

## The Leading Solar Farm and Solar Roof Developer in ASEAN



#### SPCG Public Company Limited Financial results of Year 2015 Opportunity Day - March 1<sup>st</sup>, 2016 @SET Ratchada

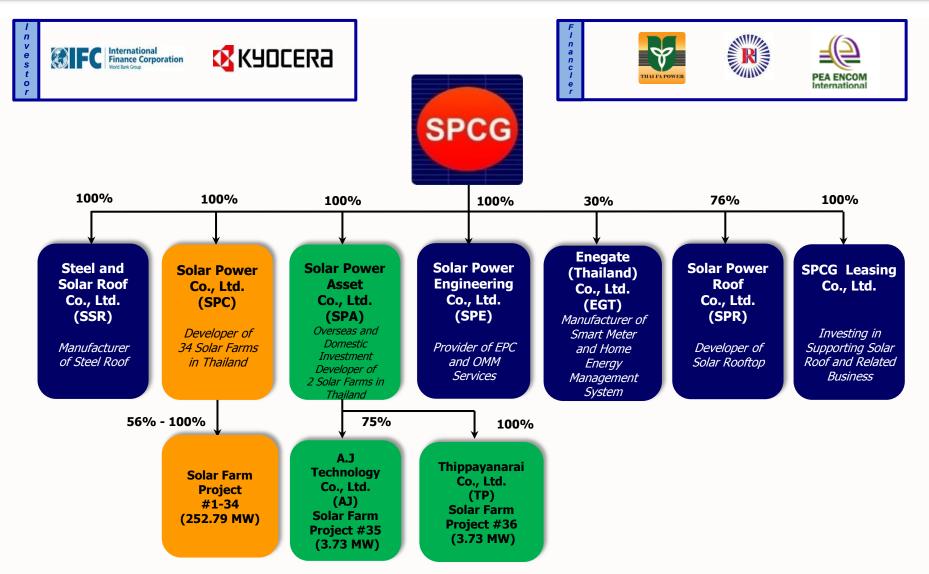








### **Business Overview**





### **Business Overview**



#### <u>Solar Farm</u>

- SPCG invests and develops 36 solar farms, which are considered the largest in ASEAN with total 260 MW PPAs by THB 8 adder on top of base tariff and Ft.
- The Company achieved COD of 36 solar farms
- SPCG has invested in Japan for 30 MW and focus on expanding business both domestic and international investment



#### <u>Solar Rooftop</u>

 SPR, a subsidiary of SPCG, provides full services for distribution and installation of solar roof systems including design and installation, supply and distribution of materials, and advice on effective management in energy-saving and safety by focusing on residence, industry and real estate project

SPCG established SPCG Leasing Co., Ltd ) in order to be a supporter in solar roof business and related business



#### EPC and O&MM

- SPCG provides Engineering, Procurement and Construction (EPC) and Operation, Maintenance and Monitoring (O&MM) services for all of its solar farms through Solar Power Co., Ltd. (SPC), a wholly owned subsidiary
- The Company expands EPC and O&MM services to external clients, both domestically and internationally through Solar Power Engineering Co., Ltd. (SPE), a wholly owned subsidiary

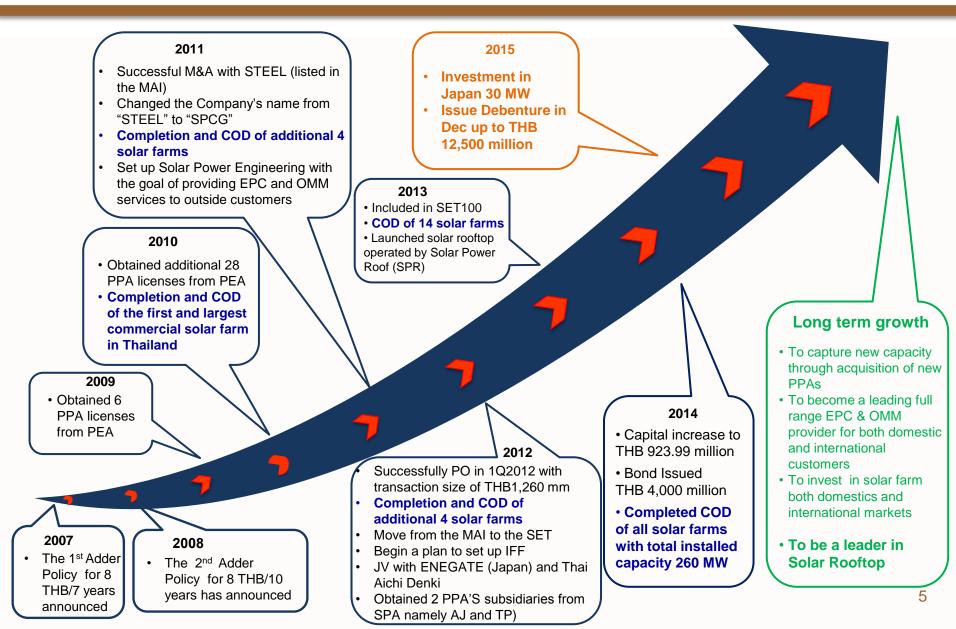


#### Steel Roofing

 Steel and Solar Roof Co., Ltd. (SSR) provides manufacturing, distribution and installation services for steel or metal roofing sheets.

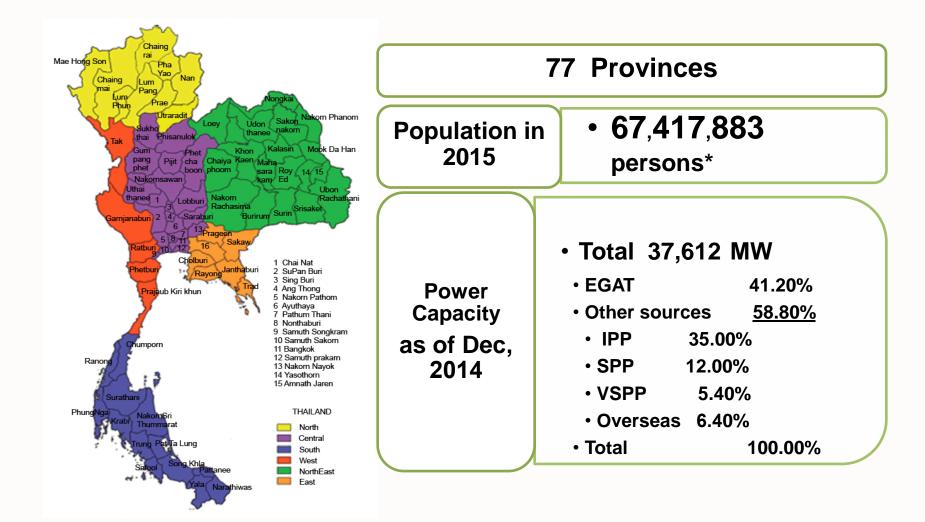


### **Business Overview**





## **Thailand and ASEAN Energy Outlook**



Reference: Electricity Generating Authority of Thailand (EGAT) from www.egat.co.th/index.php?option=com\_content&view=article&id=80&Itemid=116



### Power Development Plan: PDP 2015<sup>1</sup>

Electricity Generating Capacity from 2015 to 2036PDP 2015Total Generating as of ended 201437,612 MW100 %Total Generating as of ended 203670,335 MW100 %

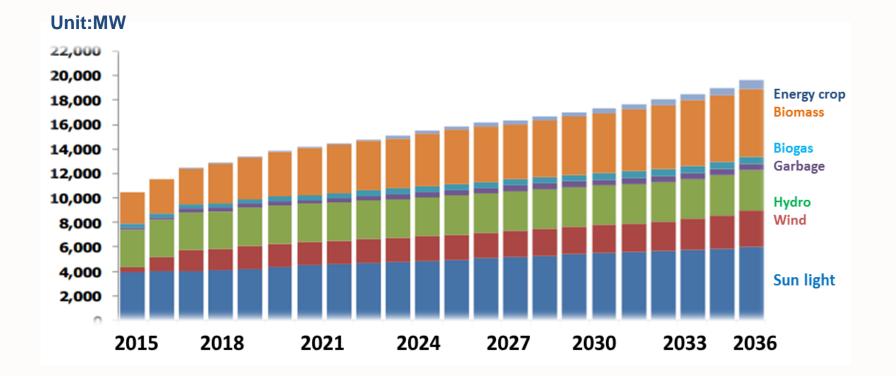
### Alternative Energy Development Plan: AEDP 2015<sup>2</sup>

Туре	Household Garbage	Industria I waste	Biomass	Biogas	Mini Hydro	Large Hydro	Wind	Sun light	Energy Crops	Total	REDP
Actual Capacity in 2014*	65.72	-	2,451.82	311.50	142.01	-	224.47	1,298.51	-	4,494.03	11.94%
Capacity in 2036	500	50	5,570	600	376	2,906.40**	3,002	6,000	680	19,684.40	28%

\* Included off grid power generation but not included large hydropower \*\*Currently installed capacity which large hydro is included in AEDP2015

Reference: 1 Ministry of Energy,30 June 2015. Power Development Plan: PDP 2015 2 Ministry of Energy, Oct 2015. Alternative Energy Development Plan :AEDP 2015 Unit:MW

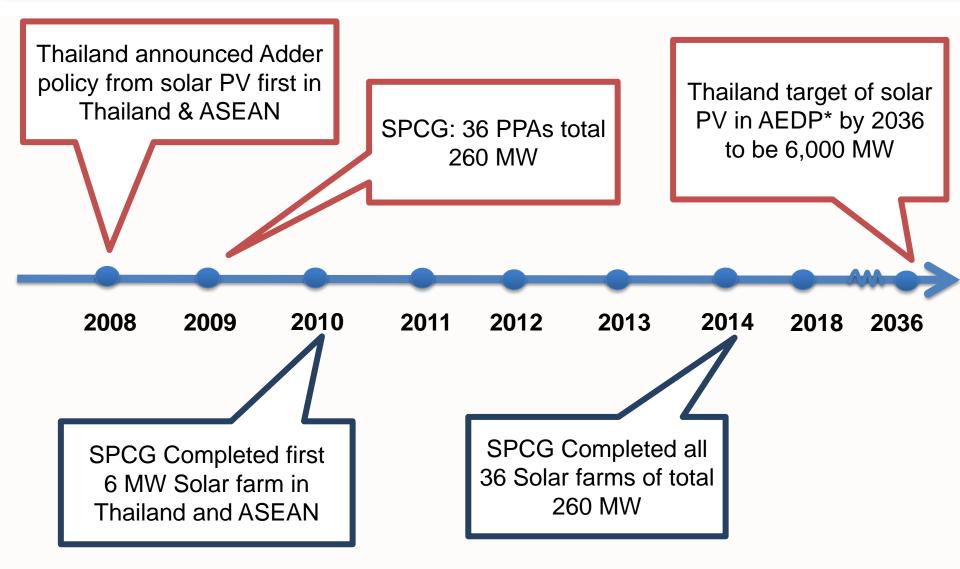




Reference: Ministry of Energy, 22 June 2015. Alternative Energy Development Plan : AEDP 2015



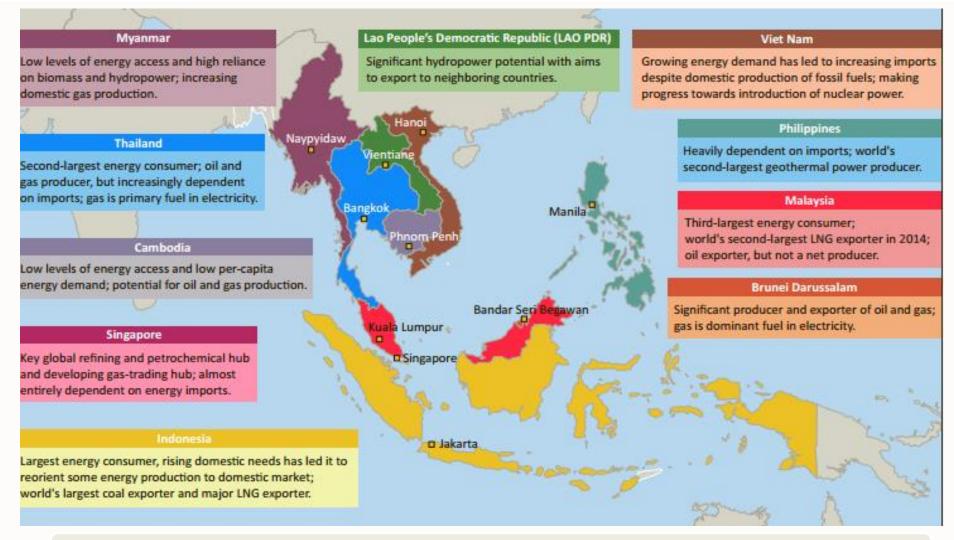
### **Thailand Solar PV Timeline**



\* AEDP = Alternative Energy Development Plan

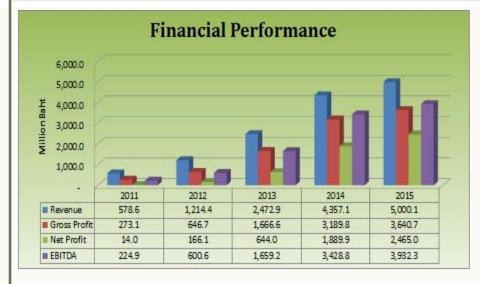


## **Energy overview of Southeast Asia**

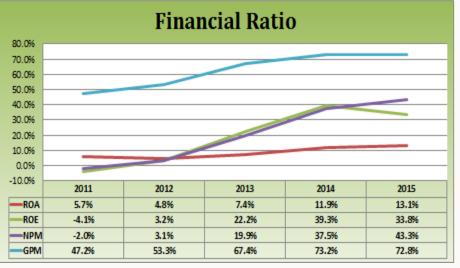


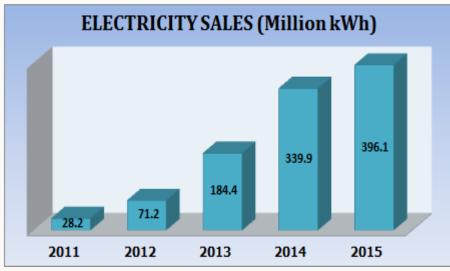
Reference: OECD/International Energy Agency (IEA), 2015 <u>https://www.iea.org/publications/freepublications/publication/WEO2015\_SouthEastAsia.pdf</u>. Paris France

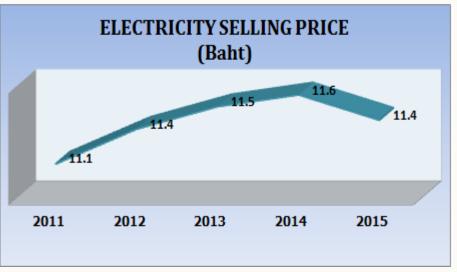
### Financial Highlights For the year ended 31 December 2015

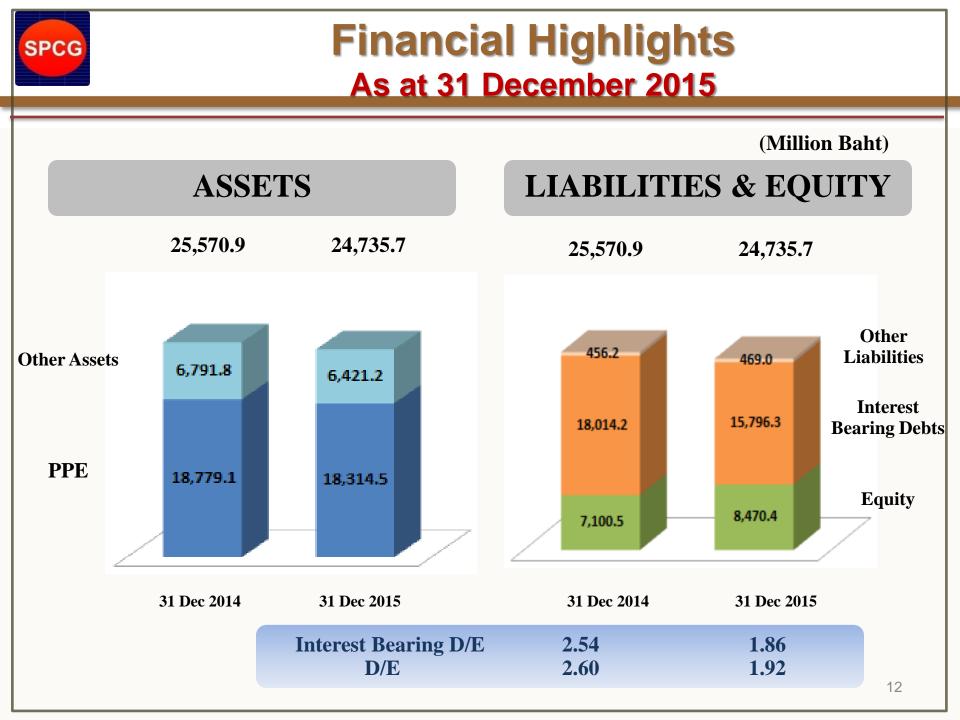


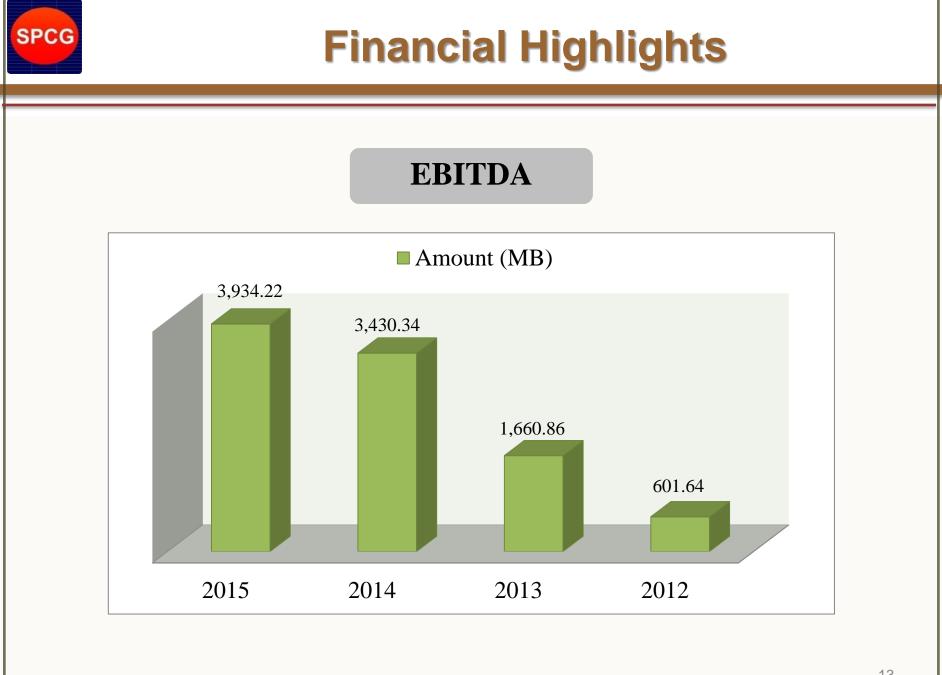
SPCG

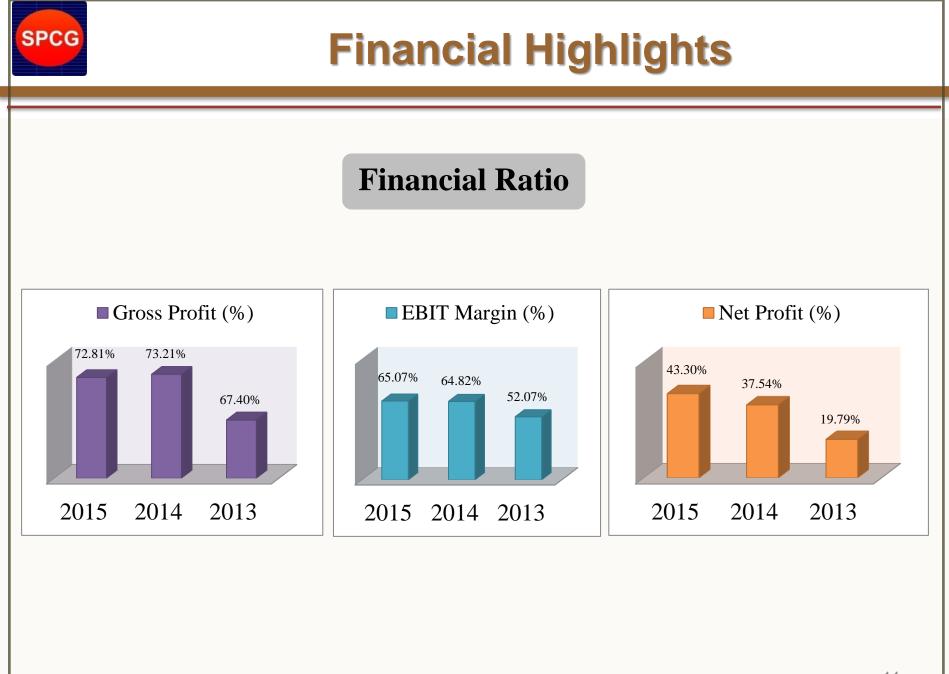














### **Potential Business**

### Solar Farm Investments - both locally and internationally

- SPCG is well positioned to expand our solar farm business:
  - Locally through new PPAs and acquisition of existing PPAs.
  - Internationally (i.e. Myanmar).
- Japan: Opportunity to invest in solar farms in Japan through our strong partnership with Kyocera.
- Myanmar: Opportunity to invest with IFC



#### EPC Business

Participate in the government's community solar farm and solar roof projects such as community solar farms.

#### Solar Roof: SPR & SSR

- SPR and SSR an expert in industrial roofs are working very closely to grow and to become the leader of solar rooftop business in Thailand.
- Potential to win bidding on government project on solar rooftop
- Opportunity on energy shortage and increase in electricity price
- Reduce carbon dioxide emissions



### **Potential Business**





### **SPR Solar Roof**







- Solar Power Roof Company Limited (SPR) is a subsidiary company of SPCG Public Company Limited (SPCG).
- SPR has Registered Capital of THB 400 million.
- SPR is in exclusive partnership with Kyocera Corporation.
- SPR offers one-stop service since survey, design, consultation, installation, after-sale service, monitoring, and documentation work with government authority, in addition of financial support to customer.
- SPR has 3 main segment:
  - o Residential
  - Commercial Residential project
  - Commercial Factory ad industry









- Solar PV Module Price Reduction (ROI  $\cong$  < 8 years)
- Low LCOE (Levelized Cost of Energy)
- BOI Incentive
- Energy Output Guarantee
- Monitoring Service
- SPCG Leasing
- ESCO company













### **Residential**

## Commercial & Industrial

### 1.06 MW

### 4.62 MW















### Frist Solar Farm in Thailand and ASEAN (Korat1,2)

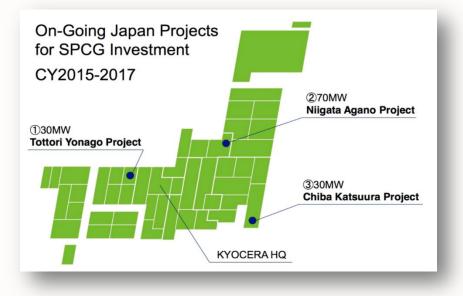




### **Solar Farm**

### Japan

### - Tottori project 30 MW







### **Tottori Project**





## Thailand

- Cooperation solar farm project
- Commercial & Industrial solar rooftop

## • Japan

- Tottori, Yonago for 30 MW
- Myanmar
- Philippines





## Q & A Thank you for your attention





Contact: ir@spcg.co.th Website: www.spcg.co.th



# \*Appendix







Singing ceremony among SPCG Public Company Limited, Kyocera Corporation & Century Tokyo Leasing Corporation on February 9,2016 at Centara Grand at Central Plaza Ladprao Bangkok







Singing ceremony between SPCG Public Company Limited & Thanapat Property Development Company Limited on Feb 4,2016 at Grande Centre Point Hotel Terminal 21







UNFCCC was invited Dr.Wandee Khunchornyakong Juljarern, Chairperson and CEO of SPCG Pcl, to be a panelist on COP21 under theme 'RE-Energising the Future' on Dec 6, 2015 at Palais Brongniart, Paris, France







World Bank was invited Dr.Wandee Khunchornyakong Juljarern,Chairperson and CEO of SPCG Pcl, to be a panelist on "Caring for Climate Business Forum" on Dec 7, 2015 at Paris Le Bourget, Paris, France