JCM Project Design Document Form

A. Project description

A.1. Title of the JCM project

17.8MW Rooftop and Floating Solar Power Project in Industrial Park

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

The proposed project aims to reduce greenhouse gas (GHG) emissions in Thailand by introducing a total of approximately 17.8MW rooftop and floating solar power system in Industrial Park owned by Saha Pathana Inter Holding PLC. The project is implemented by Tokyo Century Corporation, TISCO Tokyo Leasing Co., Ltd. and Impact Solar Limited. The electricity produced by the solar power system will replace part of the electricity which is generated by the off-grid gas-fired power plant in the industrial park and will be utilized for self-consumption during the project period. The proposed project is expected to reduce a total of 52,992 tCO2eq throughout the project crediting period. The actual emission reductions may vary depending on the actual operation of the factory and the sun radiation of the project location.

A.3. Location of project, including coordinates

Country	The Kingdom of Thailand
Region/State/Province etc.:	Chonburi Province
City/Town/Community etc:	999 Moo 11, Sub-district, Sriracha District ● Site No.6: FUI 6 ● Site No.9: FUI 9 ● Site No.12: LION-NOC ● Site No.19: Osoth Inter Lab ● Site No.21: SPI Rental Building 5 ● Site No.26: SPI Rental Building 8 ● Site No.31: S&J International ● Site No.37: Saha Seiren ● Site No.39: SPI SME 2 ● Site No.40: SPI SME 1 ● Site No.41: SPI SME 3 ● Site No.42: SPI SME 4

	● Site No.43: SPI SME 5 ● Site No.45: SPI Rental Building 7 ● Site No.52: Wacoal ● Site No.55: Top Trend ● Site No.56: Textile Prestige ● Site No.60: International Leather Fashion ● Site No.61: Thai President Foods (MAMA) ● Site No.62: LION-Eco Tower ● Site No.63: SPI Rental Building 3 ● Site No.70: SPI Rental Building 2 ● Site No.75: Textile Prestige 2 ● Site No.77: S&J Phase 2 ● Site No.78: Thai Kamaya ● Floating Solar
Latitude, longitude	N13.095867, E100.964392

A.4. Name of project participants

The Kingdom of Thailand	TISCO Tokyo Leasing Co., Ltd. Impact Solar Limited
Japan	Tokyo Century Corporation

A.5. Duration

Starting date of project operation	28/11/2023 * The date on which the whole solar power system began the operation.
Expected operational lifetime of project	17 years
Type and duration of crediting period	Fixed crediting period (10 years)
Starting date of crediting period (input the information when requesting a renewal of crediting period)	N/A

A.6. Contribution from Japan

The proposed project was partially supported by the Ministry of the Environment, Japan (MOEJ) through the Financing Program for JCM Model projects, which provided financial support of less than half of the initial investment for the project in order to acquire JCM credits. The technology of advanced and efficient solar power system is introduced in the proposed project by the Japanese project participant. Further, implementation of the proposed project

promotes technology transfer of low carbon technologies in Thailand.

B. Application of an approved methodology(ies)

B.1. Selection of methodology(ies)

Selected approved methodology No.	TH_AM001
Version number	Ver03.0

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 installs solar PV system(s).	The proposed project installed a new solar PV system in the location stated in A.3.
Criterion 2	The solar PV system is connected to the internal power grid of the project site and/or to the grid for displacing grid electricity and/or captive electricity at the project site.	The solar PV system is connected to the internal power grid of the project site for displacing electricity generated by the off-grid gas-fired power plant in the industrial park where the project site is located.
Criterion 3	The PV modules have obtained a certification of design qualifications (IEC 61215, IEC 61646 or IEC 62108) and safety qualification (IEC 61730-1 and IEC 61730-2).	The PV modules have obtained a certification of design qualifications (IEC 61215) and safety qualification (IEC 61730-1 and IEC 61730-2).
Criterion 4	The equipment to monitor output power of the solar PV system and irradiance is installed at the project site.	Power meters are installed at the project site to monitor output power of the solar PV systems. Pyranometers are installed at the project site to monitor irradiance.

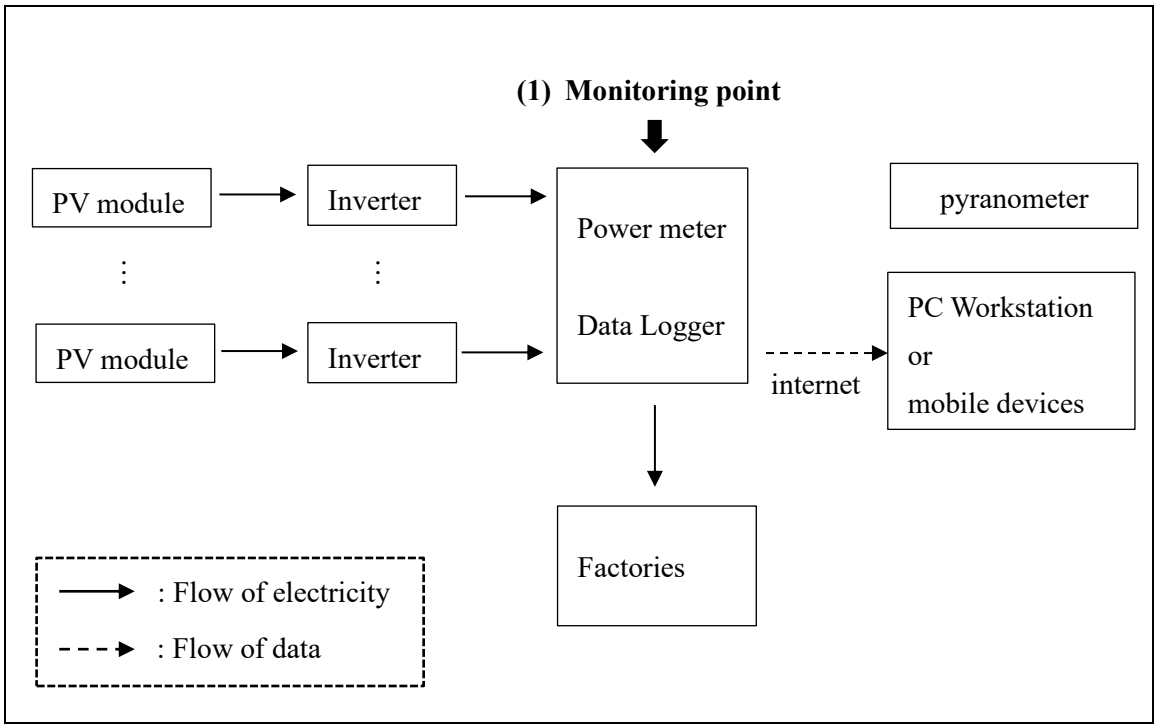
C. Calculation of emission reductions

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 the 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_2eq)	Estimated Project Emissions (tCO_2eq)	Estimated Emission Reductions (tCO_2eq)
2013	-	-	-
2014	-	-	-
2015	-	-	-
2016	-	-	-
2017	-	-	-
2018	-	-	-
2019	-	-	-
2020			
2021			
2022			
2023	695.9	0.0	695
2024	7,471.5	0.0	7,471

2025	7,471.5	0.0	7,471
2026	7,471.5	0.0	7,471
2027	7,471.5	0.0	7,471
2028	7,471.5	0.0	7,471
2029	7,471.5	0.0	7,471
2030	7,471.5	0.0	7,471
Total (tCO_2eq)			52,992

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

To solicit comments from local stakeholders, a consultation meeting was planned by the project participants, and the project participants invited various stakeholders. Details of the local stakeholder consultation meeting is summarized as follows:

Date and Time: 6th February 2025, 13:00-14:00 (Thailand time) / 15:00-16:00 (Japan time)
Venue: Online meeting

Agenda:
1. Opening remarks and introduction (by Tokyo Century Corporation)
2. Overview of the project (by Tokyo Century Corporation)
3. Explanation of technology introduced at the project site (by Impact Solar Limited)
4. Questions and answers
5. Closing (by Tokyo Century Corporation)

Following organizations from Thailand side were invited to the consultation meeting.

- Thailand Greenhouse Gas Management Organization (TGO)
- Saha Pathana Inter Holding PLC

There were no negative comments toward the proposed project expressed during the stakeholders meeting by the attendees. The comments received during the local stakeholders meeting are summarized in the following section.

E.2. Summary of comments received and their consideration

Stakeholders	Comments received	Consideration of comments received
Thailand Greenhouse Gas Management Organization (TGO)	What is the installation capacity?	The total capacity installed is 17.8MW, consisting of 17.4MW rooftop solar on 15 buildings and 478kW floating solar on 1 reservoir. (No further action is needed)
	Who is the owner of the installed equipment?	Impact Solar is the owner of the installed equipment. (No further action is needed)
	What is the emission factor used in the calculation of emissions reduction of the project? Does it take into account the co-generation plant by Saha Pathana?	The project replaces the co-generation plant. Therefore, the emission factor is the value stated on the approved methodology TH_AM001. (No further action is needed)

F. References

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

Attachment

Revision history of PDD		
Version	Date	Contents revised
01.0	24/12/2025	First edition