

Solar System in Thailand by JCM



SHARP

Be Original.

Sharp Solar Solution Asia Co., Ltd.

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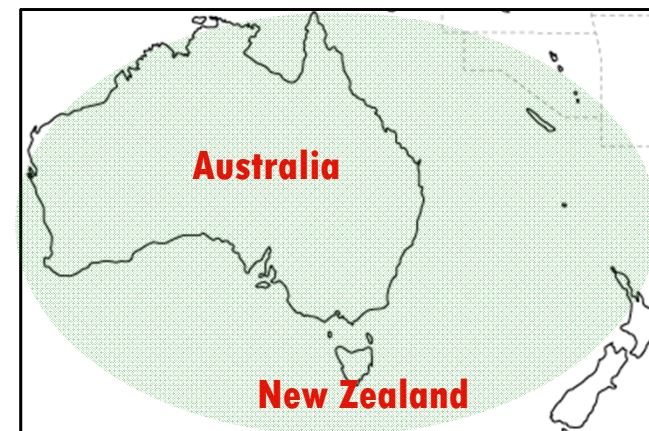
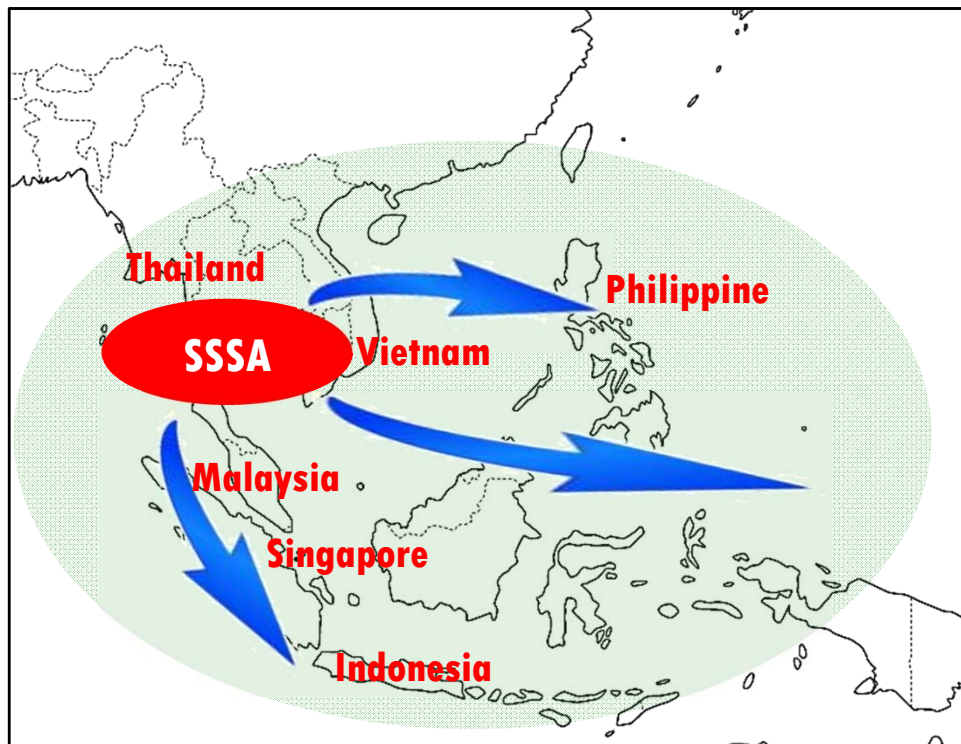
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SSSA Overview

SSSA: Sharp Solar Solution Asia Co., Ltd.

Mission : Solar Solution Business in Asia, Oceania

- 1) Solar Energy Business in Thailand (IPP/EPC/O&M)
- 2) Solar System Sales in Asia Pacific (PV Package Sales)
- 3) Territory: Pan Pacific and ASEAN (mainly Thailand)



Sharp PV Production History

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First IPP Plant by SHARP



83MW NED Plant in Thailand



Satellites: 46 years experience,
installed on more than 160 satellites
source : JAXA



Houses: No.1 share in Japan



Lighthouses: 50 years experience,
over 2,800 sites (as of March 2013)
Source: Coast Guard of Japan



1963: Started mass production of PV cells

1959: Development of c-Si solar cells

(1953: Si PV invented by Bell Laboratory)

**710MW of EPC Installation in Global
(240MW Installation in Thailand)
790K Residential Installation in Japan**

2015: Establish Sharp Solar Solution Asia

2013: Start IPP business in Japan

2012: Completion of 73MW Solar plant in Thailand

2010: Sharp's Solar business expansion Recognized as IEEE Milestone

2000: No.1 PV manufacturer in the world

1986: Installed rural electrification system in Thailand and Mongolia

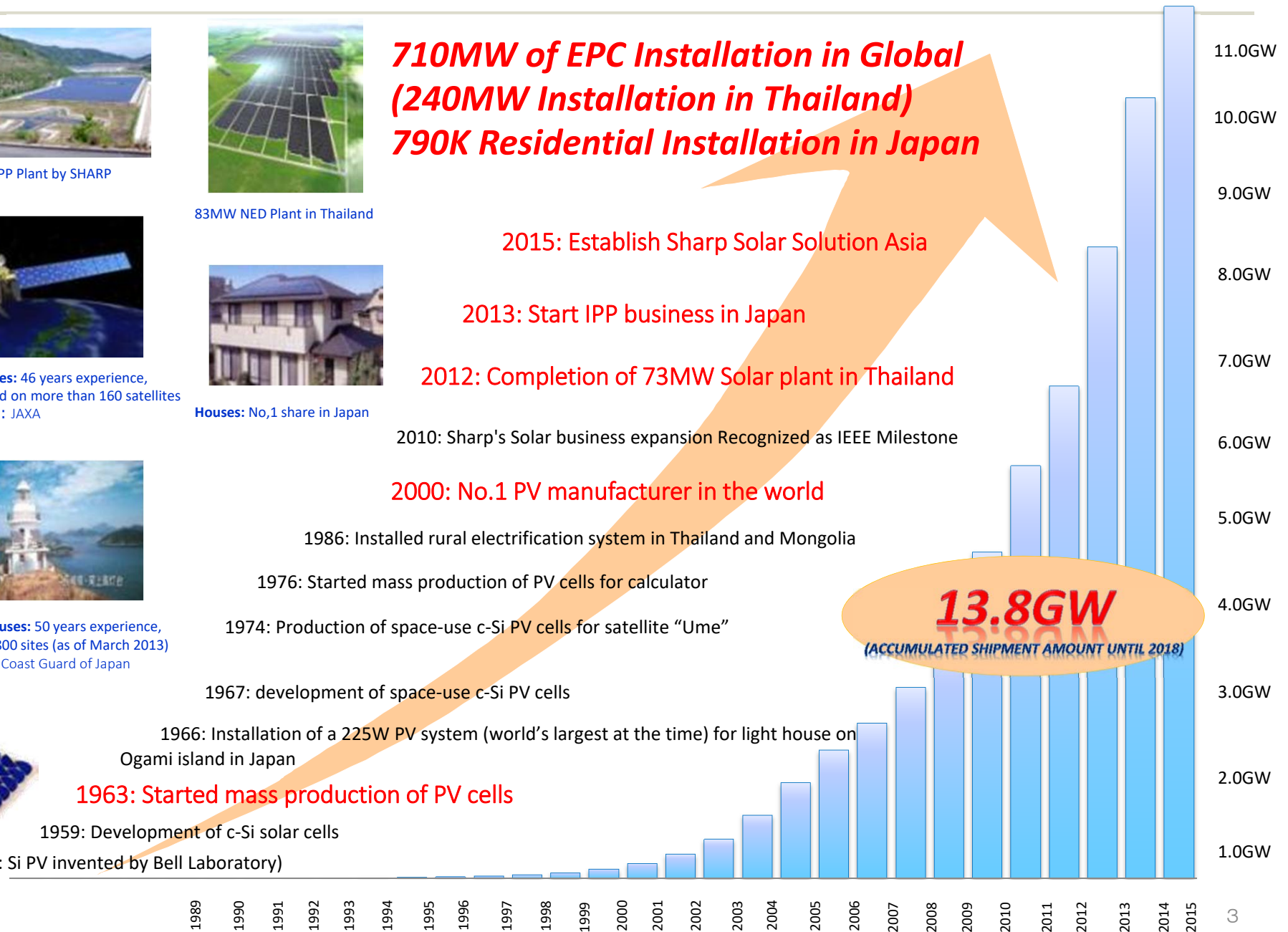
1976: Started mass production of PV cells for calculator

1974: Production of space-use c-Si PV cells for satellite "Ume"

1967: development of space-use c-Si PV cells

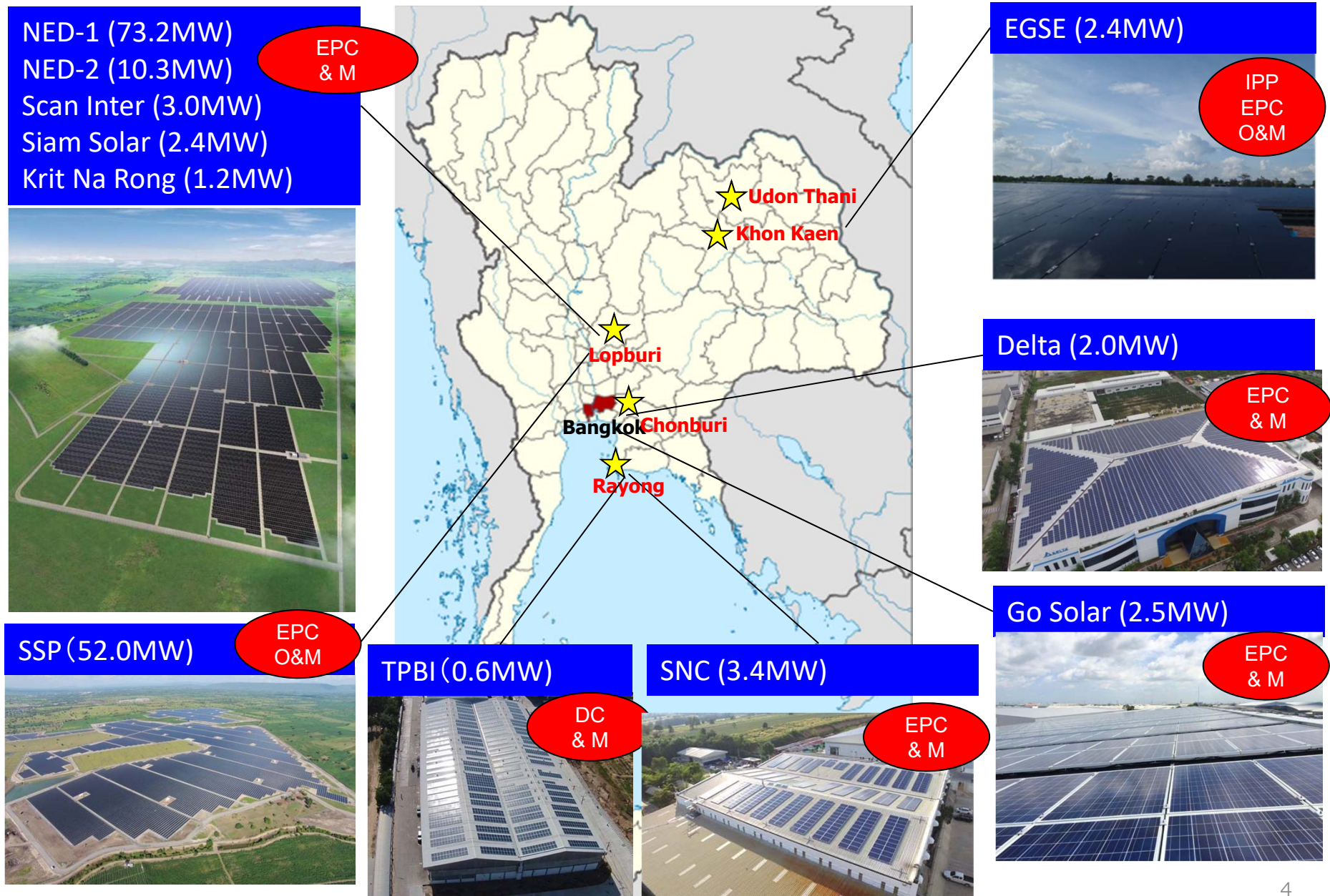
1966: Installation of a 225W PV system (world's largest at the time) for light house on
Ogami island in Japan

13.8GW
(ACCUMULATED SHIPMENT AMOUNT UNTIL 2018)



Sharp Solar Solution Asia (More than 250MW)

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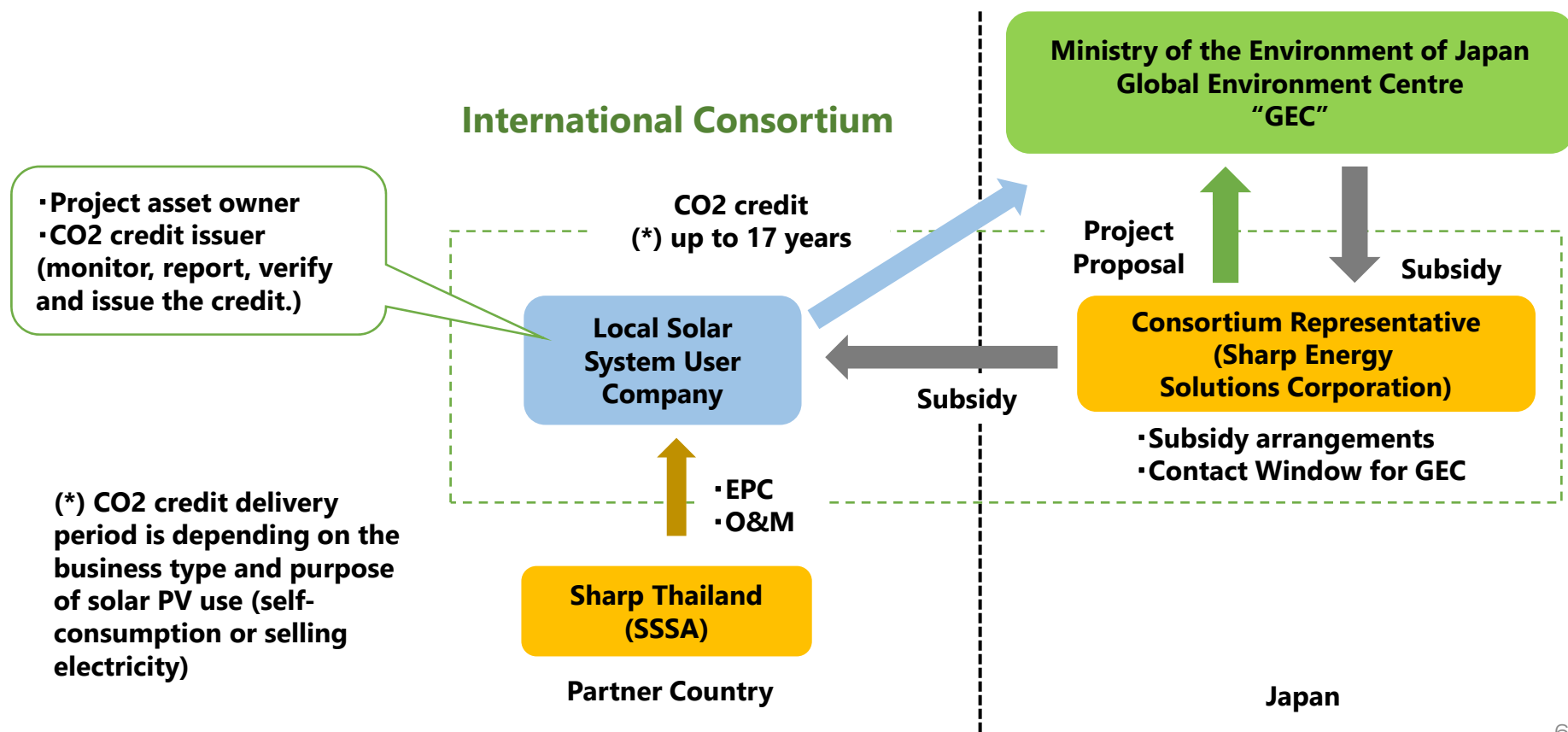


JCM PROJECT REFERENCE

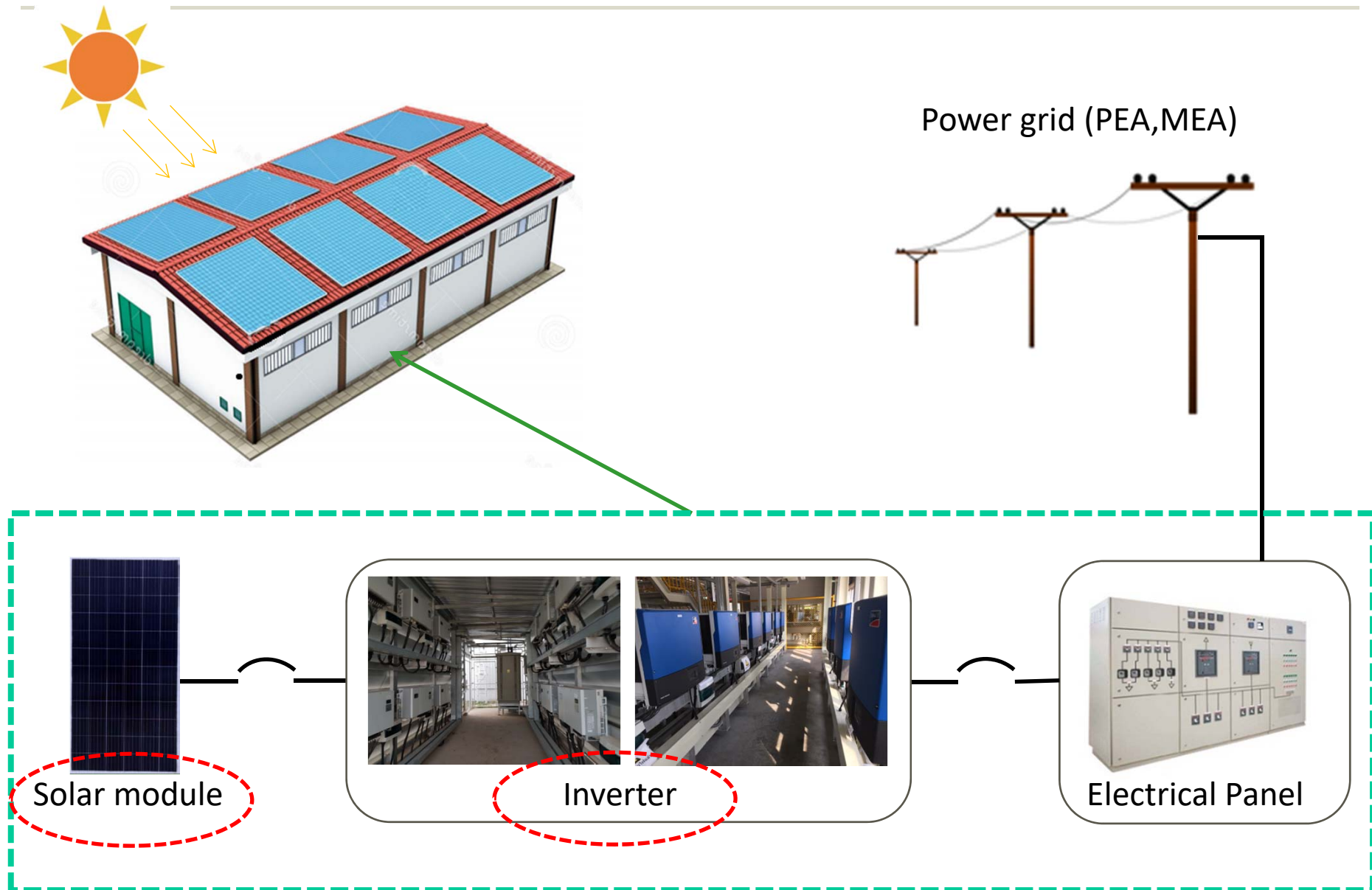


JCM Project structure

1. Sharp Japan and local country owner need to form International Consortium to apply for JCM subsidy program.
2. Local country company must be an asset owner of the Project for International Consortium.



What can be subsidized by JCM?



1. SNC - FY 2016

Introduction of 3.4MW Rooftop Solar Power System to Air-conditioning Parts Factories

Construction Start: September 2016

Expected GHG reduction 1,179 t-CO₂/year

2. Big C Supercenter - FY 2016

Introduction of 30MW Rooftop Solar Power System to Large Supermarkets

Construction Start: February 2017

Expected GHG reduction 13,293 t-CO₂/year

SNC



1. SNC – 3.4 MWdc (EPC)

Site: Rayong Province, Thailand

Capacity: 3.4 MWdc

Company: SNC PYONGSAN EVOLUTION CO., LTD.

Handover: September 2017 (Scheduled)



2. Big C Supercenter from 16 to 30MW (EPC)

- Sharp Signs Agreement to Construct Roof-Top Solar System on Stores of Big C
- 16MW will be installed and discussing expansion up to 30MW by Mar 2019.



Big C Supercenter – Reference 1



Big C - Omyai



Big C - Suksawad



Big C - Ladkrabang



Big C - Lamlukka

Big C Supercenter – Reference 2



Big C Supercenter – Reference 3





Thank you for your kind attention !

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SHARP SOLAR TECHNOLOGY.

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SOLAR SYSTEM SOLUTION CENTRE ASIA