

JCM Project Design Document Form

A. Project description

A.1. Title of the JCM project

Energy Supply Project by 2.0MW Rooftop Solar Power System to Industrial Plastic Plant in Renca, Santiago Metropolitan Region

A.2. General description of project and applied technologies and/or measures

The proposed JCM project aims to reduce CO2 emissions in Chile by introducing a 2.0 MW Solar Power System on the roof top areas of a plastics factory owned by a major company located in Renca, Santiago Metropolitan Region, which has been implementing projects under City-to-City Collaboration with Toyama City since 2020. This project also contributes to Renca's commitment to Race-to-zero.

The electricity generated by the solar power system replaces part of the electricity consumption from the grid and is fully utilized for own consumption of the factory.

A.3. Location of project, including coordinates

| | |
|-----------------------------|--------------------------------|
| Country | The Republic of Chile |
| Region/State/Province etc.: | Santiago |
| City/Town/Community etc.: | Renca |
| Latitude, longitude | 33°22'40.50" S, 70°45'15.92" W |

A.4. Name of project participants

| | |
|-----------------------|---------------------------|
| The Republic of Chile | Solarity SpA |
| Japan | Asian Gateway Corporation |

A.5. Duration

| | |
|--|------------|
| Starting date of project operation | 21/03/2024 |
| Expected operational lifetime of project | 17 years |

A.6. Contribution from Japan

The proposed project was partially supported by the Ministry of the Environment, Japan (MOEJ) through the Financing Programme for JCM Model projects, which provided financial support of less than half of the initial investment for the project to acquire JCM credits.

Implementation of the proposed project also contributes to the promotion of renewable energy in Chile.

B. Application of an approved methodology(ies)

B.1. Selection of methodology(ies)

| | |
|-----------------------------------|----------|
| Selected approved methodology No. | CL_AM001 |
| Version number | Ver2.0 |

B.2. Explanation of how the project meets eligibility criteria of the approved methodology

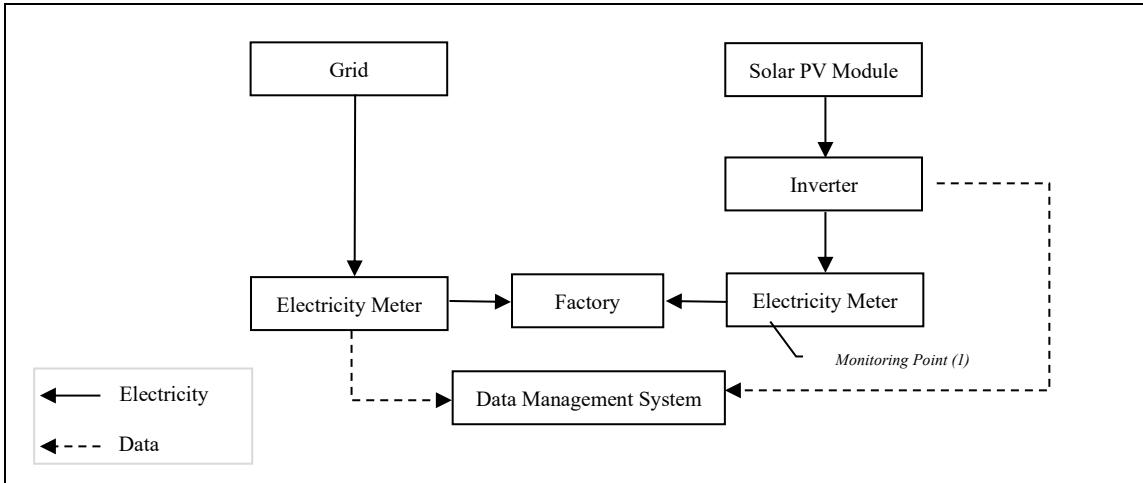
| Eligibility criteria | Descriptions specified in the methodology | Project information |
|----------------------|--|---|
| Criterion 1 | The project newly installs solar PV system(s). | A solar PV system is newly installed at the project site. |
| Criterion 2 | The PV modules are certified for design qualifications (IEC 61215, IEC 61646 or IEC 62108) and safety qualification (IEC 61730-1 and IEC 61730-2). | The PV module installed in the project has been certified for design qualifications (IEC 61215) and safety qualification (IEC 61730-1 and IEC 61730-2). |
| Criterion 3 | The equipment used for monitoring output power of the solar PV system(s) and irradiance is installed at the project site. | Electricity meter and pyranometer have been installed at the project site to monitor output power and irradiance respectively. |

C. Calculation of emission reductions

C.1. All emission sources and their associated greenhouse gases relevant to the JCM project

| Reference emissions | |
|---|-----------------|
| Emission sources | GHG type |
| Consumption of grid and/or captive electricity | CO ₂ |
| Project emissions | |
| Emission sources | GHG type |
| Generation of electricity from solar PV system(s) | N/A |

C.2. Figure of all emission sources and monitoring points relevant to the JCM project



C.3. Estimated emissions reductions in each year

| Year | Estimated Reference emissions (tCO ₂ e) | Estimated Project Emissions (tCO ₂ e) | Estimated Reductions (tCO ₂ e) | Emission |
|----------------------------|--|--|---|----------|
| 2024 | 724.6 | 0 | | 724 |
| 2025 | 945.4 | 0 | | 945 |
| 2026 | 1,180.0 | 0 | | 1,180 |
| 2027 | 1,180.0 | 0 | | 1,180 |
| 2028 | 1,180.0 | 0 | | 1,180 |
| 2029 | 1,180.0 | 0 | | 1,180 |
| 2030 | 1,180.0 | 0 | | 1,180 |
| Total (tCO ₂ e) | | | | 7,533 |

D. Environmental impact assessment

| | |
|---|----|
| Legal requirement of environmental impact assessment for the proposed project | No |
|---|----|

E. Local stakeholder consultation

E.1. Solicitation of comments from local stakeholders

The project participants held a local stakeholder consultation meeting in order to take due steps

to engage stakeholders and solicit comments for the proposed project. Details of the meeting is summarized as follows:

Date and Time: 29th October 2024, 9:00-9:30 (Chile time) / 21:00-21:30 (Japan time)

Venue: Online by Zoom

Agenda:

1. Opening remarks
2. Introduction of participants from all parties
3. Introduction of the project participants from Chile and Japan
 - [Chile] Solarity SPA
 - [Japan] Asian Gateway Corporation
4. Summary of the project and technology introduced
5. Questions and answers
6. Closing

Stakeholders:

- Ministry of the Environment
- Ministry of Energy
- Embassy of Japan Second Secretary
- Tehmco (Solar power plant installation site owner)

E.2. Summary of comments received and their consideration

| Stakeholders | Comments received | Consideration of comments received |
|-----------------------------------|---------------------|------------------------------------|
| Ministry of the Environment | No comment received | No further action is needed |
| Ministry of Energy | No comment received | No further action is needed |
| Embassy of Japan Second Secretary | No comment received | No further action is needed |

F. References

Reference lists to support descriptions in the PDD, if any.

Annex

Revision history of PDD

| Version | Date | Contents revised |
|---------|------------|------------------|
| 01.0 | 27/01/2026 | First edition |
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