



The Leading Solar Farm and Solar Roof Developer in ASEAN



SPCG Public Company Limited

Operating Results of Q1/2016

Opportunity Day – May 24, 2016 @ 603 SET Ratchada



Agenda

Business Overview

Thailand and ASEAN Energy Outlook

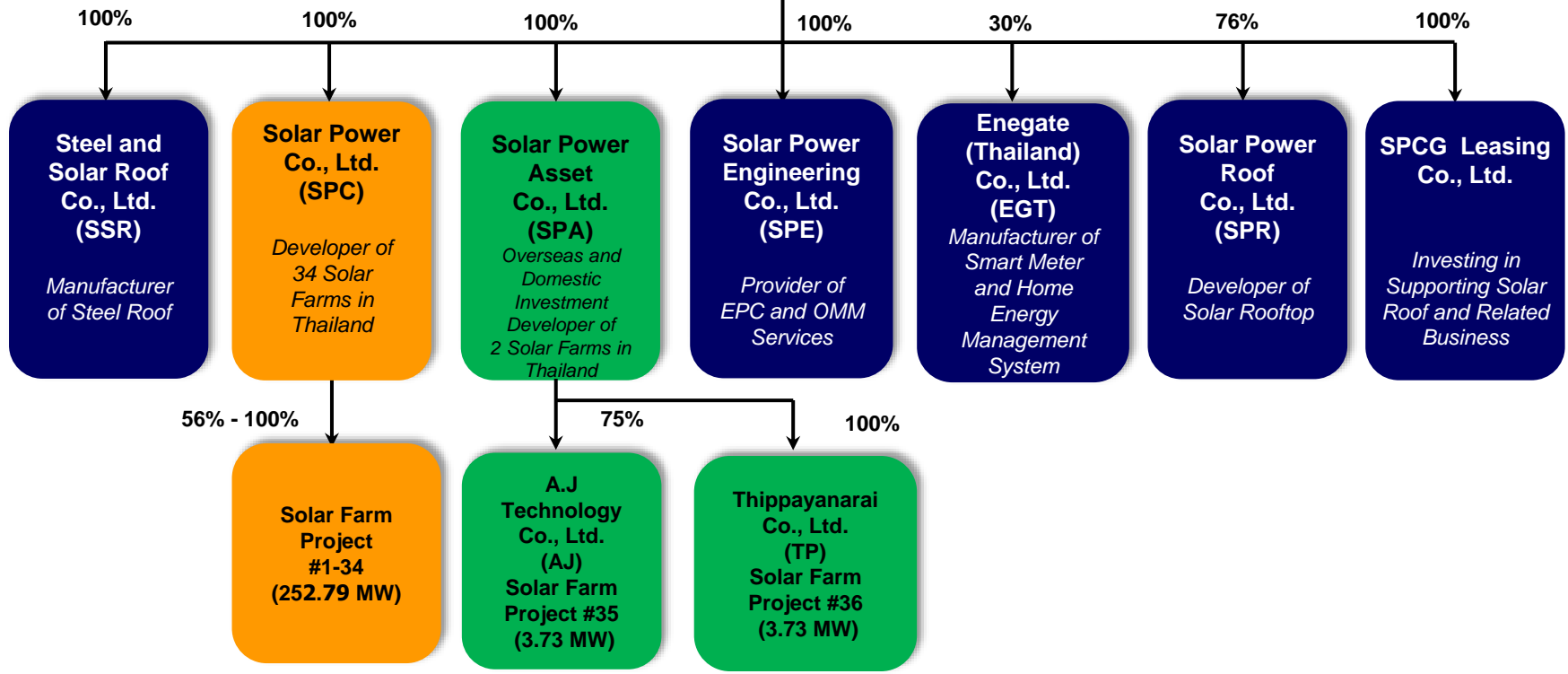
Financial Highlights

Potential Business

Q&A



Business Overview





Business Overview



Solar Farm

- 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



Solar Rooftop

- 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

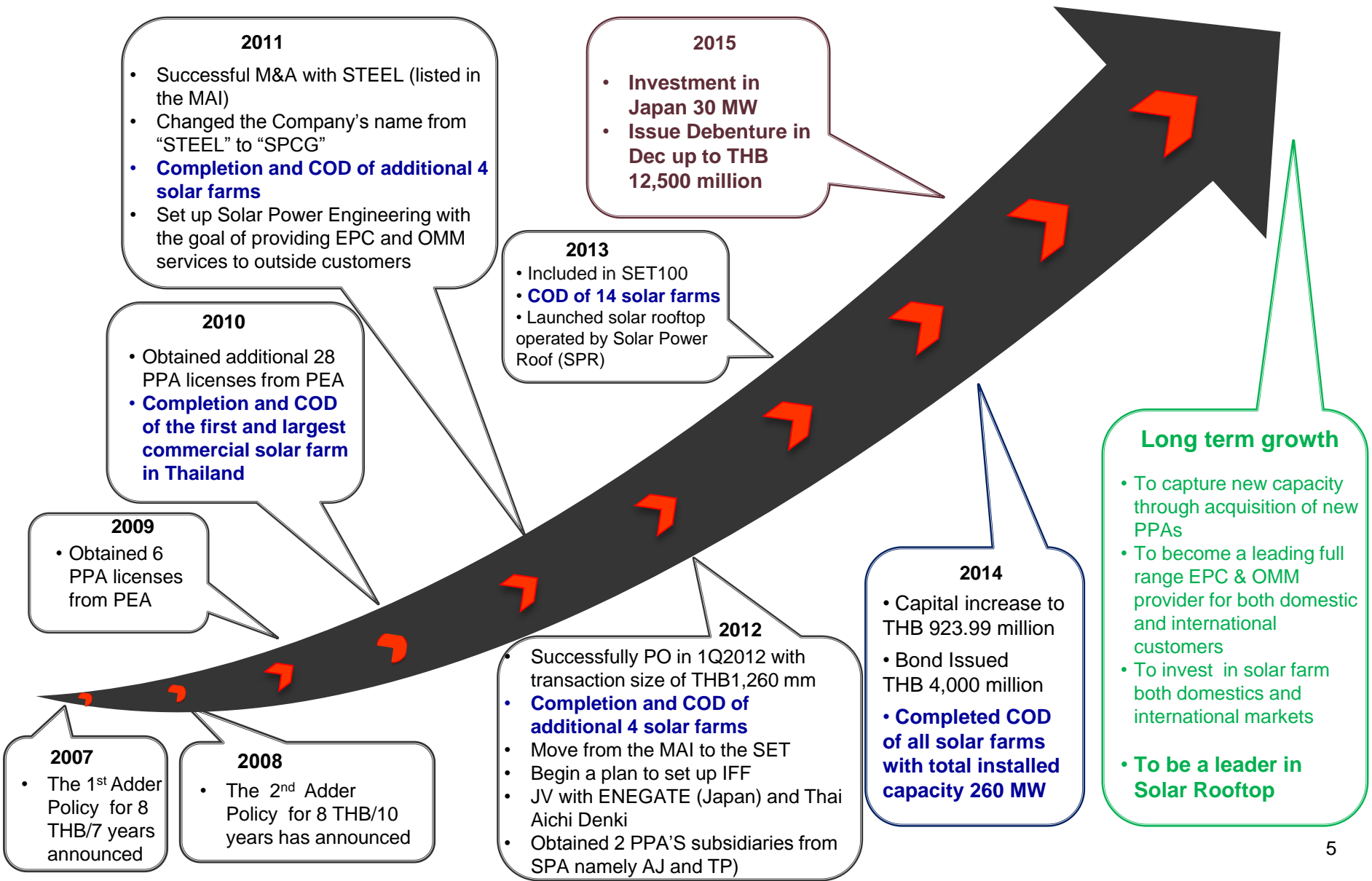


Steel Roofing

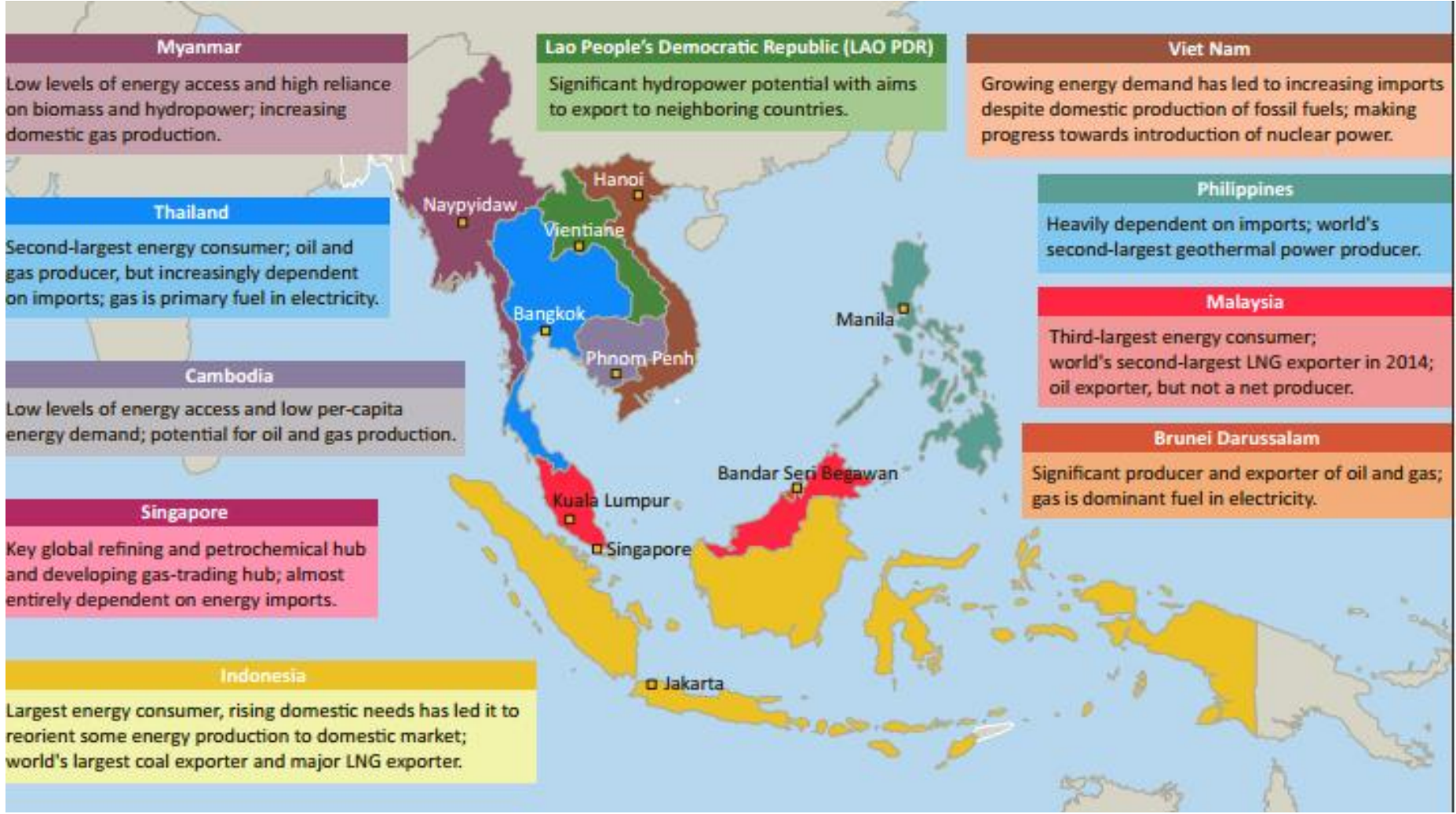
- Steel and Solar Roof Co., Ltd. (SSR) provides manufacturing, distribution and installation services for steel or metal roofing sheets.



Business Overview

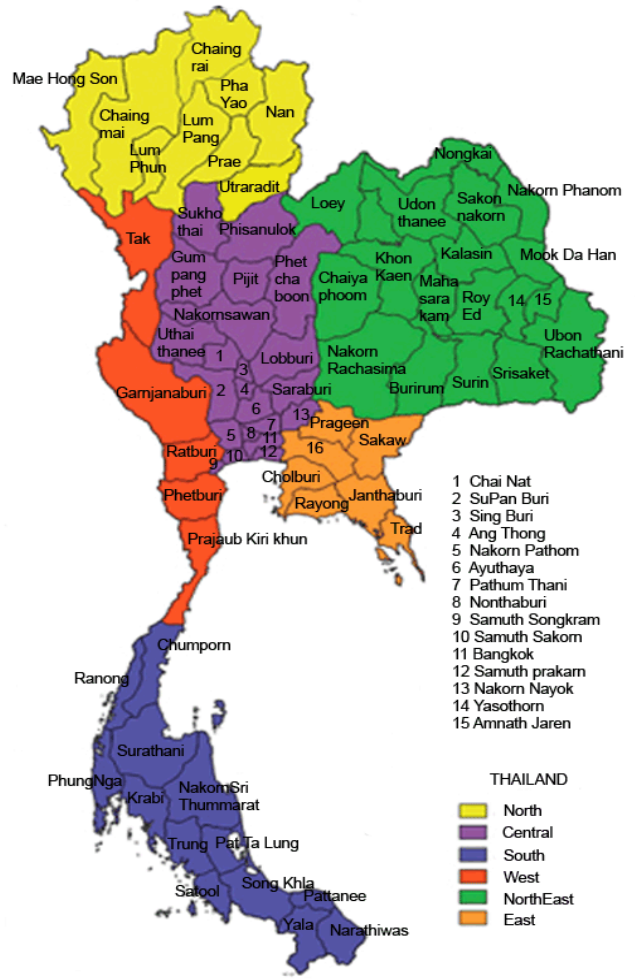


Energy overview of Southeast Asia





Thailand and ASEAN Energy Outlook



77 Provinces

Population in 2015

• **67,417,883** persons*

Power Capacity as of Dec, 2014

- **Total 37,612 MW**
- **EGAT 41.20%**
- **Other sources 58.80%**
 - **IPP 35.00%**
 - **SPP 12.00%**
 - **VSPP 5.40%**
 - **Overseas 6.40%**
- **Total 100.00%**



PDP 2015 and AEDP 2015

Power Development Plan: PDP 2015¹

Unit:MW

Electricity Generating Capacity from 2015 to 2036	PDP 2015
Total Generating as of ended 2014	37,612 MW
Total Generating as of ended 2015	39,756 MW
Total Generating as of ended 2036	70,335 MW

Alternative Energy Development Plan: AEDP 2015²

Type	Household Garbage	Industrial waste	Biomass	Biogas	Small 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	12%
Actual Capacity in 2015	131.68		2,726.60	372.51	172.12	2,906.40	233.90	1,419.58	-	7,962.79	20%
Capacity in 2036	500	50	5,570	600	376	2,906.40	3,002	6,000	680	19,684.40	28%

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

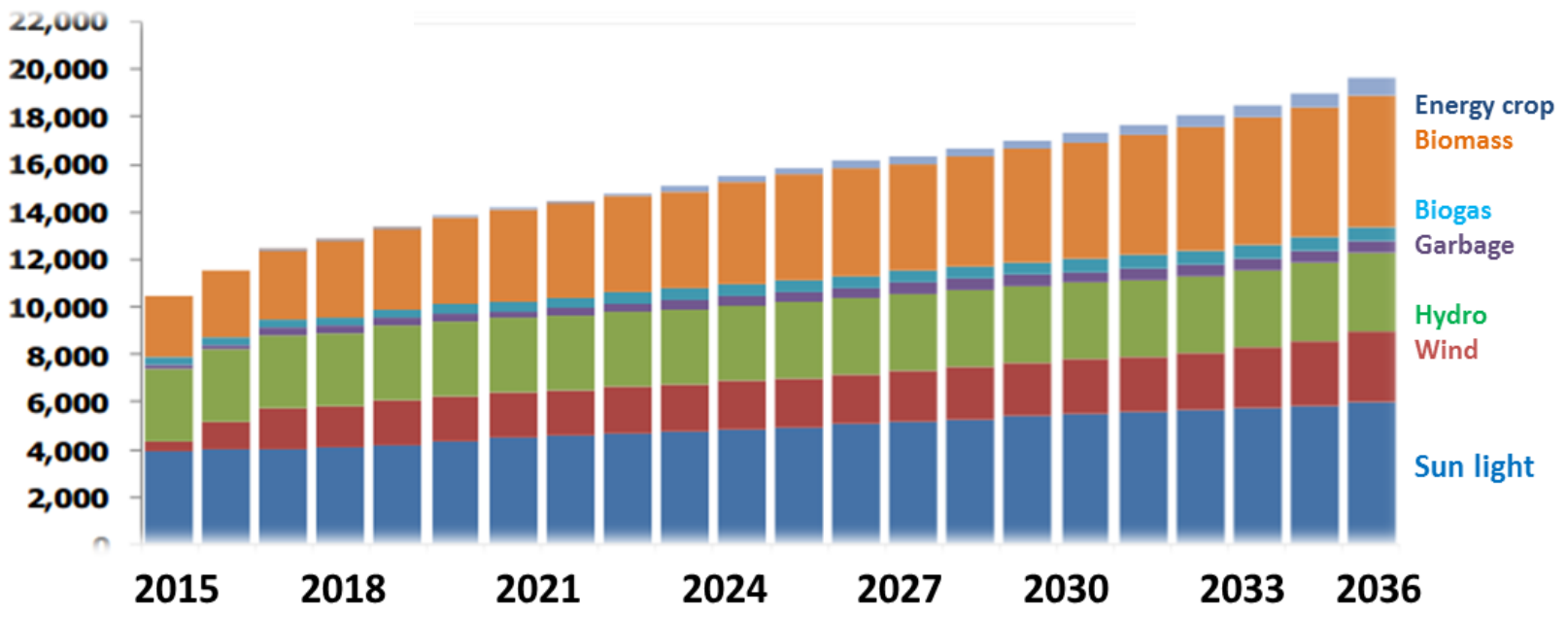
Ministry of Energy 19 April 2016 :www.dede.go.th/download/state_59/consumtion_feb59.pdf



Alternative Energy Development Plan: AEDP 2015



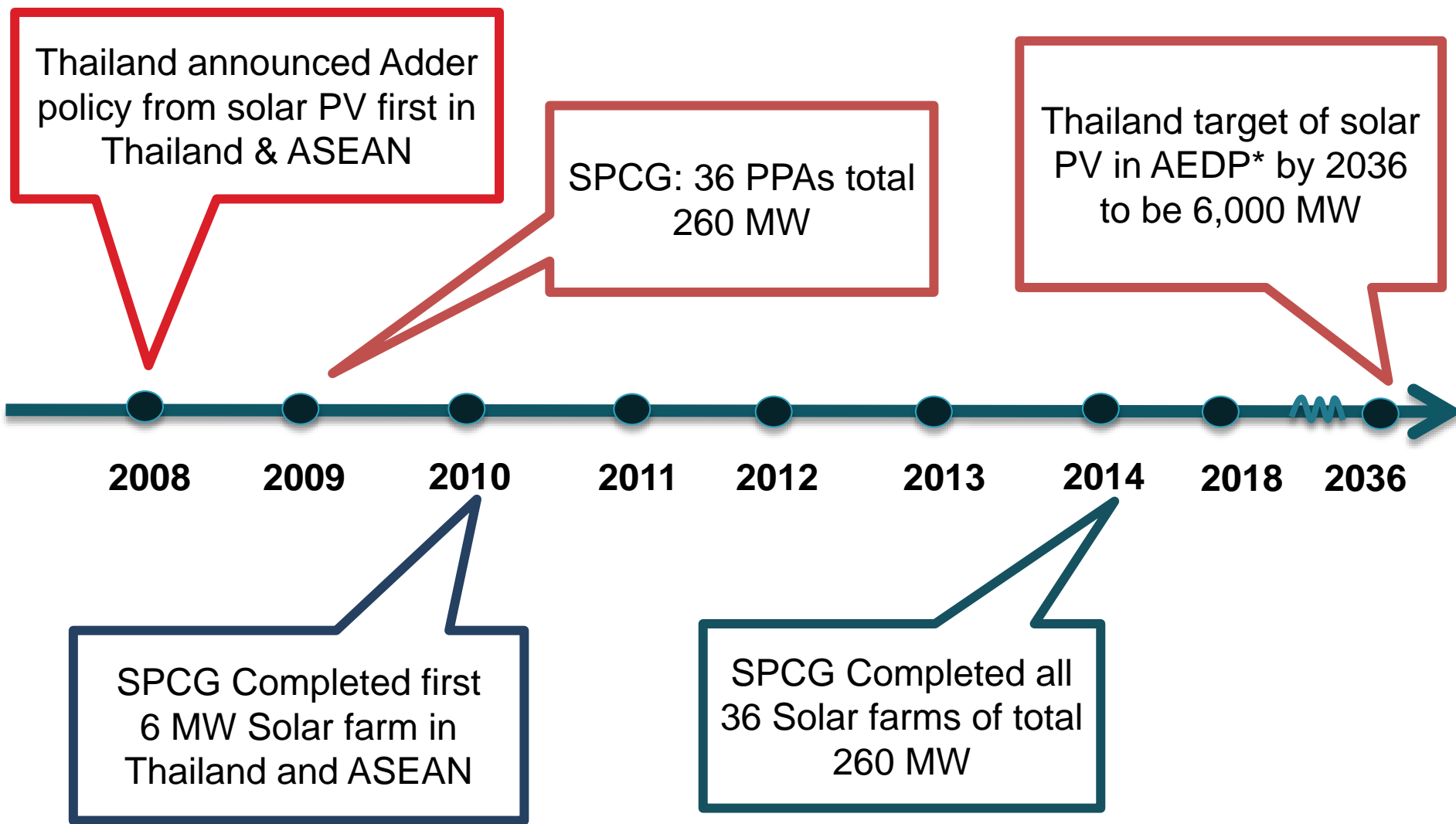
Unit:MW



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



Thailand Solar PV Timeline



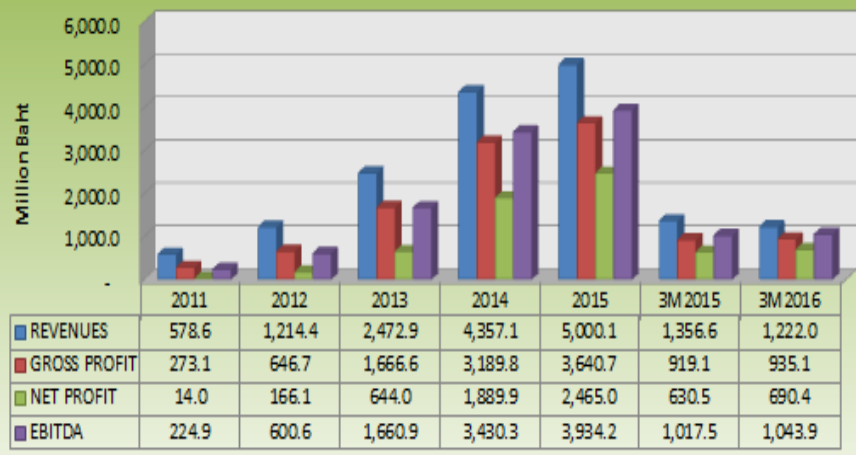
* AEDP = Alternative Energy Development Plan



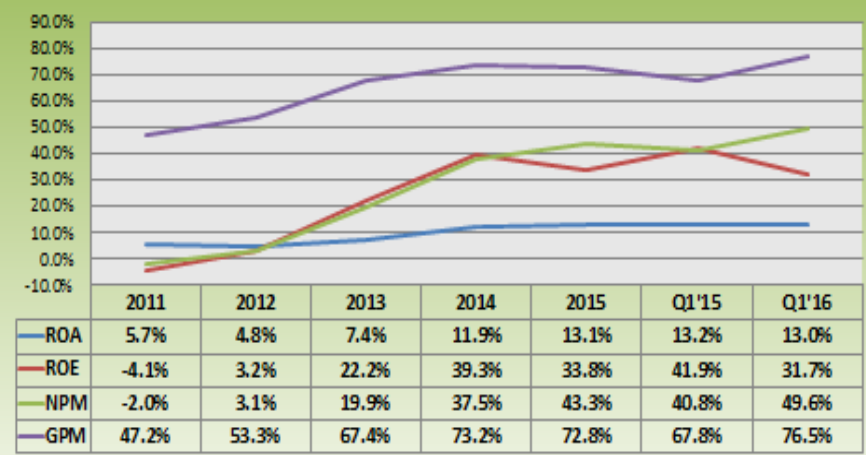
Financial Highlights

For the three-month period ended 31 March 2016

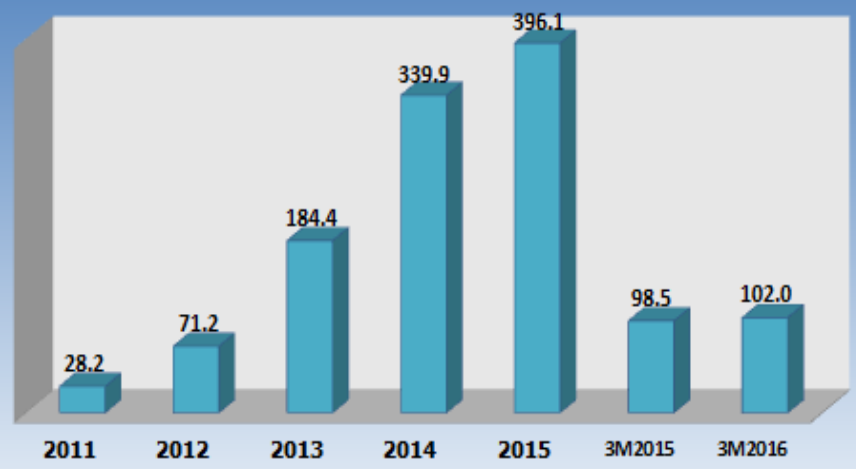
Financial Performance



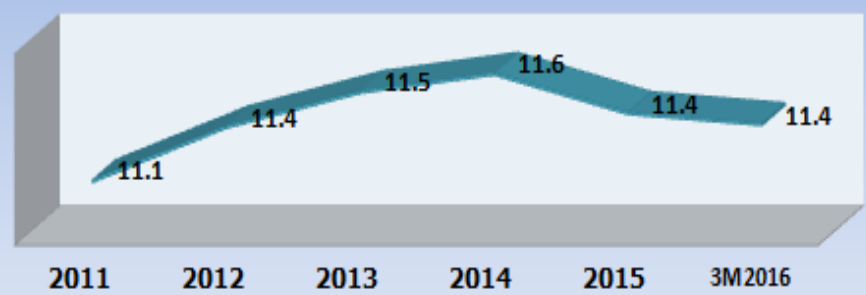
FINANCIAL RATIO



ELECTRICITY SALES (Million kWh)



ELECTRICITY SELLING PRICE (Baht)





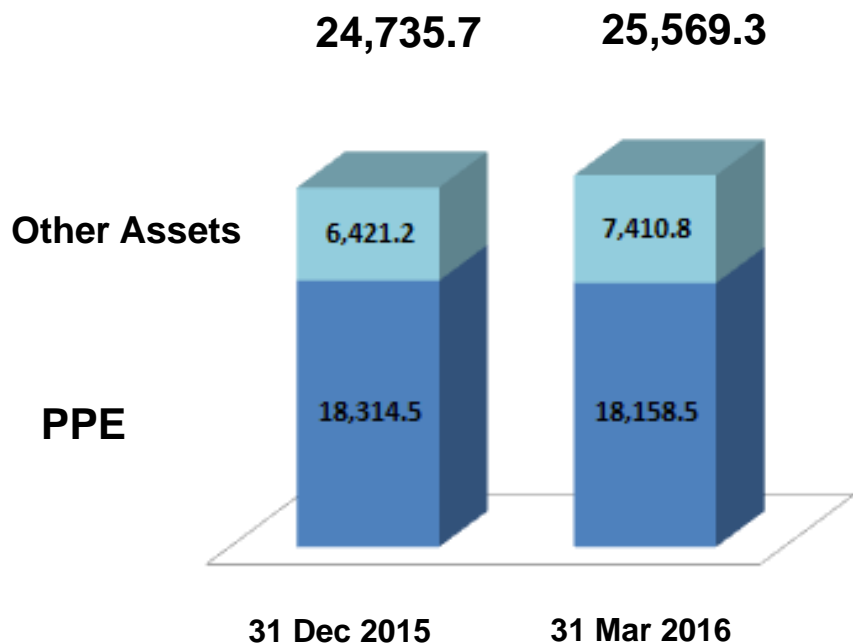
Financial Highlights

FINANCIAL POSITION - CONSOLIDATED

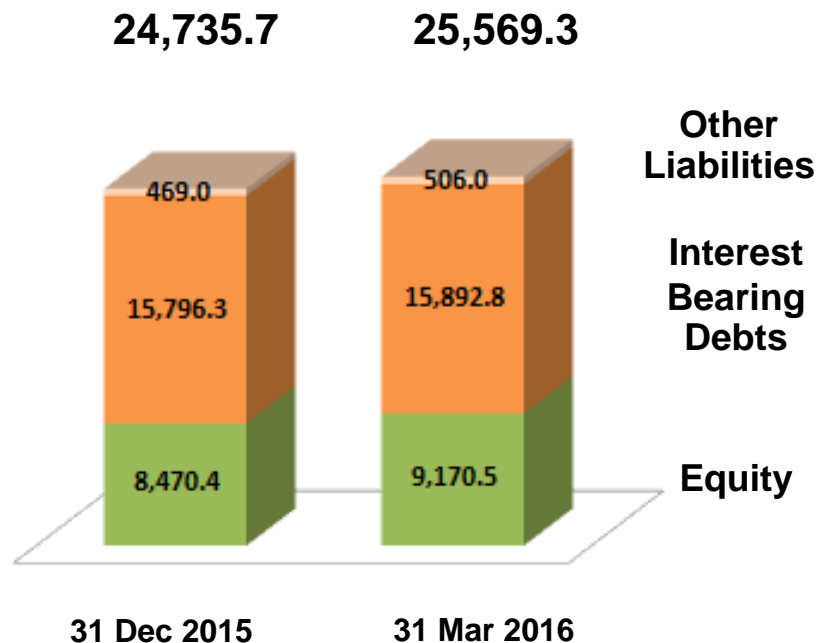
As at 31 March 2016

(Million Baht)

ASSETS



LIABILITIES & EQUITY

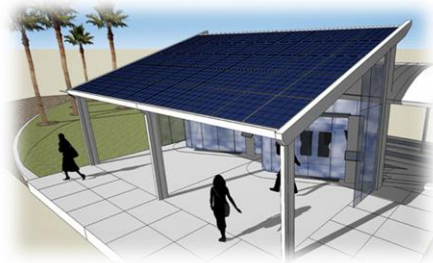


Interest Bearing D/E	1.86	1.73
D/E	1.92	1.79

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



About SPR

- 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 markets:
 - Residential
 - Commercial – Residential project
 - Commercial – Factory and industry





Residential



In partnership with  THE NEW VALUE FRONTIER



Residential





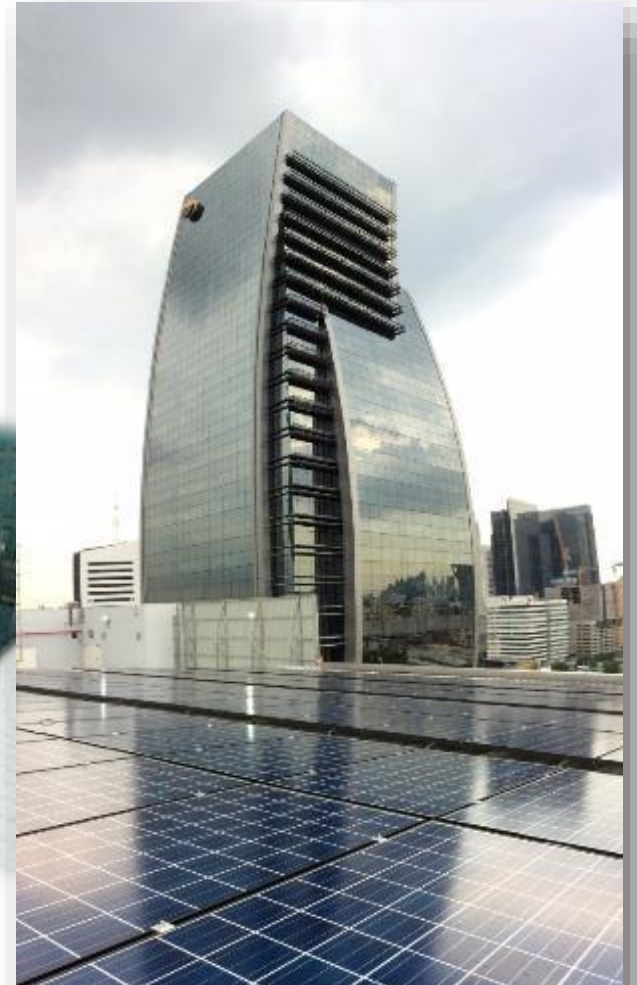
Commercial



Bank of Thailand



Commercial



The Stock Exchange of Thailand



Commercial



HomePro



SPR Solar Roof

The image shows a hand holding a smartphone displaying the SPR Solar Roof app. The app interface includes a status bar at the top with signal strength, Wi-Fi, time (10:19 AM), and battery (100%). Below the status bar, the app title "SPR SOLAR ROOF" and location "Bangkok, Thailand" are displayed. There are four tabs: "Day", "Month", "Year", and "Total", with "Day" selected. A line graph shows power output in kW over a 24-hour period, with a peak of approximately 3.5 kW at 12:00. The x-axis is labeled from 0:00 to 24:00 in 6-hour increments. The y-axis is labeled "Power [kW]" from 0 to 5. Below the graph, it says "Total yield today 20.00 kWh".

สะดวกยิ่งขึ้น

สำหรับลูกค้า SPR ให้ท่านไม่พลาด
ทุกความเคลื่อนไหวของปริมาณไฟได้ทุกที่ทุกเวลา

เพียงลูกค้ามี

NOTEBOOK/PC TABLET SMART PHONE

ANDROID APP ON Google play

Available on the App Store

SMA

ง่ายเพียงปลายนิ้ว



Selling tools

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





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





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





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





Frist Solar Farm in Thailand and ASEAN (Korat 5)





Overseas Investment Plan 2016

- ▶ **Thailand**
 - Commercial & Industrial solar rooftop
- ▶ **Japan**
 - Tottori, Yonago for 30 MW
- ▶ **Myanmar**
 - Partner with IFC
- ▶ **Philippines**

Invitation



**UNFCCC was invited to be a panelist on COP21 under theme
'RE-Energising the Future'
on Dec 6, 2015 at Palais Brongniart, Paris, France**

Invitation



Wandee Khunchornyakong, CEO of Solar Power Company Group is one of the participants in #caring4climate panel #cop21



World Bank was invited to be a panelist on ‘Caring for Climate Business Forum’ on Dec 7, 2015 at Paris Le Bourget, Paris, France

Invitation



Mark Hauptmann, MP Member of the German Parliament invited to be a panelist on German-Asian Business 'Dialogue Innovation: Industry 4.0, Research & Development, Digitalization' in Berlin, Germany in 2016



Q & A

Thank you for your attention



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