affect the landscape. The employees are from Santa Rosa, which is the nearest town about 4 km away from the solar park. Water is not used during the operation of the park, only for cleaning the panels and in that case, it is brought by tanker truck.

In the operation stage, impacts associated with the following are highlighted:

- The cleaning of the panels, which will be carried out only with water, without chemical cleaning products. Depending on the amount of dirt that accumulates, this is done every 4-6 months. Approximately 10 liters of water are consumed per kW installed and per wash. The water will be obtained from a tanker truck.
- Fossil fuel is used only in vehicles for maintenance.

¹³ <https://www.mendoza.gov.ar/wp-content/uploads/sites/19/2018/10/PLP12-8830.pdf>

¹⁴ <https://www.mendoza.gov.ar/wp-content/uploads/sites/14/2017/07/5961.pdf>

In the following the items defined by section 5 of the tool will be developed.

Environmental risks

According to section 6 of the Tool Sustainable Development Safeguards version 1.1 the environmental risks to be assessed are:

- a) land use: resource efficiency and pollution prevention and management.
- b) Water
- c) Biodiversity and Ecosystems
- d) Climate Change

The following is a summary of the most relevant issues in the Environmental Impact Assessment associated with what is required by the tool.

- a) Land use: resource efficiency and pollution prevention and management

The Sustainable Development Safeguards Tool version 1.1 requires ensuring that the project activity does not generate changes in land use that would have negative effects on the environment by polluting air, soil and water, or deplete natural resources that could cause harm to the environment, biodiversity and communities in general.

The current project was built on an area of 20 hectares more than 5km from the nearest town called Santa Rosa. Within the project area there was minor vegetation and no watercourse. Being an emergency photovoltaic project, it does not require the use of any other input from the environment than the sun. Therefore, there was no negative impact on land use.

- b) Water

The study area is located in the so-called 'Cuenca Hydrogeological Norte' of the province of Mendoza. This region is characterized by a low topographic slope without

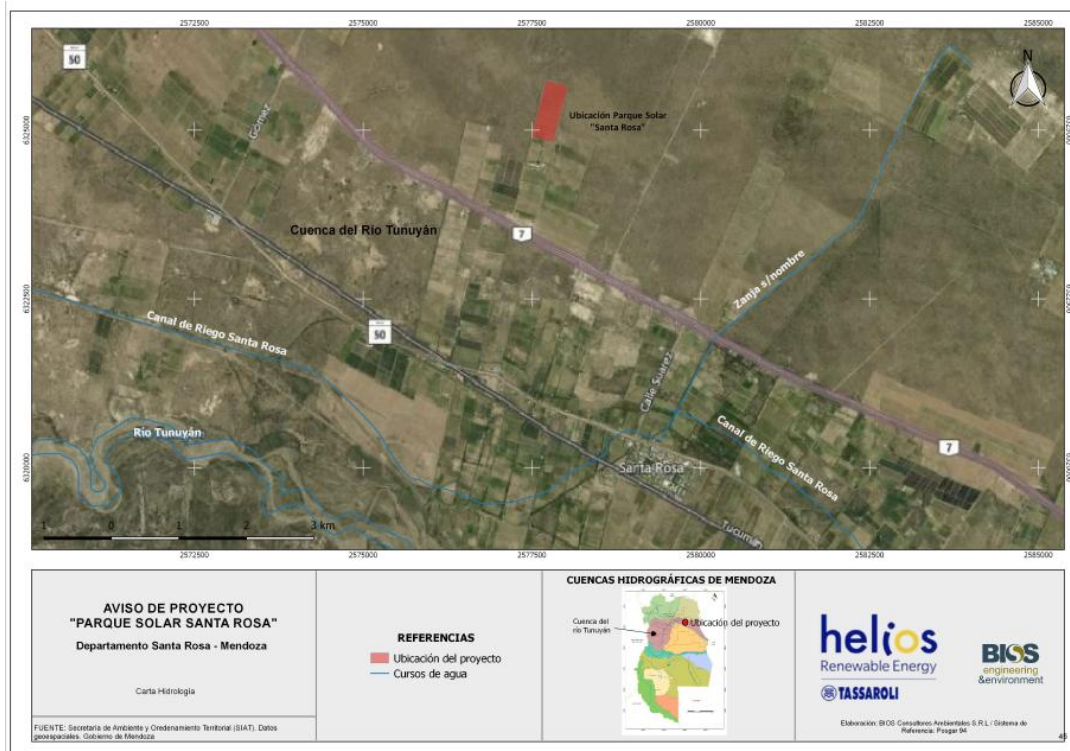
positive geofoams, generating an alluvial plain environment known as 'Llanura de la Travesía', with the presence of the Tunuyan river as a striking feature.

From the point of view of surface water, the most distinguishing feature of the area is the Tunuyan River, which is located about 5.6km from the Solar Park area, and on the other hand, 3.3km to the south is the Santa Rosa irrigation canal, which is waterproofed.

The river has its imbrifera basin in the Andes Mountains, therefore, the sediments that it has transported and with which it has filled the lower basin, have the same origin. Its regime is of the snowy type, with flood flows from spring to summer and decreasing towards winter. This river has contributed to the formation of two sedimentary basins: the Upper Tunuyán basin and the North basin. In the first part, the flow is diverted for irrigation, a percentage infiltrates, recharging aquifers and the rest continues its movement towards the North basin. This rest, in the lower part of the Upper Tunuyán basin itself, collects water from the first aquifer level that thickens it in such a way that the flow at the outlet of this basin is usually somewhat greater than that which it brings from the mountain range.

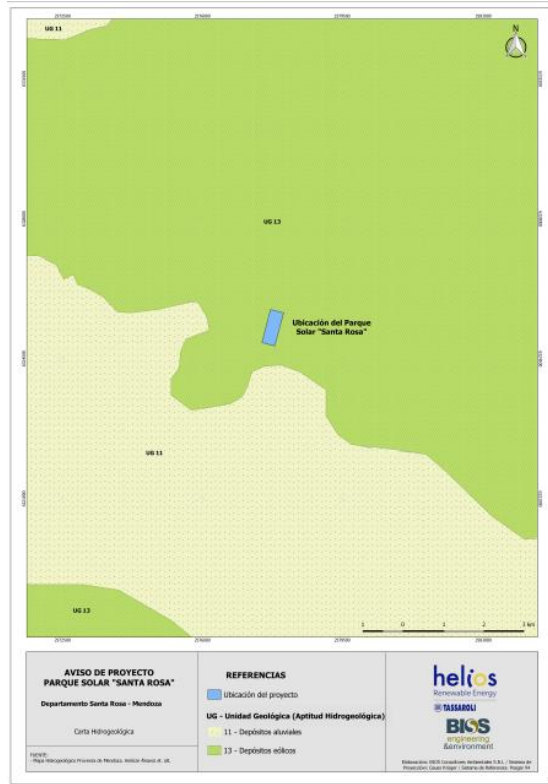
The Project is located 5.6 km from the Tunuyán River and 3.3 km to the south is the San Rosa watertight risk channel. The Project does not consume water during operation of the PV plant. Therefore, the risk of impact was low.

Figure 4: Mendoza watersheds



As can be observed in the hydrogeological chart (figure below), the project is located in the geological unit (hydrogeological suitability) of Aeolian deposits, coinciding with the geomorphological characteristics defined by the presence of an eastern fluvial-aeolian plain with living dunes and inter-dunes depressions. Finally, there are the alluvial deposits, following the course of the lower Tunuyan river. In the hydrogeological charts below it can be seen that the project will be developed in an area whose alluvial filling has a thickness of 500m, from this point onwards are the aquifers. On the other hand, according to the electrical conductivity curve, the Iso conductivity of the area is 2200micro/S/cm, located between 100 and 180m from the surface.

Figure 5: Hydrogeological suitability

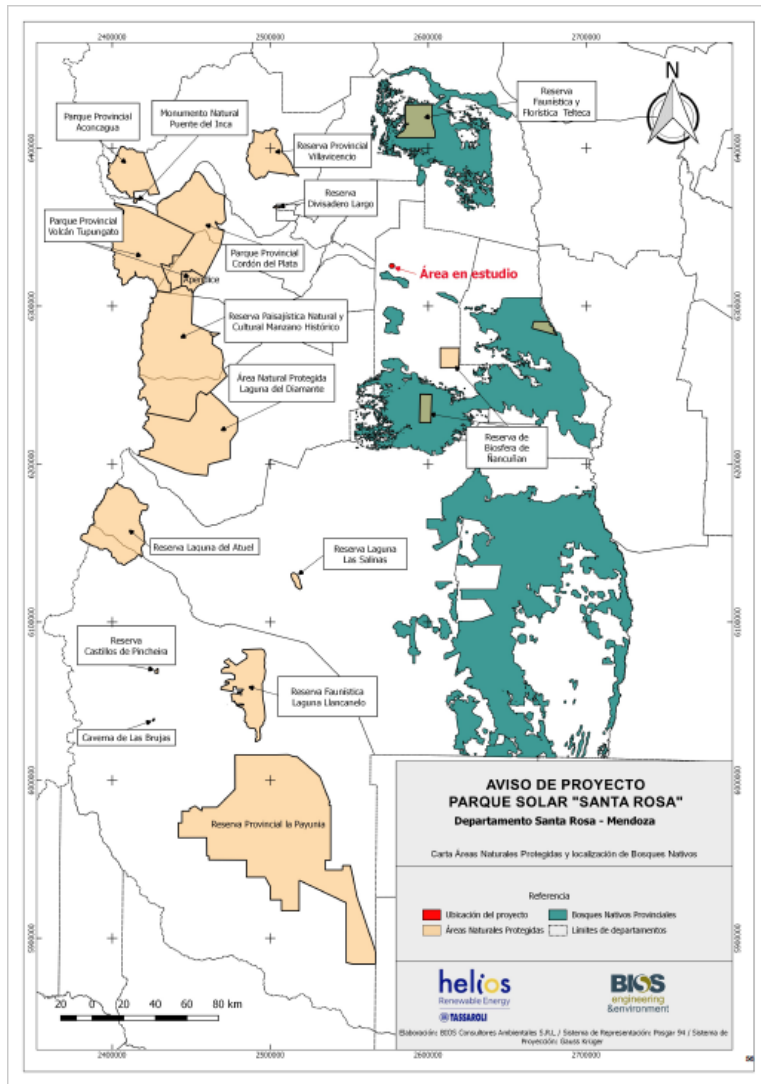


c) Biodiversity and Ecosystem

The province of Mendoza has a reduced diversity of plant and animal species compared to those found in other regions of Argentina. There are several endangered native species (both animal and plant) in the province. As a preservation measure, Mendoza created a series of Natural Protected Areas¹⁵. Each of them is of different categories and represent each biome of the region. It is important to note that the project is not located in areas designated as Protected Areas.

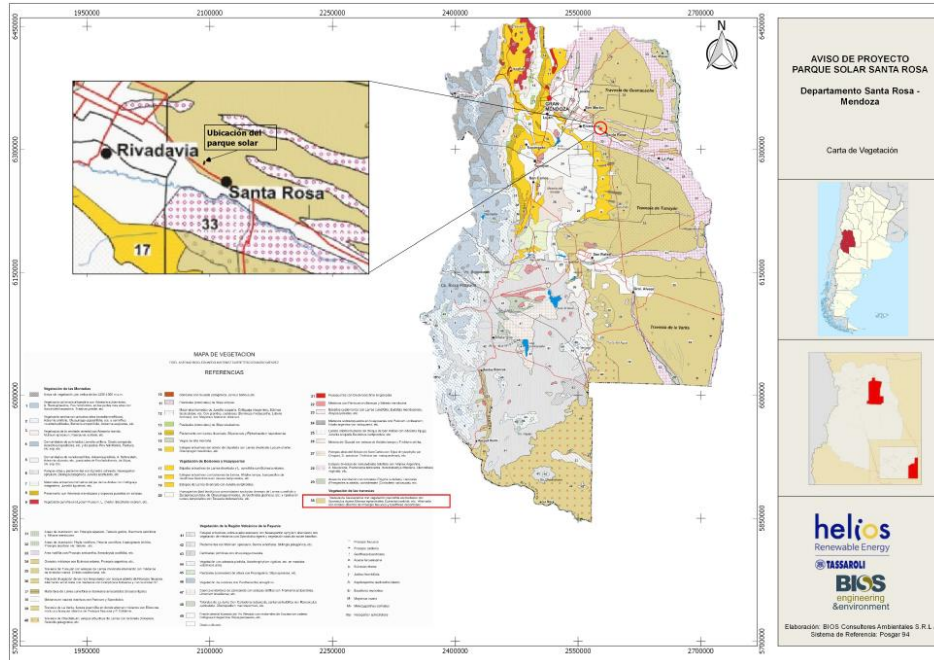
Figure 6: Mendoza Protected Areas

¹⁵ <https://www.mendoza.gov.ar/areasnaturales/>



With regard to flora, the project is located within the phytogeographical province of Monte. It is characterized by the Monte de Llanuras and plateaus, which differs from the ecoregion of plains and pockets due to its geomorphological characteristics. It extends from the south of the province of San Juan to the province of Chubut. The predominant vegetation type is high shrub steppe, mainly characterized by the jarillal community, with the presence of columnar cacti or cardons and carob tree forests in some areas.

Figure 7: Vegetation map of the project area



d) Climate Change

The current project generates energy from renewable sources. In this way, the renewable electricity supplied to the grid by the project activity will displace electricity with a more intensive CO2 emission factor as approximately 60% of the electricity in the grid is produced from fossil fuels, mainly natural gas, but also diesel, fuel oil and coal.

The present project generates energy through photovoltaic panels. Therefore, the impact of the consequences of climate change such as rising temperatures, reduced water availability, salinization of land and fresh water, erosion, desertification, rising sea levels, acidification of the oceans and depletion of natural buffer zones, among other issues, have a very slight impact and generate a very low risk on the project's activity.

9 Socioeconomic Aspects

According to section 7 of the Sustainable Development Safeguards Tool version 1.1 the social risks to be assessed are:

- a) Human Rights
- b) Corruption
- c) Economic impact
- d) Human Rights

- a) Human Rights

This project is located on a 20-hectare plot of land owned by the Tasarolli company. The nearest town is the village of Santa Rosa, which is 5km from the project area. As it is a photovoltaic power generation project, the impact on the quality of life of the local communities is practically nil.

A public hearing was held where the project was discussed in detail with neighbors and relevant authorities in a transparent manner so that anyone who may feel affected by the project had the opportunity to comment on it (see details in section 10 of this report). There were no negative comments on the project. It is therefore considered that there is no risk to the human rights of both Tasarolli employees and local communities.

- Labor conditions: Tasarolli complies with all national, provincial and local laws and regulations regarding the rights of its workers. The company does not engage in any form of child labor, forced labor or discriminate against any person on the basis of gender, age, race, religion, country of origin, sexual orientation, disability or any other form of discrimination. Tassaroli has a code of ethics (available on request) which regulates all these issues. Tassaroli complies with all regulations and requirements related to the safety of its employees.
- Gender equality and women's empowerment: Tassaroli promotes gender equality for all its employees by giving them equal opportunities for employment and growth within the company with a focus on women's empowerment. Within Tasarolli, equal pay is respected regardless of gender. At the same time, the Helios unit was created within the company, which is in charge of the company's sustainability projects and is responsible for the current photovoltaic project. This unit is made up of 50% women. Details can be found in the Code of Ethics (available on request).
- Land acquisition, land use restrictions, displacement and involuntary resettlement: The land used for the solar project was acquired in May 2021 from the former owner SEXTEL S.A. There were no settlements on the land. Prior to our project, the land was blank, with no production of any kind, only native flora.
- Indigenous Communities and Cultural Heritage: There are and were no claims to this land by any indigenous or local community.

- Community Health and Safety: The nearest town, Santa Rosa, to the project is located 5 km away. As it is a photovoltaic renewable energy project, the impact on the communities while the project was operational was practically nil.

During the construction stage, impacts associated with the following stand out:

- Particulate matter from soil movement and vehicle traffic on dirt roads.
- Atmospheric gases are produced by mobile sources and machinery.

As the nearest town is 5km away and there are few lorries, the impact is very low.

In the operation stage, impacts associated with the following stand out:

- The cleaning of the panels, which is done only with water, without chemical cleaning products. Depending on the amount of dirt that accumulates, it was carried out every 4-6 months. Estimated consumption of 10 liters of water per kW installed and per wash. Water will be obtained from a tanker truck.
- Fossil fuel is used only in vehicles for maintenance.

Regarding Solid Waste:

- During the construction stage, 100 people worked, generating approximately 3 thousand kilos of waste assimilable to household waste. Most of this waste was recycled.
- In the operation stage there are about 5 people employed. The waste is collected by the municipal waste collection service.
- Industrial waste from the construction stage was sorted and disposed of in authorized sites.
- Hazardous waste: Most of this waste was generated during the construction stage by used oils, paint cans and rags contaminated by possible lubricant leaks. During the operation stage, waste paint containers, toner, batteries, solvents and fluorescent tubes may be generated. All of these are disposed of safely in compliance with current regulations.

Regarding liquid effluents:

During the construction stage there were chemical toilets and portable showers. The effluents will be removed by an authorised company which will dispose of them at an authorised site.

During the operation stage, there will be permanent toilet and shower facilities, and a treatment system for the effluents generated that will comply with current regulations.

- b) Corruption: Tasarolli has zero tolerance to any act of corruption. It has the full conviction and commitment to accurate, transparent and honest reporting of all energy generation, as well as compliance with all national, provincial and local laws. Full details can be found in the Code of Ethics available on request.
- c) Economic impact

The impact of the project on local communities will be clearly positive and will be reflected in the generation of direct and indirect jobs, mainly during construction and later, to a lesser extent, during operation and maintenance. During the construction phase of Helios Santa Rosa I and II, 100 people were employed, with a peak of 145 workers. Currently, in the operation phase of Helios Santa Rosa I, there are 6 permanent workers.

On the other hand, the project will supply renewable electricity in a rural area improving the availability and reliability of the local electricity service in the area. to the grid which will reduce greenhouse gas emissions from the national electricity grid. In turn, the project will supply renewable electricity to the grid that will reduce GHG emissions from the national electricity grid, thereby contributing to climate change mitigation.

On the other hand, a community-oriented vocational training program was carried out, which will result in the training and qualification of the workforce, which may be useful in other projects of similar characteristics in the region.

10 Stakeholders' Consultation

During the preparation of the project, information meetings were held with stakeholders. According to Argentinean legislation there is no obligation to hold a public hearing for this type of project. The people consulted were from the municipality, the provincial government, the university that was involved in the studies and neighbors of the site where the solar photovoltaic park is located. All comments received were positive. They were very satisfied with the project as it allows the sustainable development of the region through a renewable energy project with very low impact on the ecosystem. The possibility of direct and indirect employment and the fact of taking advantage of a renewable resource such as solar energy, which is of very high quality in Mendoza, met with great approval from all those consulted.

During the construction period and the first years of operation (October 2024) of the project, the community and any other stakeholder who had a query, complaint or claim had an email address available to contact directly with the unit in charge of the project. At the date of preparation of this document, there were no complaints or claims of any kind.

However, in order to provide all stakeholders with the best tools to channel their complaints, claims or comments, a new complaints scheme will be implemented by the end of 2024 to make it even simpler and more direct for them to express their views. The essence of the current scheme will remain the same. All comments, complaints or claims will be processed, and a response will be given.

11 REDD+ Safeguards

not applicable

12 Special categories, related to co-benefits

not applicable

13 Grouped Projects

not applicable

14 Implementation of the project

14.1 Implementation status of the project

1. Date of commercial habilitation of the first stage Helios Santa Rosa I: 29/03/2022.
2. Since 01/04/2022, CAMMESA has registered the injection of electricity into the national grid by Helios Santa Rosa I.
3. In this first stage of verification (from 01/04/2022 to 31/03/2024) the solar farm has injected 26,473 MWh into the grid.
4. 3,881 MWh were redeemed by the I-REC program.
5. The second stage of the project, Helios Santa Rosa II, will be commissioned in May 2024. The energy production of this plant will not be considered in this document.

14.2 Revision of monitoring plan

Due to the fact that validation and verification are taking place simultaneously, the monitoring plan used for verification is the same as in the DDA. Therefore, the monitoring plan has not been revised.

14.3 Request for deviation applied to this monitoring period

not applicable

14.4 Notification or request of approval of changes

not applicable

15 Monitoring system

15.1 Description of the monitoring plan

The monitoring plan includes the tracking of the following variables:

- 1) **Electricity injected to the grid**, it is continuously measured and recorded on an hourly basis with 2 electricity meters: one SMEC (Commercial Metering System) as the main electricity meter and one back-up meter. Cross-checking of this variable can be done as there are 2 meters measuring the same variable. In case the main meter is not working, the data from the back-up meter is used. This variable can also be cross-checked with the information that CAMMESA¹⁶ publishes on its website. The SMEC and the back-up meter comply with the Argentine regulation for measuring energy exchanges of generating agents of the Wholesale Electricity Market (MEM) in terms of accuracy class and

¹⁶ <https://cammesaweb.cammesa.com/informe-sintesis-mensual/> .

CAMMESA is responsible for the calibration of the SMECs of all agents. The SMEC terminals are sealed.

All meters have records and generation data ready to be downloaded remotely and/or locally by CAMMESA and the project developer.

The Solar PV Plant manager is responsible for recording electricity generation data.

- 2) **Grid emission factor** is calculated according to TOOL07 version 07.0 based on official and publicly available data from CAMMESA. The emission factors for CO₂ emission factors for fossil fuels are published by the National Energy Secretariat¹⁷ and are based on official documents submitted by the Argentine Republic to the UNFCCC¹⁸. The construction margin (BM) is calculated ex ante and the operating margin (OM) by the simple method is updated annually, therefore, the grid emission factor or combined margin (CM) is updated annually. The generation data, quantity and type of fossil fuel used by each generation unit are reported in CAMMESA's monthly reporting database, which is available on CAMMESA's website¹⁹.

The person responsible for this calculation is Leonel Mingo, an external consultant.

The monitored data are included in an Excel spreadsheet for emission reduction calculations. All data collected as part of the monitoring process are archived electronically and kept for at least two years after the end of the last crediting period. After that time the information will be stored in back-up copies that can be reconstructed if necessary.

15.2 Data and parameters to quantify the reduction of emissions

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

<i>Data / Parameter</i>	EFgrid,BM,2022 , EFgrid,BM,2023
<i>Data unit</i>	CO ₂ /MWh
<i>Description</i>	CO ₂ emission factor of the construction margin (BM) in the year y (for this DDA year y =2022)

¹⁷ <https://www.argentina.gob.ar/economia/energia>

¹⁸ ¹⁴ <https://www.argentina.gob.ar/ambiente/cambio-climatico/tercer-informe-bienal>

¹⁹ <https://cammesaweb.cammesa.com/informe-sintesis-mensual/>

<i>Source of data used</i>	Ex-ante calculated value to be used throughout the first crediting period.
<i>Value (s)</i>	Period 1= 0.301
<i>Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)</i>	Baseline, BM calculation
<i>Justification of choice of data or description of measurement methods and procedures applied</i>	The parameter was calculated according to TOOL7 'Tool for calculating the emission factor of a power system (version 07.0)', for the first crediting period. Person/entity responsible: Leonel Mingo, external consultant.
<i>Additional comments</i>	All relevant data are from CAMMESA, official and publicly available. ²⁰

<i>Data / Parameter</i>	EGm,2022; EGm,2023
<i>Data unit</i>	MWh
<i>Description</i>	Net amount of electricity generated and delivered to the grid by generation unit m in year y (y = 2022;)
<i>Source of data used</i>	Calculation for the first crediting period based on CAMMESA data.
<i>Value (s)</i>	Please refer to the excel entitled: Emission Reductions. Solar PV plant Santa Rosa I & II. Tab: Construction Margin 2022
<i>Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)</i>	Baseline, BM calculation
<i>Justification of choice of data or description of measurement methods and procedures applied</i>	The parameter was calculated according to TOOL7 'Tool for calculating the emission factor of a power system (version 07.0)', for the first crediting period. Person/entity responsible: Leonel Mingo, external consultant.
<i>Additional comments</i>	All relevant data are from CAMMESA, official and publicly available ²¹ .

²⁰ <https://cammesaweb.cammesa.com/>

²¹ <https://cammesaweb.cammesa.com/>

<i>Data / Parameter</i>	m
<i>Data unit</i>	-
<i>Description</i>	Generation units included in the calculation of the construction margin
<i>Source of data used</i>	Calculation for the first crediting period based on CAMMESA data.
<i>Value (s)</i>	Please refer to the excel entitled: Emission Reductions. Solar PV plant Santa Rosa I & II. Tab: Construction Margin 2022
<i>Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)</i>	Emissions Baseline, BM calculation
<i>Justification of choice of data or description of measurement methods and procedures applied</i>	The parameter was calculated according to TOOL7 'Tool for calculating the emission factor of a power system (version 07.0)', for the first crediting period. Person/entity responsible: Leonel Mingo external consultant.
<i>Additional comments</i>	-

<i>Data / Parameter</i>	$EF_{EL,m,2022}$
<i>Data unit</i>	t CO ₂ /MWh
<i>Description</i>	CO ₂ emission factor of generation unit m in year y (y =2022)
<i>Source of data used</i>	Data used for the first crediting period. Calculation based on CAMMESA data
<i>Value (s)</i>	Please refer to the excel entitled: Emission Reductions. Solar PV plant Santa Rosa I & II. Excel file tab: Construction Margin 2022
<i>Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)</i>	Calculation of the construction margin for the calculation of baseline emissions.
<i>Justification of choice of data or description of measurement methods and procedures applied</i>	The parameter was calculated according to the 'Tool for calculating the emission factor of an electricity system (version 07.0)'. Person/entity responsible: Leonel Mingo, external consultant.

<i>Additional comments</i>	All relevant data are from CAMMESA, official and publicly available ²²
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<i>Data / Parameter</i>	FC _{i,m} ,2022			
<i>Data unit</i>	Natural Gas (dm ³)	Fuel Oil (t)	Gasoil (l)	Coal (t)
<i>Description</i>	Volume of fuel type i consumed by power plant/generation unit m in the project's electricity system in year y			
<i>Source of data used</i>	Data used for the first crediting period. Official CAMMESA data ²³			
<i>Value (s)</i>	Please refer to the excel entitled: Emission Reductions. Solar PV plant Santa Rosa I & II. Excel file tab: Construction Margin 2022			
<i>Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)</i>	Calculation of the construction margin for the calculation of baseline emissions.			
<i>Justification of choice of data or description of measurement methods and procedures applied</i>	CAMMESA publishes the volume by fuel type and the electricity generation associated with that fuel in its monthly report. These are official and publicly available data. Person/entity responsible: Leonel Mingo, external consultant			
<i>Additional comments</i>	Todos los datos relevantes son de CAMMESA. ²⁴			

<i>Data / Parameter</i>	NCV _{i,y}
<i>Data unit</i>	GJ/unit mass or volume
<i>Description</i>	Net calorific value (energy content) of fuel type i in year y

²² <https://cammesaweb.cammesa.com/>

²³ <https://cammesaweb.cammesa.com/>

²⁴ <https://cammesaweb.cammesa.com/>

<i>Source of data used</i>	Third Submission of the Argentine Republic to the UNFCCC. Table A2.2 page 241 ²⁵			
<i>Value (s)</i>	Natural Gas(GJ/t)	Fuel Oil (GJ/t)	Gasoil (GJ/t)	Coal (GJ/t)
	48.0	40.40	43.0	30.14
<i>Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)</i>	Emissions Baseline, BM calculation			
<i>Justification of choice of data or description of measurement methods and procedures applied</i>	The BM is calculated only once ex ante at the beginning of the first crediting period on the basis of the latest available information and must be used for the full crediting period (according to paragraph 72 of Tool 7 Tool to calculate the emission factor for an electricity system version 07.0). The NCV expressed in different units commonly used in Argentina is: Natural Gas: 8.300 kcal/m ³ ; Fuel Oil = 9.800 kcal/kg; Gasoil = 8.619 kcal/l; Imported Coal = 7.200 kcal/kg.			
<i>Additional comments</i>				

<i>Data / Parameter</i>	EFCO _{2,i,y}				
<i>Data unit</i>	t CO ₂ / dm ³ / t CO ₂ /t / t CO ₂ /t / t CO ₂ /t				
<i>Description</i>	CO ₂ emission coefficient of fuel type i in year y (y= 2022).				
<i>Source of data used</i>	Data from Argentina's Third BUR submitted to the UNFCCC / Reports from the National Energy Secretariat ²⁶ .				
<i>Value (s)</i>	Gas Natural [t CO ₂ /dm ³]	Fuel Oil [t CO ₂ /t]	Gasoil [t CO ₂ /t]	Carbón [t CO ₂ /t]	Fuente

²⁵ <https://unfccc.int/sites/default/files/resource/Argnc3.pdf>

²⁶ <https://www.argentina.gob.ar/ambiente/cambio-climatico/tercer-informe-bienal>

		1.948	3.17	3.19	2.85	Secretaría de Energía. Factor de emisión de CO2 para la red eléctrica argentina 2022 ²⁷
<i>Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)</i>	Baseline					
<i>Justification of choice of data or description of measurement methods and procedures applied</i>	In compliance with paragraph 72 of Tool 7 Tool to calculate the emission factor for an electricity system version 07.0) the calculation of the construction margin (BM) was calculated only once ex ante at the beginning of the first crediting period based on the latest available information and should be used for the whole first crediting period.					
<i>Additional comments</i>						

15.2.2 Data and parameters monitored

Complete the table for all data and parameters monitored during the project quantification period. Copy this table for each data and parameter.

<i>Data / Parameter</i>	EGPJ, facility, 1
<i>Data unit</i>	MWh
<i>Description</i>	Amount of net electricity generation supplied by the project plant/unit to the grid in the year y
<i>Measured /Calculated /Default:</i>	Measured

²⁷ <http://datos.minem.gob.ar/dataset/calculo-del-factor-de-emision-de-co2-de-la-red-argentina-de-energia-electrica>

<i>Source of data</i>	On-site measurements with SMEC (commercial measurement system).
<i>Value(s) of monitored parameter</i>	<p>Period 1: 13,541.35</p> <p>Period 2: 12,946.2</p> <p>Period 3: 6.200.2</p>
<i>Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)</i>	Baseline
<i>Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)</i>	<p>Helios Santa Rosa I main SMEC Brand: CIRCUTOR</p> <p>Model: CIRWATT 402-MT5A-26D</p> <p>Serial number: 352000495 Class 0,2s</p> <p>Calibration frequency at least every 5 years. Last calibration: 29/03/2022 valid until 28/03/2027 Control meter:</p> <p>Brand: HONEYWELL</p> <p>Model: ALPHA 3</p> <p>Serial number: 04712916 Class: 0,2</p> <p>Frequency of calibration at least every 5 years</p> <p>Last calibration: 29/03/2022 valid until 28/03/2027</p>
<i>Measuring/ Reading/ Recording frequency</i>	Continuous measurement, logging and recording of the integrated energy value in 15-minute periods. The report uses hourly energy which is the sum of the energy reported in the 4 15-minute periods corresponding to that hour. Monthly energy is also reported.
<i>Calculation method (if applicable)</i>	The hourly energy is the sum of the energy reported every 15 minutes for that hour. Monthly energy is the sum of the energies recorded every 15 minutes for that period.
<i>QA/QC procedures applied</i>	In addition to the SMEC there is a control meter that measures the same variable. In case the SMEC data is lost, the control meter data is used. There are time limits for repair/replacement of the SMEC in case

	of failure or out of class. The SMEC and control meter installations are sealed and only CAMMESA personnel can intervene.
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<i>Data / Parameter</i>	EFgridOM.1
<i>Data unit</i>	t CO2/MWh
<i>Description</i>	CO2 emission factor of the operating margin (OM) in year 1
<i>Measured /Calculated /Default:</i>	Calculated. The parameter is calculated according to TOOL07 'Tool for calculating the emission factor of a power system (version 07.0)'.
<i>Source of data</i>	Volume of fuel by type used in period 1 and volume of thermal generation in period 1 obtained from the CAMMESA Monthly Report database. The CO2 emission factor of each fossil fuel is information included in Argentina's Third BUR submitted to the UNFCCC/Reports of the National Energy Secretariat ²⁸ .
<i>Value(s) of monitored parameter</i>	0.504
<i>Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)</i>	baseline
<i>Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)</i>	Does not apply
<i>Measuring/ Reading/ Recording frequency</i>	For each verification event

²⁸ <http://datos.minem.gob.ar/dataset/calculo-del-factor-de-emision-de-co2-de-la-red-argentina-de-energia-electrica>

<i>Calculation method (if applicable)</i>	<p>The method selected for the calculation is the simple OM method. The share of low cost/must run generation during the last 5 years (2019-2023) was 43.19%, so the simple OM method can be applied.</p> <p>Simple OM is calculated as the ratio of CO2 emissions associated with the use of fossil fuels for electricity generation in period 1 to the volume of thermal generation in period 1.</p> <p>Emissions from fossil fuels used are the sum of CO2 emissions for each fuel type, which are calculated as the product of the volume of thermal generation in period 1 and the volume of thermal generation in period 2.</p> <p>calculated as the product of the volume of fuel type i multiplied by the CO2 emission coefficient of fuel type i.</p>
<i>QA/QC procedures applied</i>	<p>Public data is used and checks are made that fuel volumes and thermal generation are consistent with CAMMESA reports. The CO2 emission coefficients for each fossil fuel are those used in official documents of the Argentina.</p>

<i>Data / Parameter</i>	EFgridCM.1
<i>Data unit</i>	t CO2/MWh
<i>Description</i>	CO2 emission factor of the electricity grid or combined margin (CM) in year 1
<i>Measured /Calculated /Default:</i>	calculated
<i>Source of data</i>	The BM was calculated ex ante in 2022 (based on CAMMESA data) ²⁹ , the OM of period 1 is a monitored parameter. The weights of the OM and BM are defined in the AMS I.D. methodology version

²⁹ <https://cammesaweb.cammesa.com/informe-anual/>

	18.0 wOM = 75% and wBM= 25%.
<i>Value(s) of monitored parameter</i>	0.4531
<i>Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)</i>	baseline
<i>Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)</i>	Public data is used and fuel volumes and thermal generation are checked to ensure that they are consistent with CAMMESA reports. CO2 emission coefficients for each fossil fuel are those used in official documents of the Argentine Republic.
<i>Measuring/ Reading/ Recording frequency</i>	For each annual verification event
<i>Calculation method (if applicable)</i>	
<i>QA/QC procedures applied</i>	Public data is used and checks are made that fuel volumes and thermal generation are consistent with CAMMESA reports. The CO2 emission coefficients for each fossil fuel are those used in official documents of Argentina.

<i>Data / Parameter</i>	FC _{i,n,y}
<i>Data unit</i>	Mass or volume
<i>Description</i>	Amount of fuel type i consumed by plant/generation unit n in the project's electricity system in year y
<i>Measured /Calculated /Default:</i>	Measured

<i>Source of data</i>	CAMMESA in the annual report database ³⁰ .
<i>Value(s) of monitored parameter</i>	See the Excel file called: Emission Reductions. Solar PV plant Santa Rosa I & II. Biocarbon Registry. Monitoring report. Flap: Fuels.
<i>Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)</i>	Baseline
<i>Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)</i>	Public data is used and fuel volumes and thermal generation are checked to ensure that they are consistent with CAMMESA reports.
<i>Measuring/ Reading/ Recording frequency</i>	Monthly. CAMMESA reports in the monthly report database
<i>Calculation method (if applicable)</i>	
<i>QA/QC procedures applied</i>	These are official and public data. Consistency in the different public reports is monitored.

<i>Data / Parameter</i>	NCV _{i,y}			
<i>Data unit</i>	GJ/unit mass or volume			
<i>Description</i>	Net calorific value (energy content) of fuel type i in year y			
<i>Measured /Calculated /Default:</i>	calculated			
<i>Source of data</i>	Third Submission of the Argentine Republic to the UNFCCC. Table A2.2 page 241 ³¹			
<i>Value(s) applied</i>	Natural Gas(GJ/t)	Fuel Oil (GJ/t)	Gasoil (GJ/t)	coal (GJ/t)
	48.0	40.40	43.0	30.14

³⁰ <https://cammesaweb.cammesa.com/informe-anual/>

³¹ <https://unfccc.int/sites/default/files/resource/Argnc3.pdf>

<i>Indicate what the data are used for (Baseline/Project/Leakage emission calculations)</i>	baseline
<i>Monitoring frequency</i>	Single OM: annually during the accreditation period of the relevant year.
<i>Measuring/ Reading/ Recording frequency</i>	Every year
<i>Measurement/Calculation method (if applicable)</i>	
<i>QA/QC procedures applied</i>	The data used for the calculation are from CAMMESA ³² (years 2019- 2023 and from the Secretariat of Energy of the Nation ³³), official and publicly available.

<i>Data / Parameter</i>	EFCO _{2,i,y}				
<i>Data unit</i>	CO ₂ / dm ³ / t CO ₂ /t / t CO ₂ /t / t CO ₂ /t				
<i>Description</i>	CO ₂ emission coefficient of fuel type i in year y				
<i>Measured /Calculated /Default:</i>	calculated				
<i>Source of data</i>	Data from the Third BUR of the Republic of Argentina submitted to the UNFCCC ³⁴ / Reports of the National Energy Secretariat ³⁵				
<i>Value(s) applied</i>	Natural Gas [t CO ₂ /dm ³]	Fuel Oil [t CO ₂ /t]	Gasoil [t CO ₂ /t]	coal [t CO ₂ /t]	source
	1.948	3.17	3.19	2.85	National Energy Secretariat. CO ₂ emissions factor

³²

https://cammesa.com/?doing_wp_cron=1725458876.1336588859558105468750

³³ <https://www.argentina.gob.ar/economia/energia>

³⁴ <https://unfccc.int/sites/default/files/resource/Argnc3.pdf>

³⁵ <https://www.argentina.gob.ar/economia/energia>

					of the Argentine electricity grid ³⁶ .
<i>Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)</i>	Baseline				
<i>Monitoring frequency</i>	Annual for each verification report				
<i>Measuring/ Reading/ Recording frequency</i>	Every year				
<i>Measurement/Calculation method (if applicable)</i>	<p>The parameter EFCO_{2,i,y} is according to TOOL7 'Tool for calculating the emission factor of a power system (version 07.0)'.</p> <p>Person/entity responsible: Leonel Mingo, external consultant.</p>				
<i>QA/QC procedures applied</i>	The data used for the calculation are from CAMMESA ³⁷ (years 2019- 2023 and from the Secretariat of Energy of the Nation ³⁸), official and publicly available.				

<i>Data / Parameter</i>	SDG 4 Quality education
<i>Data unit</i>	<ol style="list-style-type: none"> 1. Elaboration of the criteria for the selection of the participants of each training pathway: it will be monitored: according to the validity of the agreements that gave rise to the training center. 2. Implementation of the training pathway: to be monitored on the basis of the indicators mentioned below. <ul style="list-style-type: none"> • Number of people enrolled • Attendance and qualifications. • Number of people completing the course per number of enrolments.

³⁶ <http://datos.energia.gob.ar/dataset/calculo-del-factor-de-emision-de-co2-de-la-red-argentina-de-energia-electrica>

³⁷

https://cammesaweb.cammesa.com/?doing_wp_cron=1725458876.1336588859558105468750

³⁸ <https://www.argentina.gob.ar/economia/energia>

<i>Description</i>	4.4 By 2030, significantly increase the number of young people and adults with the necessary skills, in particular technical and vocational skills, to access employment, decent work and entrepreneurship. 4.4.1 Proportion of youth and adults with information and communication technology (ICT) skills, broken down by type of skill.
<i>Measured /Calculated /Default:</i>	Measured
<i>Source of data</i>	Tassaroli S.A
<i>Value(s) applied</i>	complies/ does not comply
<i>Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)</i>	-Progress on SDG 4
<i>Monitoring frequency</i>	Every year

<i>Data / Parameter</i>	SDG 5 Gender Equality
<i>Data unit</i>	Adimensional Action 1: Survey of posts to determine compliance with internal protocol. Action 2: Maintain 30% of women in Helios business unit (carbon project).
<i>Description</i>	5.1 End all forms of discrimination against all women and girls everywhere. 5.1.1 Determine whether or not legal frameworks exist to promote, enforce and monitor equality and non-discrimination on the basis of sex.
<i>Measured /Calculated /Default:</i>	Measured
<i>Source of data</i>	Tassaroli S.A
<i>Value(s) applied</i>	complies/ does not comply
<i>Indicate what the data are used for (Baseline/</i>	Progress on SDG 5

<i>Project/ Leakage emission calculations)</i>	
<i>Monitoring frequency</i>	Every year

<i>Data / Parameter</i>	<i>SDG 7 Affordable and clean energy</i>
<i>Data unit</i>	MWh/year
<i>Description</i>	<i>Total volume of electricity produced from non-conventional renewable energy sources</i>
<i>Measured /Calculated /Default:</i>	<i>Measured</i>
<i>Source of data</i>	<i>Manager of the Solar Photovoltaic Plant</i>
<i>Value(s) applied</i>	MWh/year
<i>Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)</i>	<i>Progress on SDG 7</i>
<i>Monitoring frequency</i>	<i>Every year</i>

<i>Data / Parameter</i>	<i>SDG 9 Industry, Innovation and Infrastructure</i>
<i>Data unit</i>	<i>Action 1: Conjunctural analysis, feasibility costs Action 2: Construction of new park by 2030</i>
<i>Description</i>	<i>9.5 Increase scientific research and improve the technological capabilities of industrial sectors in all countries, in particular developing countries, including by fostering innovation and significantly increasing the number of research and development personnel per million inhabitants and public and private sector expenditure on research and development by 2030.</i>
<i>Measured /Calculated /Default:</i>	<i>Measured</i>
<i>Source of data</i>	<i>Manager of the Solar Photovoltaic Plant and Human Resources of Tassaroli S.A.</i>
<i>Value(s) applied</i>	<i>complies/ does not comply</i>

Indicate what the data are used for (Baseline/Project/Leakage emission calculations)	Progress on SDG 9
Monitoring frequency	Every year

<i>Data / Parameter</i>	SDG 13 Climate Deal
<i>Data unit</i>	tCO ₂ e tCO ₂ e/year
<i>Description</i>	Target 13.2 Incorporate climate change measures into national policies, strategies and plans. 13.2.2 Total greenhouse gas emissions per year.
<i>Measured /Calculated /Default:</i>	measured
<i>Source of data</i>	Photovoltaic Solar Plant Manager / external consultant
<i>Value(s) applied</i>	complies/ does not comply
Indicate what the data are used for (Baseline/Project/Leakage emission calculations)	Progress on SDG 9
Monitoring frequency	Every year

16 Quantification of GHG emission reduction / removals

16.1 Baseline emissions

Baseline emissions in tCO₂/year $y=1$, are calculated as the product between the electricity delivered by the Helios Santa Rosa Solar PV Plant to the grid in period 1 (EGPJ, facility, 1) in MWh/year and the grid emission factor of period 1 (EF_{grid,y}) in tCO₂/MWh. Period 1 is one year and runs from 01/04/2022 to 31/03/2023. Analogously it is calculated for period 2. For the part of period 3 to be included (from April 2024 to August 2024 (date of closure of the current report) the same values will be used as for the year 2023 because the updated values will only be available in 2025.

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

$$BE_y = \text{Baseline emissions in year } y \text{ (t CO}_2\text{)}$$

$EGPJ_{,y}$ = 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)

$EF_{grid,y}$ = 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” (t CO₂/MWh)

$$EGPJ_{,y} = EGPJ_{,facility,y}$$

Where:

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

The electricity delivered to the grid by the Helios Santa Rosa Photovoltaic Solar Park in period 1 was 13,541 MWh/year and for year 2 it was 12,946 MWh/year.

For the calculation of the EF_{grid,1} the Tool for calculating the CO₂ emission factor of an electricity system (TOOL07, version 07.0) is applied.

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

Where:

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

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

wOM = Weighting of operating margin emissions factor (per cent)

wBM = Weighting of build margin emissions factor (per cent)

For solar projects the default values for wOM and wBM are as follows: wOM = 0.75 and wBM = 0.25.

Operating Margin ex post:

The simple method for the calculation of OM can be used as in the last 5 years low cost/must run generation accounted for less than 50% of generation.

ENERGY GENERATION (GWh)								
Year	Thermal	Low cost/must run (LCMR)				TOTAL LCMR	Total Generation	Share LCMR in %
		Hydro	Nuclear	Renweables	Imports			
2023	73,020	39,332	8,963	20,086	6,241	74,622	141,401	52.77%
2022	81,751	30,186	7,469	19,340	6,310	63305	138,746	45.60%
2021	90,074	24,116	10,170	17,437	819	52542	141,797	37.10%
2020	82,336	29,093	10,011	12,737	1,204	53045	134,177	39.50%
2019	80,137	35,370	7,927	7,812	2,746	53856	131,246	41.00%
Source: http://portalweb.cammesa.com/memnet1/Pages/descargas.aspx						Average Share in the last 5 years		43.19%
Informe Anual 2023 Base de datos			Flap: Generación anual					

The simple OM is calculated as the sum of the product of the volume of fuel type i by the emission coefficient of fuel type i divided by the volume of thermal generation. The data is obtained from the CAMMESA monthly report database.

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

Where

EF_{grid,BM,y} = Build margin CO₂ emission factor in year y (t CO₂/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} = CO₂ emission factor of power unit m in year y (t CO₂/MWh)

m = Power units included in the build margin

y = Most recent historical year for which electricity generation data is available

Table 12: Simple Om year 2022

		Factor emisión	Total, emisiones
Thermal generation in period 2022 + imports	88,061 GW/h		
Fossil fuel consumption in period 1:			
NATURAL GAS	14,220 mdam ³	1.95	27,703,059
FUEL OIL	1,113 kTon	3.17	3,529,444
GAS OIL	2,436 mm ³	2.70	6,569,497
MINERAL COAL	777 kTon	2.34	1,814,554
GHG emissions from fossil fuel consumption in period 1:			39,616,554
OM year 2022		0.4499 tCO₂/MW	

Fuente: CAMESSA²⁵

Table 13: Simple Om year 2023 and 2024

		Factor emisión	Total, emisiones
Thermal generation in period 2022 + imports	79,259 GW/h		
Fossil fuel consumption in period 1:			
NATURAL GAS	14,220 mdam3	13,944	27,164,746
FUEL OIL	1,113 kTon	674	2,137,027
GAS OIL	2,436 mm3	1,300	3,506,931
MINERAL COAL	777 kTon	521	1,215,811
GHG emissions from fossil fuel consumption in period 1:			34,024,515
OM año 2023 y 2024			0.4293 tCO ₂ /MW

Fuente: CAMESSA²⁶

$$\text{OM 2023} = 34.024.515 \text{ tCO}_2 / 79.259.000 \text{ MWh} = 0,4293 \text{ tCO}_2/\text{MWh}$$

Construction margin

Construction margin 2022

To calculate the Construction margin, the ex ante calculation was chosen with the latest available information corresponding to 2022 and 2023. The data used is from CAMMESA reports.

The total generation of 2022 and 20% of it are presented:

To calculate the WB, the ex ante calculation was chosen with the latest available information corresponding to 2022 and 2023. The data used is from CAMMESA reports.

Total Generated	138,746,604	(total generation in MWh)
20%	27,749,321	

The most recently enabled generation units were selected, without considering the units registered in the CDM, until they accumulate at least 20% of the 2022 generation. In total there are 67 generation units that in 2022 generated 25,838,817 MWh that They correspond to 19% of the generation of 2022.

Once the 57 units (m generation units) have been identified, the BM is calculated with the following equation.

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

Where,

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

$EG_{m,y}$ = Net quantity of electricity generated and delivered to the grid by power unit m in year y (MWh)

$EF_{EL,m,y}$ = CO2 emission factor of power unit m in year y (t CO2/MWh)

m = Power units included in the build margin

y = Most recent historical year for which electricity generation data is available = 2022

For the year 2022, the Build Margin is the quotient between the CO2 emissions of the 57 most recently enabled units that are not units registered in the CDM (the oldest unit that is part of this group of m generation units was enabled in July 2020) and that have generated at least 20% of the total energy generated in 2022:

Hence, the BC is = 0.292 tCO₂/MWh according to official sources that can be seen on the cammesa³⁹.

Construction Margin 2023- 2024

The total generation of 2023 and 20% of it is presented:

Total Generated	141.397.691	(total generation in MWh)
20%	28.279.538	

The most recently commissioned generation units were selected, without considering the units registered in the CDM, until they accumulate at least 20% of the generation in 2023. In total there are 58 generation units that in 2023 generated 24,574,691 MWh corresponding to 17% of the 2023 generation.

For the year 2023, the BC is the quotient between the CO₂ emissions of the 58 most recently enabled units that are not CDM registered units (the oldest unit that is part of this group of m generation units was enabled in July 2020) and that have generated at least 20% of the total energy generated in 2023:

Thus the BC is = 0.086 tCO₂/MWh according to official sources which can be viewed on the cammesa website⁴⁰.

Combine Margin

Combine Margin 2022

Period 1year 2022 EFgrid,1 = 0.75 x 0.4499 tCO₂/MWh + 0,25 x 0.292 tCO₂/MWh = 0.4104 tCO₂/MWh

³⁹ <https://cammesaweb.cammesa.com/informes-y-estadisticas/>

⁴⁰ ²⁸ <https://cammesaweb.cammesa.com/informe-anual/>

Combine Margin 2023-2024

Combined Margin or Grid Emission Factor calculated ex post period 1 year 2023:
 $EF_{grid,1} = 0.75 \times 0.4293 \text{ tCO}_2/\text{MWh} + 0.25 \times 0.086 \text{ tCO}_2/\text{MWh} = 0.3435 \text{ tCO}_2/\text{MWh}$

Baseline Emissions

Tassaroli S.A. has certified the Helios Santa Rosa solar farm to the International REC Standard and has redeemed 1780 MWh to offset Scope 2 of the Carbon Footprint of the industry located in San Rafael, Mendoza by 2022 and 1982 by 2023 and 1265 for 2024.

Period 1: $13,521 - 2,275.5 = 11,245.5$

Period 2: $12,946 - 2,275.5 = 10,985.2$

Period 3: $6,200.2 - 790.8 = 5,409.4$

Total = 27,640.2

Period 1: April 2022 - March 2023 = 4,384.5

Period 2: April 2023 - March 2024 = 3,773.4

Period 3: April 2024 – August 2024 = 1,858.1

Total, baseline emissions = 10,016

For more details see excel: Emission Reductions. Solar PV plant Santa Rosa I & II. Biocarbon Registry. Monitoring report

16.2 Project emissions/removals

Zero

16.3 Leakages

Zero

16.4 Net GHG Emission Reductions / Removals

Year	Baseline emissions / removals (tCO₂e)	Project emissions / removals (tCO₂e)	Leakage emissions (tCO₂e)	Net GHG emission reductions / removals (tCO₂e)
Period 1 (01/04/2022 – 31/03/2023)	4,384.5	0	0	4,384.5
Periodo 2 (01/04/2023- 31/03/2024)	3,773	0	0	3,773
Periodo 3 (abril 2024 – agosto 2024)	1,858			1,858
Total	10,016	0	0	10,016

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

The difference in MWh between what was projected in the PPD and this monitoring report that is exclusively due to Tassaroli's decision to redeem that amount of MWh in the I-REC program to mitigate its own carbon footprint for the years 2022 and 2023 and 2024.

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

The difference is solely due to Tassaroli's decision to redeem that amount of MWh in the I-REC program to mitigate its own carbon footprint for the years 2022, 2023 and 2024.