



SPCG
Public
Company
Limited

SPCG Public Company Limited: THE PIONEER OF SOLAR FARM AND SOLAR ROOF DEVELOPER IN THAILAND AND ASEAN COMMUNITY



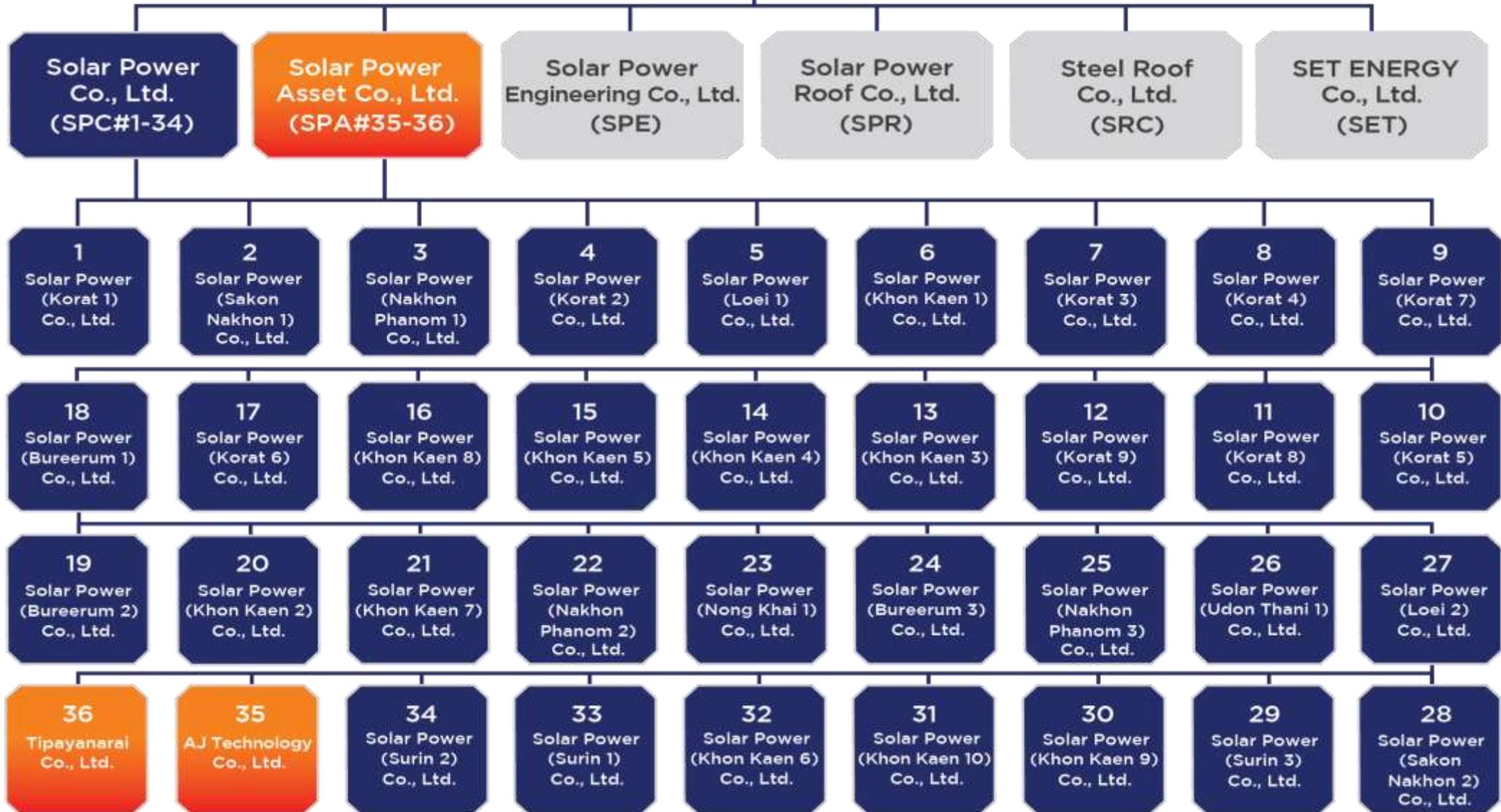
Operating Result – For the year 2020





CORPORATE STRUCTURE





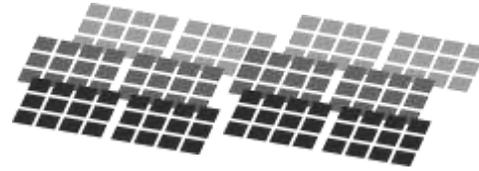
SPCG Timeline



Government of Thailand

Acquiring 36 PPAs, 260 MW

SPCG listed in the Stock Exchange of Thailand (Backdoor listing)



SPCG Completed all 36 Solar farms 260 MW

Expanded investment 480 MW in Ukujima, Japan (≈2,600 MB) (1st & 2nd injection : 1,268 MB)

SPCG targeted solar energy production in 2037 to be 5,000 MW

2007 > 2009 > 2010 > 2011 > 2013 > 2014 > 2018 > 2020 > 2037

Announced target of Solar PV 500 MW with Adder policy, first time in Thailand & ASEAN

Successfully developed first Solar Farm of 6 MW in Thailand & ASEAN

Being pioneer of Solar Roof business in Thailand & ASEAN

Expanded investment 30 MW in Tottori, Japan

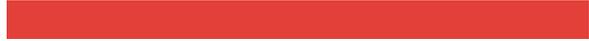
Expanded investment 500 MW in Eastern Economic Corridor Special Development Zone (“EEC”) (≈23,000 MB)

9,290 MW is the target of solar PV in Power Development Plan (PDP 2018 Rev.1)



Business Overview

Solar Farm



Investment and development of Solar Farm / Engineering, Procurement and Construction (EPC) / Operation, Maintenance and Monitoring (OM&M)

Solar Roof



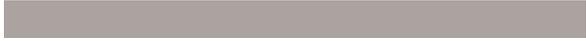
Full service in the design and installation of solar roof systems.

Steel Roof

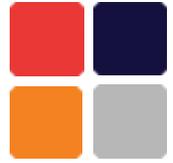


Steel Roof and Roof Structure with one-stop service

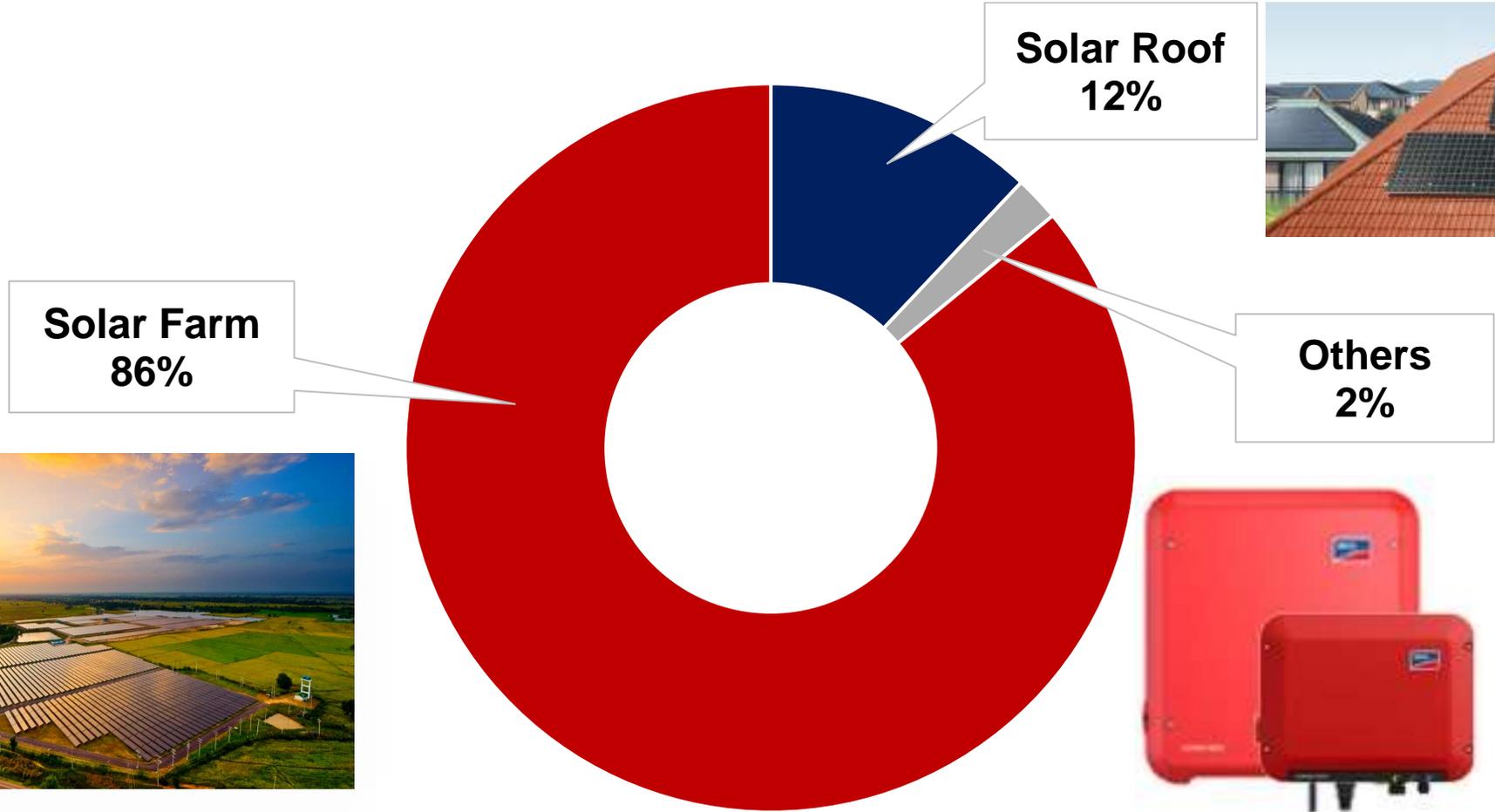
SMA Sales & Service Authorized Partner



Authorized Sales and Service Partner of SMA Solar Technology AG (SMA), Germany



Revenue Structure in Each Business



■ Solar Roof ■ Others ■ Solar Farm

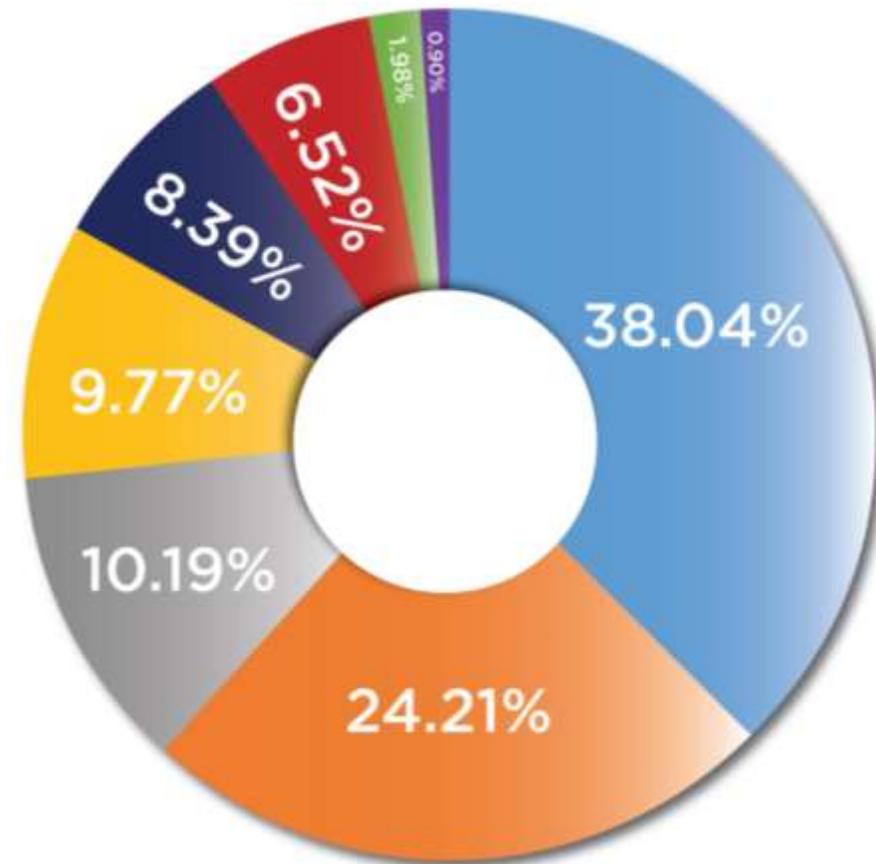


STOCK INFORMATION

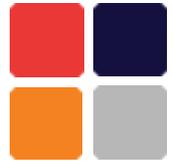


SPCG Public Company Limited

Stock	SPCG
Market	SET
Industry	Resources
Sector	Energy & Utilities
First Trade Date	December 20, 2005
Authorized Capital	1,153,189,000.00 Baht
Paid-up Capital	1,055,790,000.00 Baht
Major Shareholders	75.79 % (Record date on December 14, 2020)
Minor Shareholders	24.21 % (Record date on December 14, 2020)
Dividend Policy	Not less than 40 percent of net profit of the separate financial statement after legal reserve in compliance with the company regulations and laws (with additional conditions)

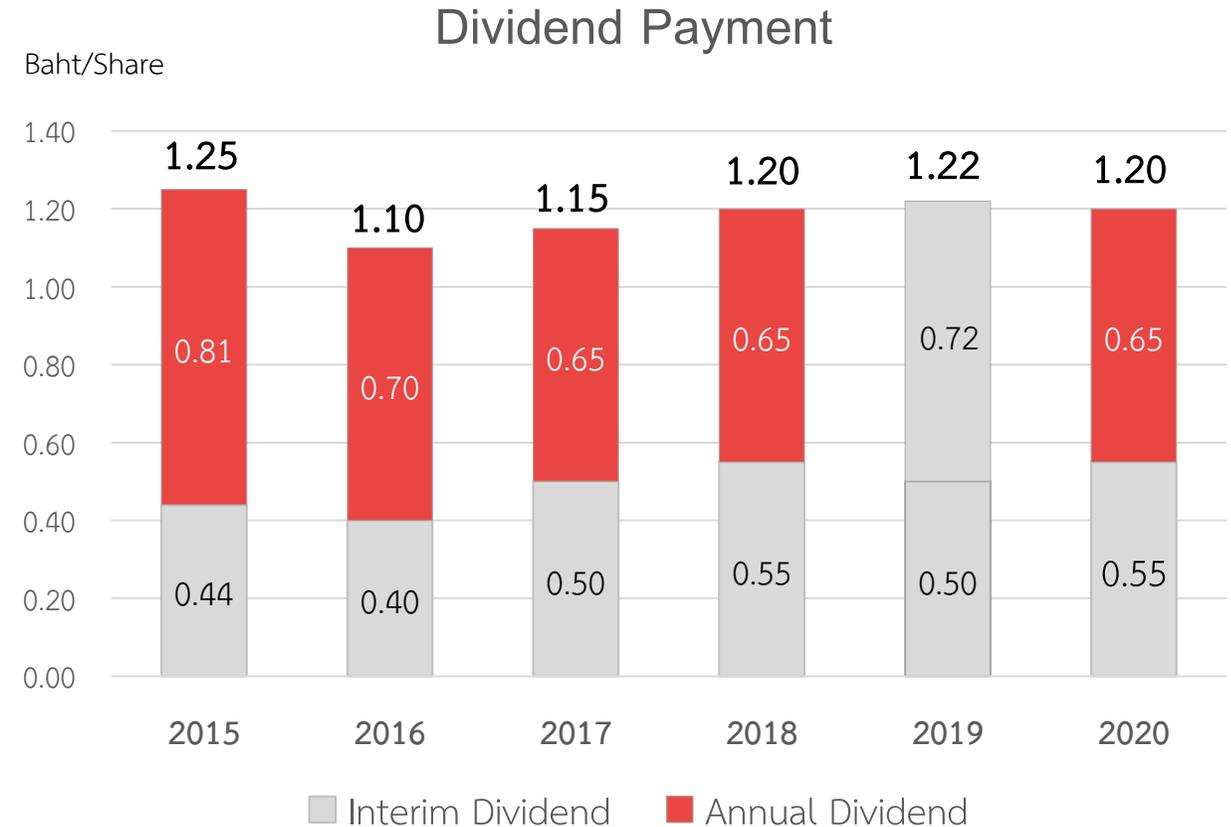


- Khunchornyakong Family
- Institutional Investors
- Minor Shareholders
- KYOCERA Corporation
- GULF INTERNATIONAL INVESTMENT (HONG KONG) LIMITED
- Mr. Withoon Manomaikul
- UBS AG SINGAPORE BRANCH
- Sethiwan Family



SPCG Dividend Payment

Year	Dividend (THB / Share)	Dividend Yield
2015	1.25	3.97 %
2016	1.10	5.84 %
2017	1.15	5.02 %
2018	1.20	6.21 %
2019	1.22	6.12 %
2020	1.20	6.06 %



Dividend Policy: Not less than 40% of net profit of the separate financial statement after legal reserve in compliance with the company regulations and laws (with additional conditions)

Remark: The payment of such dividend at 0.65 Baht/share is subject to the approval from the Annual General Meeting of shareholders on April 19th, 2021.



SOLAR FARM BUSINESS

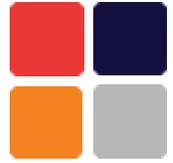




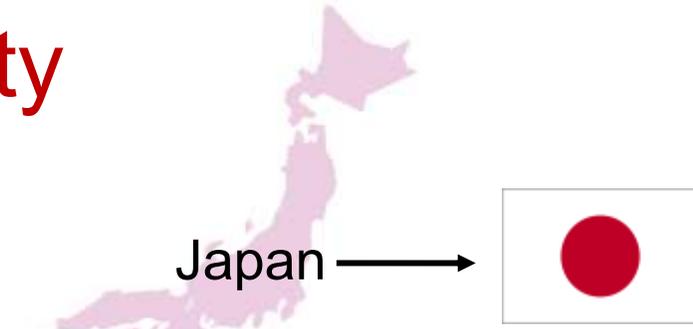
Benefits

Solar Farm Business

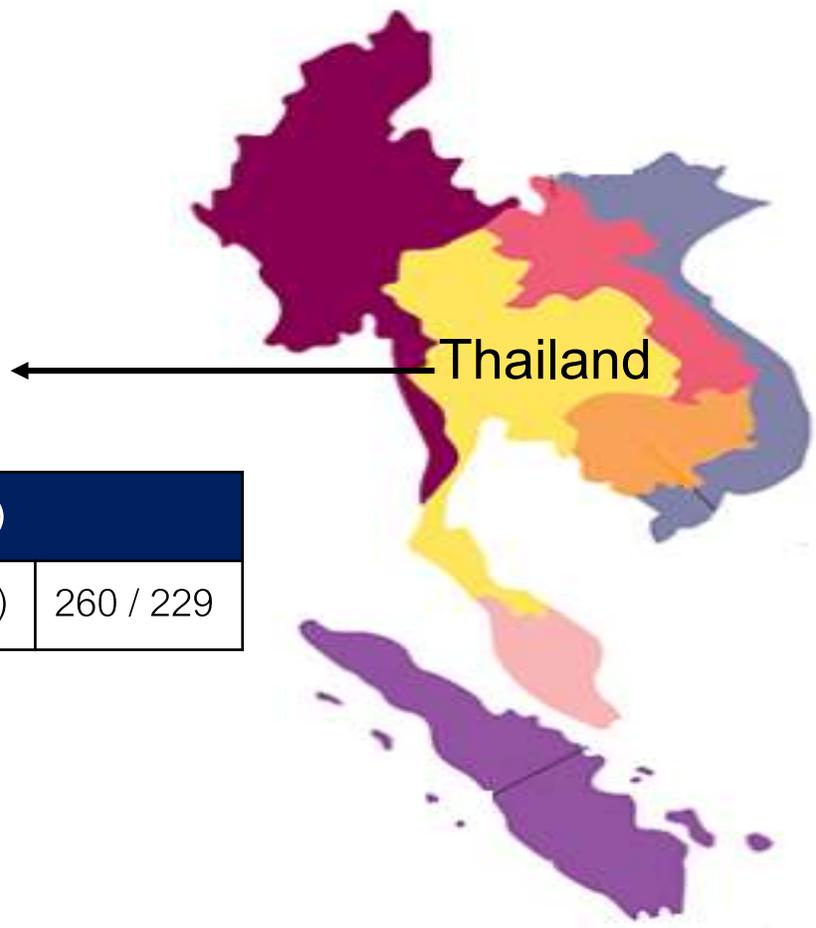
- Renewable resource and energy security.
- Reduces carbon dioxide emissions which is the cause of global warming.
- Low maintenance costs, highly efficient and sustainability of solar panels of Kyocera, Japan with 25 years warranty
- All our solar farms are supported by government sector, **Adder rate.**



Solar Farms - Total Capacity



Tottori (Fully COD)	
Total Capacity / Equity (MW)	30 / -
Ukujima (Developing)	
Total Capacity / Equity (MW)	480 / 86



36 Solar Farms (Fully COD)	
Total Capacity / Equity (MW)	260 / 229



Solar Farm in Thailand

- Pioneer and leading developer of the first solar farm project in Thailand and ASEAN community.
- 36 solar farms in Thailand, 260 MW
 - Commercial Operation Date (COD) to Provincial Electricity Authority (PEA) since mid 2014.
 - Adder rate at 8 THB/kWh for 10 years.
 - In 2020, 36 solar farms generated up to 385.8 Million units.

Northeast Region

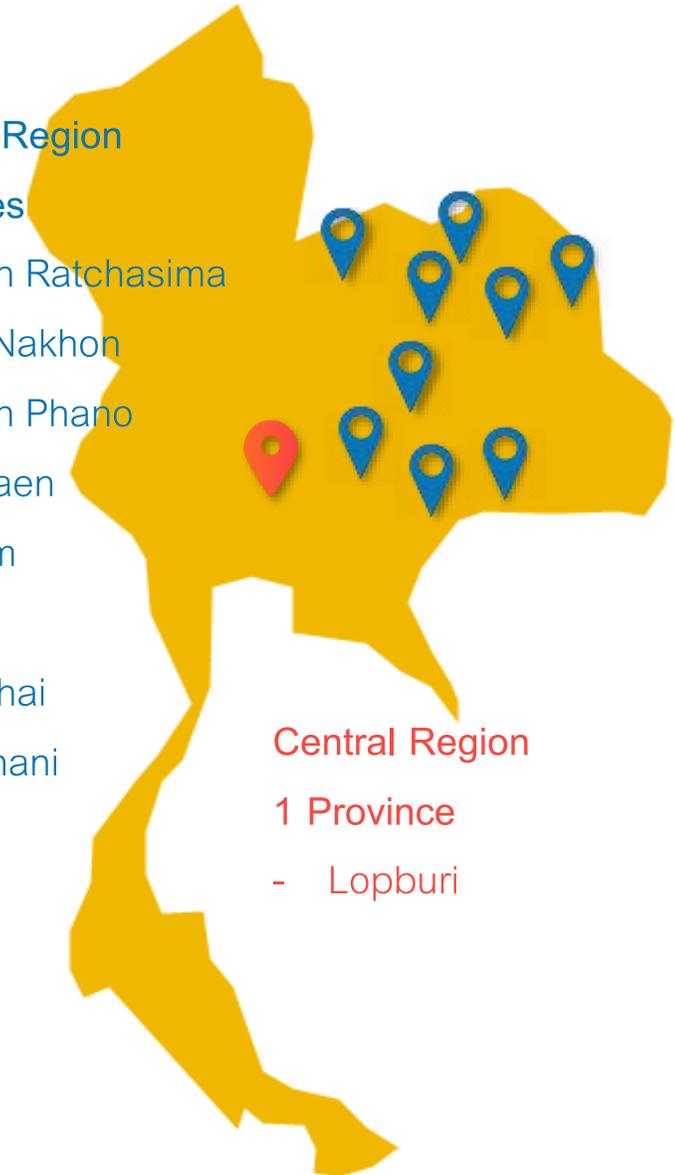
9 Provinces

- Nakhon Ratchasima
- SakonNakhon
- Nakhon Phano
- Khonkaen
- Buriram
- Surin
- Nongkhai
- Udonthani
- Loei

Central Region

1 Province

- Lopburi





1st Solar Farm in Thailand and ASEAN (Korat 1,2)





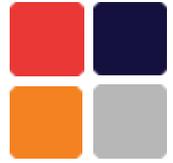
Solar Farm (Korat 5,8)



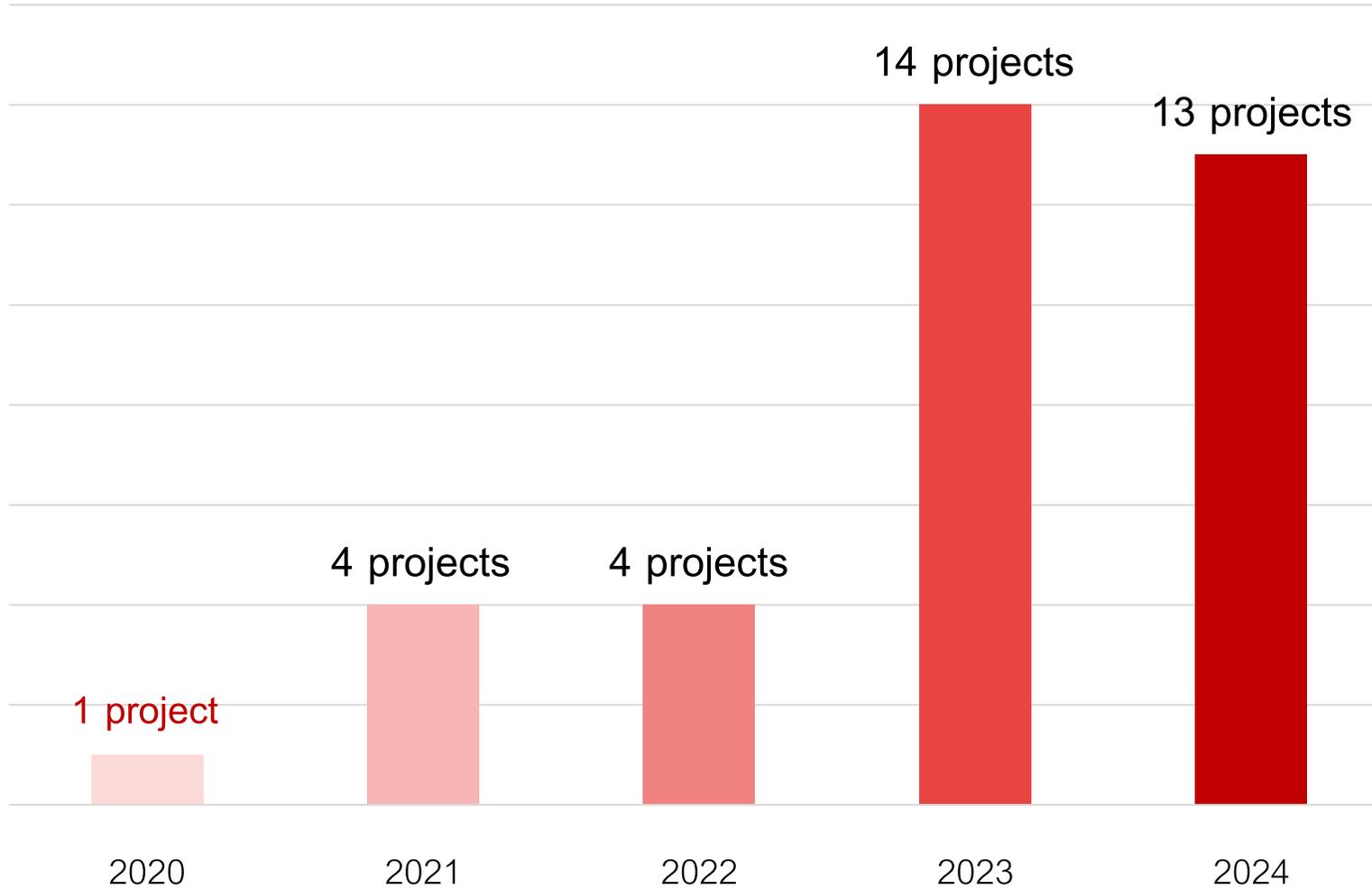


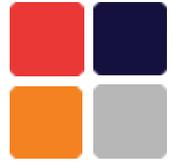
Solar Farm Education Center and Solar Farm Exhibition

Monitoring Room

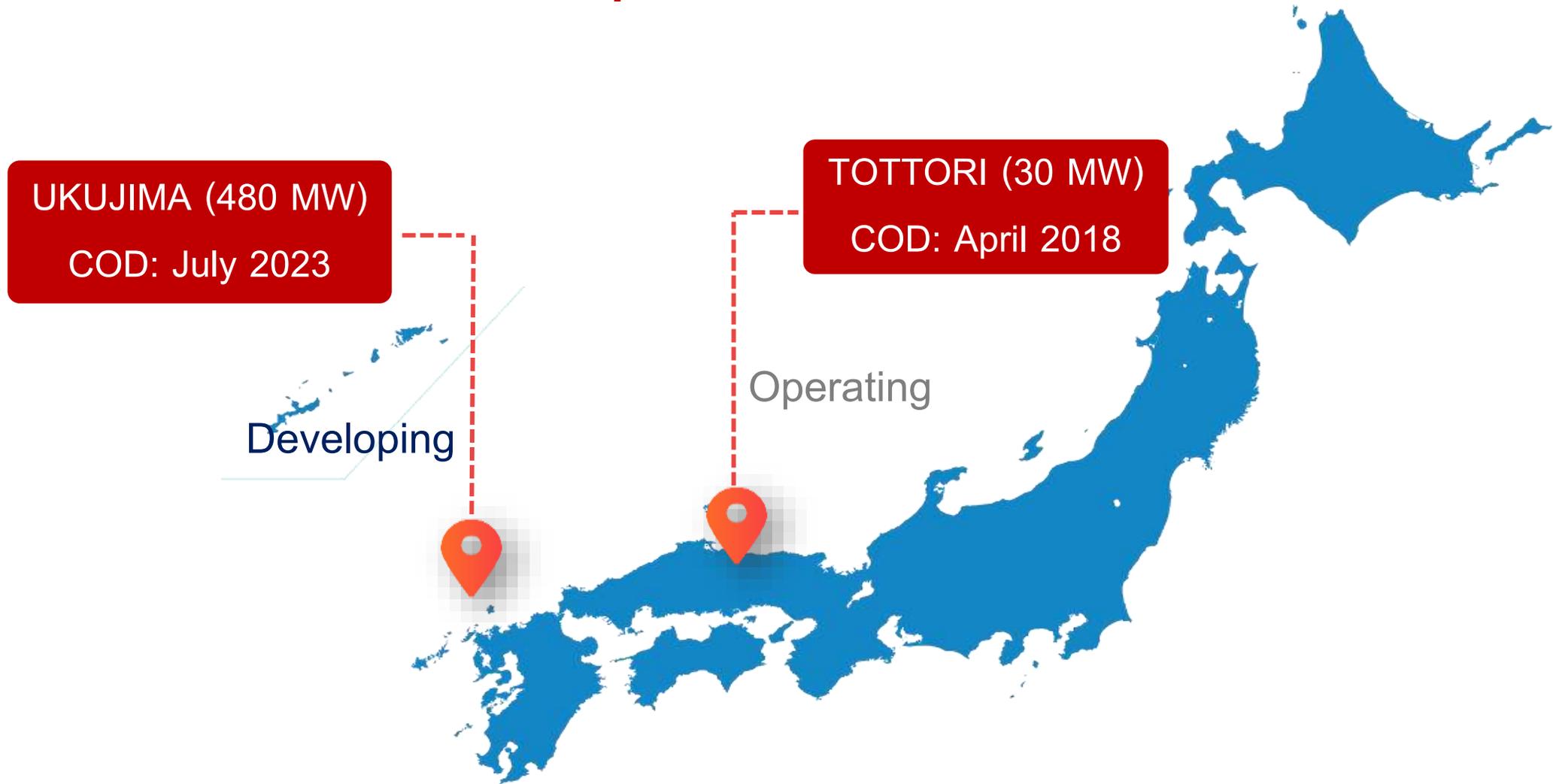


Phase-Out of Adder





Solar Farms in Japan





Tottori Yonago Mega Solar Farm



Tottori Yonago Mega Solar Farm in Japan, 30 MW

- Commercial Operation Date (COD) to Chugoku Electric Power Co., Ltd. in April 2018
- Power purchase agreements at 36 yen/unit for 20 years
- Dividend yield
 - In 2018 : 1.6%
 - In 2019 : 7.2%
 - In 2020 : 6.1%



Ukujima Mega Solar Project

Total Capacity	480 MW
Construction Site	Ukujima island, Sasebo city, Nagasaki prefecture (located at the west coast of Kyushu, Japan)
Partners	<ul style="list-style-type: none"> • SPCG Public Company Limited (17.92%) • Kyocera Corporation • Kyudenko Corporation • Tokyo Century Corporation • Furukawa Electric Company Limited • Tsuboi Corporation • Chiyoda-gumi • Smart Energy • Newstar Communications
Power Purchase Rate	FiT 40 Yen / Unit
Contract Period	17 years 3 months
Purchaser of Electricity	Kyushu Electric Power Co., Inc.





Ukujima Mega Solar Project

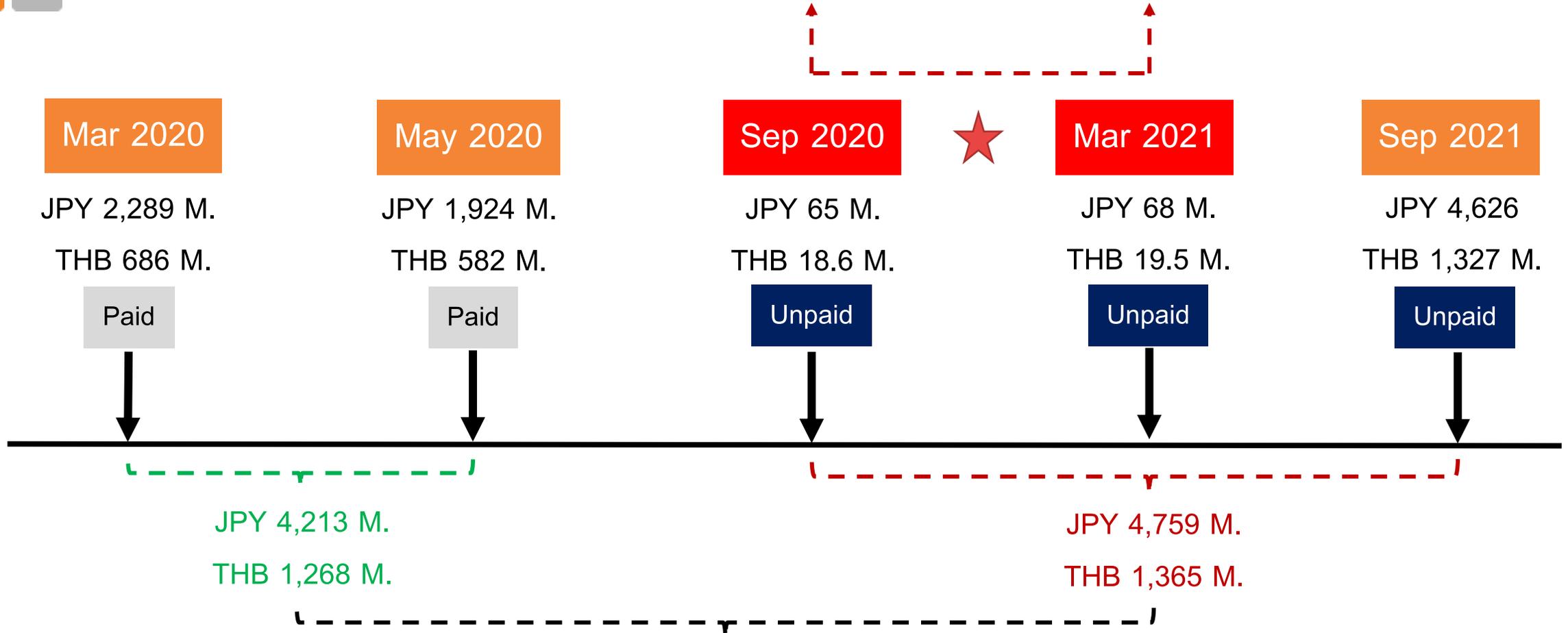
Construction Period	2019 - 2023
Commercial Operation Date (COD)	1 July 2023
Total Project Cost	JPY 178,758 Million (Approx. THB 51,294 Million) (Exchange rate 28.6949 THB per 100 Yen as of March 9 th , 2021)
SPCG Investment Budget	JPY 9,000 Million (Approx. THB 2,582 Million) (Exchange rate 28.6949 THB per 100 Yen as of March 9 th , 2021)
D/E ratio	Debt 70 : Equity 30
Forecasted 2025 Revenue (Holding Company)	JPY 3,025 Million (Approx. THB 868 Million) (Exchange rate 28.6949 THB per 100 Yen as of March 9 th , 2021)
Forecasted 2025 Dividend (SPCG Proportion : 17.92%)	JPY 980 Million (Approx. THB 281 Million) (Exchange rate 28.6949 THB per 100 Yen as of March 9 th , 2021)



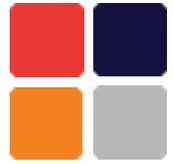


SPCG Injection

3rd & 4th injection was postponed due to Covid-19 crisis, but COD schedule remains the same, 1 July 2023



1st Injection : exchange rate 29.9815 THB per 100 Yen as of March 26, 2020
 2nd Injection : exchange rate 30.2572 THB per 100 Yen as of May 18, 2020
 3rd, 4th, 5th Injection : exchange rate 28.6949 THB per 100 Yen as of March 9th, 2021

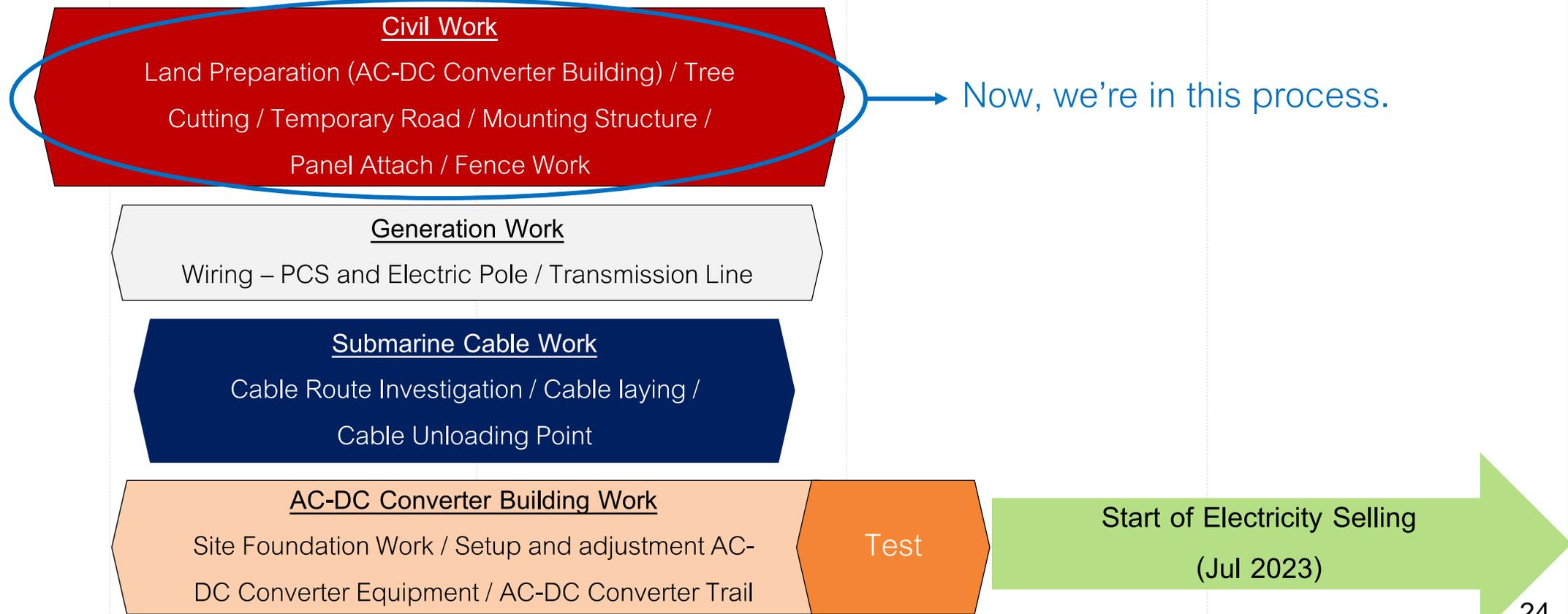


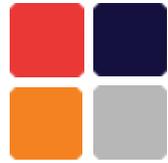
Project Timeline



2020				2021				2022				2023				2024			
Q.1	Q.2	Q.3	Q.4																

Construction (2019 – 2023)



EPC status

Topic	Detail	Planned Period	Actual Progress (%)
<p>Civil Work</p>	<ul style="list-style-type: none"> Land preparation for AC-DC Converter Building, PCS, temporary road Disaster prevention work Tree cutting Site measuring Soil improvement Mounting structure, panel attach, fence work 	<p>Oct 2020 - Dec 2022</p> <p>Oct 2020 - Feb 2021</p> <p>Nov 2020 - Apr 2022</p> <p>Sep 2020 - Aug 2020</p> <p>Oct 2020 - Dec 2021</p> <p>Jan 2021 – Dec 2022</p>	<p>15 %</p> <p>0 %</p> <p>10 %</p> <p>30 %</p> <p>10 %</p> <p>0 %</p>

Tree Cutting

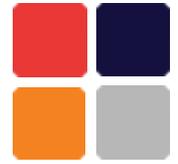


Site Measuring



Soil Improvement

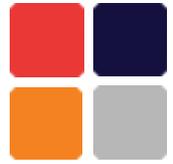




Work Progress



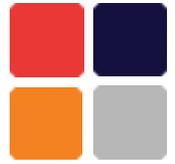
Site Office Building



Work Progress



Land Adjustment Process



Work Progress



Land Adjustment Process



SOLAR ROOF BUSINESS



Solar Power Roof Company Limited (SPR)



Solar Power Roof Company Limited (SPR) is a subsidiary of SPCG and a pioneer in solar roof development to help reduce the electricity expenses and CO2 reduction. For residential, commercial and industrial systems in Thailand and the ASEAN community.

Best Value

Solar Power Roof system by SPR reduces both energy bills and global-warming CO2 emissions instantly after installation.

Best Design

Our professional team provides valued customers for full service regarding the surveys, system design, feasibility studies, and installation.

Best Output

Solar Power Roof system by SPR has provided energy by using the highest quality of solar modules by Kyocera Corporation (Japan) along with the best balance of systems for 25 years sustainability.

Best Service

With daily monitoring services, SPR provides a free record and report of energy production for up to 2 years, as well as maintenance (if any) in order to accommodate the best service.

KYOCERA CORPORATION

KYOCERA has been a pioneer in developing innovative solar power solutions for over 40 years. During this time, Kyocera has set the standard for harnessing the Sun's energy with highly reliable and high quality, best-in-class technology — having produced an accumulated 8 gigawatts of solar power generating equipment to date.

敬天愛人

THE NEW VALUE FRONTIER



“Respect the Divine and Love People”

Preserve the spirit to work fairly and honorably,
Respecting people, our work, our company and
our global community.

SMA Solar Technology AG, Germany



- SMA is global leader for solar inverters, a key component of all PV plants.
- Listed company in the Stock Exchange of Frankfurt and in the SDAX index.
- SMA market position is ranking “3” globally. (based on installed inverter capacity)
- SMA products are the best quality with comprehensive service due to SMA’s over 35 years of experience in the solar business.





Solar Roof Business



RESIDENTIAL

≈ 5 MW

COMMERCIAL

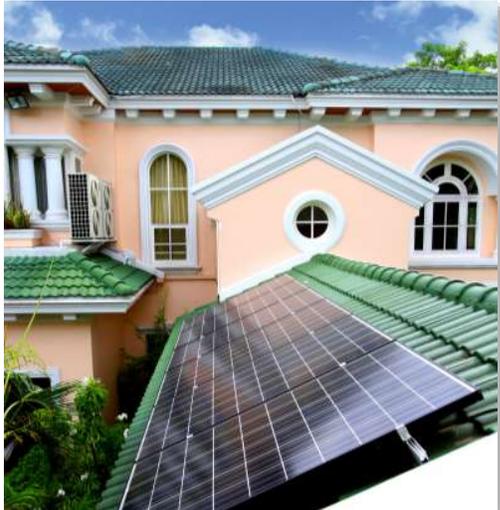
≈ 50 MW

INDUSTRIAL

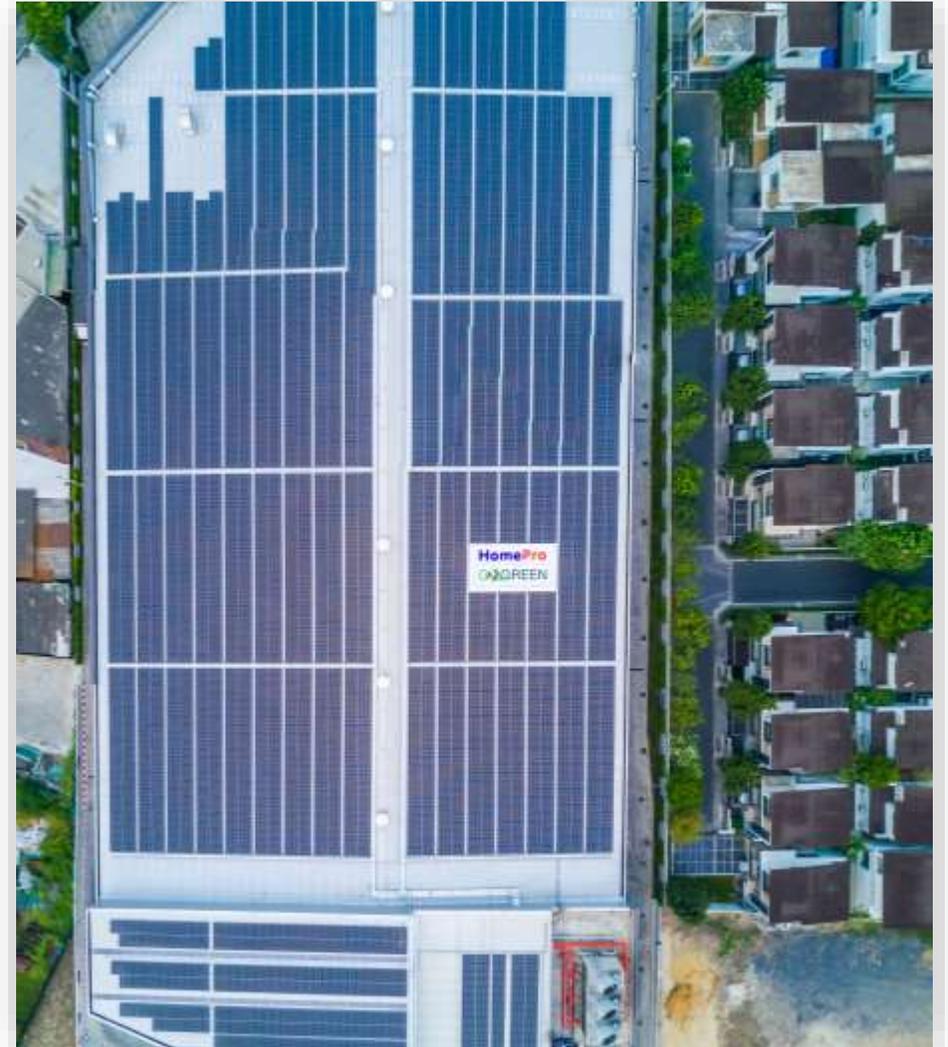
> 100 MW



RESIDENTIAL



COMMERCIAL





COMMERCIAL





COMMERCIAL





INDUSTRIAL





INDUSTRIAL



INDUSTRIAL



INDUSTRIAL



Monitoring System



▼ PV System Data

<p>Current power an hour ago</p>  <p>93.40 kW</p> <p>Energy and Power »</p>	<p>Energy</p>  <p>1458.60 kWh Today</p> <p>Total: 122.200 MWh</p>	<p>Reimbursement</p>  <p>5,834.40 THB Today</p> <p>Total: 488,799.08 THB</p>
<p>CO2 avoided</p>  <p>826 kg Today</p> <p>Total: 69 t</p>	<p>PV system information</p>  <p>PV system power: 365.70 kWp Commissioning: 5/11/2017</p> <p>PV system profile »</p>	<p>Temperature measurement 33 minutes ago</p>  <p>42 °C  -35 °C</p>
<p>Irradiation 33 minutes ago</p>  <p>261 W/m²</p>	<p>Performance Ratio</p> <p> 0.91  0.84</p> <p>yesterday last 30 days</p>	<p>Weather for Rayong</p>  <p>30 °C Light rain shower</p> <p>Tomorrow »</p>
<p>Location</p>  <p>107 Moo4, T.Pluakdaeng, A.Pluakdaeng 21140 Rayong Thailand</p> <p>Enlarge map »</p>		

Solar PPA Business by Strong Collaboration Partners

MUL Group

Mitsubishi UFJ Lease & Finance

Mitsubishi UFJ Lease and Finance, a member of MUFG Group, operates Worldwide as a total financial group, who also provide a stable financing.



SPCG, a listed company at SET, is a pioneer of solar industry in Thailand, who provides design, installation work, after-service.

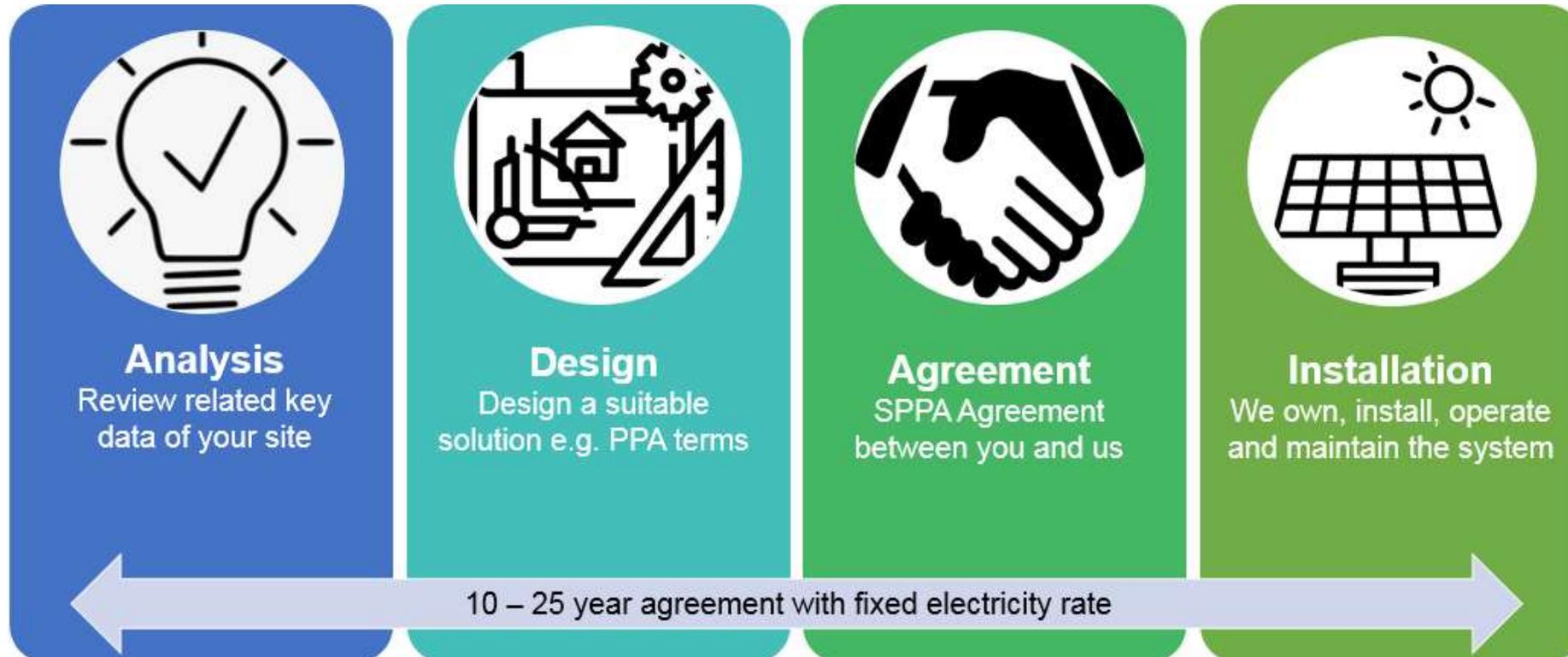


PEA ENCOM, 100% owned by PEA, provides infrastructure and network of electricity service, through Thailand.

Let's go green with MSEK Power

What is a Solar Power Purchase Agreement

A Solar Power Purchase Agreement (SPPA) is an agreement in which a developer owns, operates, and maintains the photovoltaic (PV) system, and a customer agrees to site the system on its property and purchases the system's electric output from the solar services provider for a predetermined period.





AUTHORIZED SALES & SERVICE PARTNER BUSINESS





Authorized Sales & Service Partner Business



- The SMA Group is a global leader for solar inverters, a key component of all PV plants.
- SMA Solar Technology AG, is a listed company in the stock exchange of Frankfurt.

Since July 2018, SPCG appointed the subsidiary company which is **Solar Power Engineering Co., Ltd. (SPE)** as the authorized sales & service partner of SMA Solar Technology AG (SMA) in Thailand.

- Covering all SMA family products in the Indo-China region; Thailand, Vietnam, Laos, Cambodia, Myanmar
Covering the need of customers on behalf of SMA.
- SPE will support the customer in their enquiry and contact, technical training on the product, together with SMA.



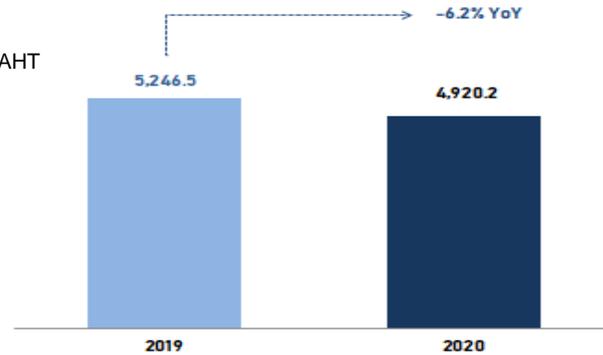
FINANCIAL HIGHLIGHT



Financial Performance

Sales

UNIT : MILLION BAHT



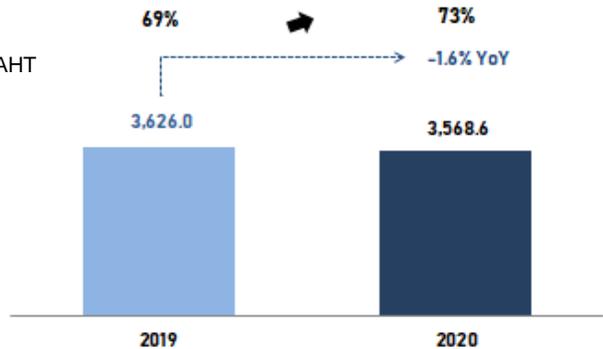
Sales Drop in 2020

Sales decreased 326.3 MB YoY resulted from Solar Farm Business. The main reasons were as follows:

- The revenue from subsidy of adders, 8 Baht per unit, of Solar Power (Korat 1) Co., Ltd. expired on 20 April 2020
- Power output for 2020 decreased by 11.6 million units (3%)

GPM

UNIT : MILLION BAHT

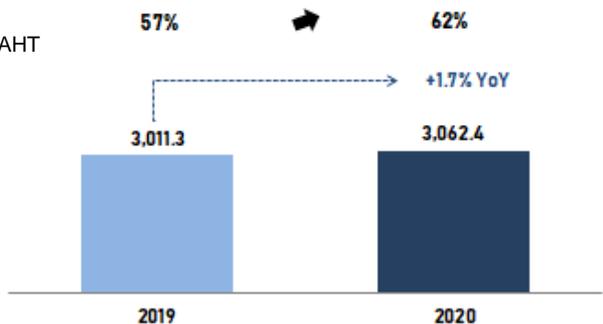


GPM Growth in 2020

The main reasons was from Cost Saving Strategy resulting in cost of O&M (Operating & Maintenance) of solar farm business decreased in the amount of Baht 69 million per annum

NPM

UNIT : MILLION BAHT

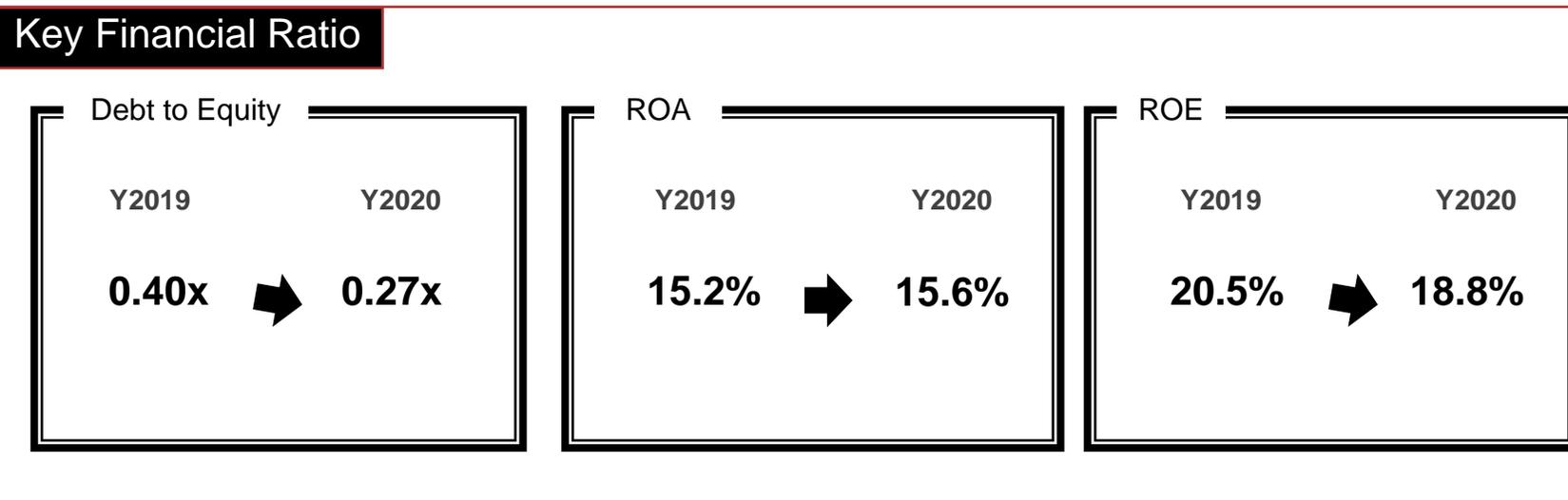
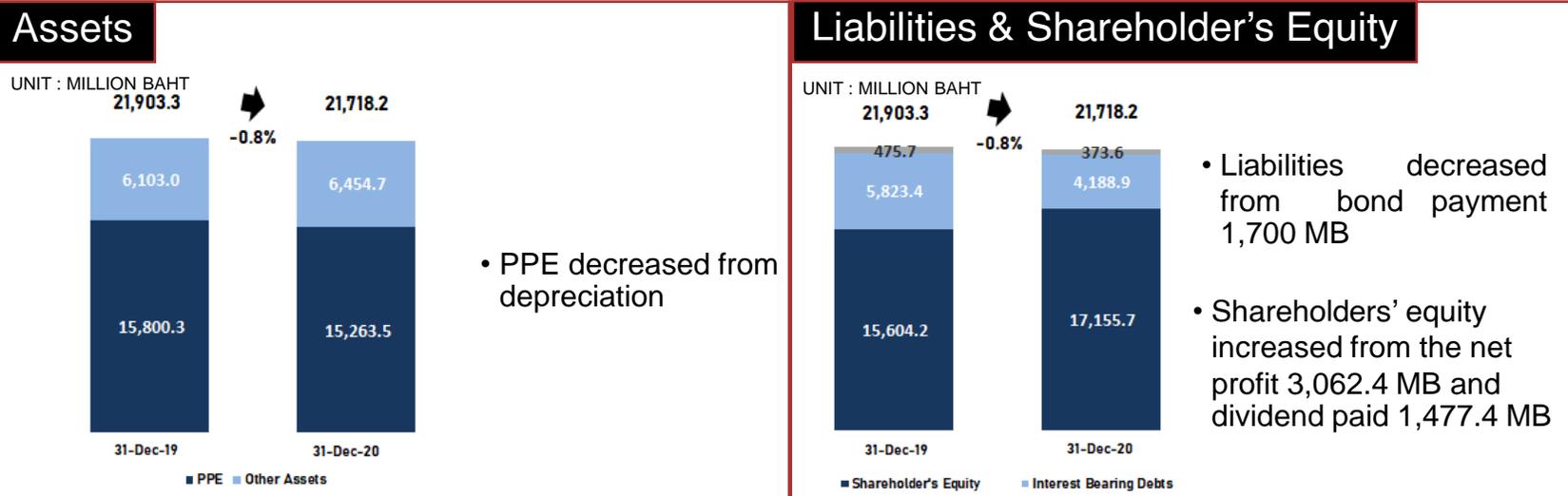


NPM Growth in 2020

The main reasons were as follows:

- Finance cost decreased from repayment on debentures
- Administrative expenses decreased resulted from the cost saving strategy

Financial Performance





SPCG TARGET 2021





SPCG Target 2021

Total revenue not less than 5,500 MB

**To increase total production capacity of
36 Solar Farms up to 385 million units**

**To expand new investment projects
Domestically and Internationally**



Thank you for your attention

- Best Value - Best Design - Best Output - Best Service -



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