



บริษัท โกลบอล เพาเวอร์ ซินเนอร์ยี จำกัด (มหาชน)
Global Power Synergy Public Company Limited



Corporate Presentation

THE INNOVATIVE POWER FLAGSHIP OF PTT GROUP

Finansia Investment Conference 2019

JANUARY 22th, 2019

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Industry Overview

Company Overview

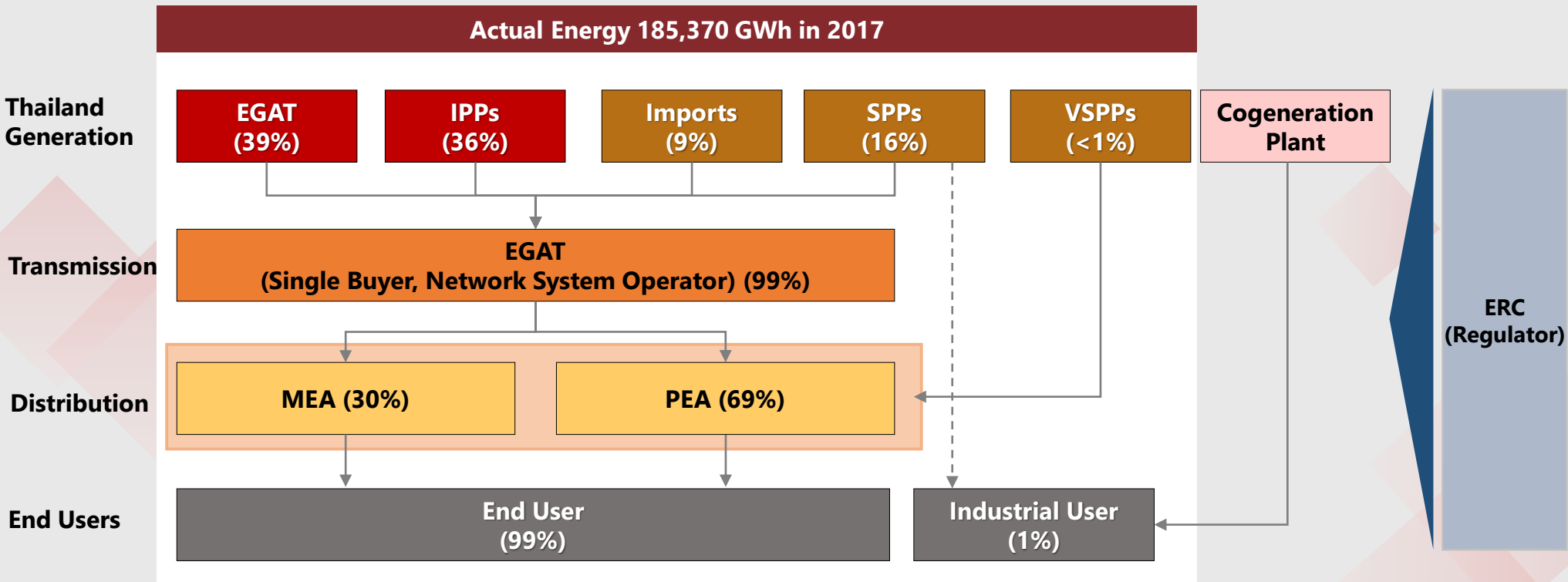
Investment in Affiliates

GPSC's Growth Story

Financial Performance

Current Power Industry Structure in Thailand

- **EGAT and IPPs dominate electricity generation market**, with the combined market share 75%.
- EGAT is the sole purchaser for almost all of the electricity generated, while VSPPs sell electricity directly to the MEA and PEA
- SPPs sell electricity to both EGAT and directly to industrial users



Definition

EGAT	Electricity Generating Authority of Thailand (State-owned entity)
IPP	Independent Power Producers
SPP	Small Power Producers
VSPP	Very Small Power Producers
MEA	Metropolitan Electricity Authority (State-owned entity)
PEA	Provincial Electricity Authority (State-owned entity)
ERC	Energy Regulatory Commission

Power Plant Agreement (PPA) and Revenue Structure

IPP

Independent Power Producer (IPP):

- A larger power producer who has electricity capacity more than 90 MW
- IPPs are obliged to sell their entire output to EGAT

SPP

Small Power Producer (SPP):

- A small power producer who sell their electricity no more than or equal to 90 MW to EGAT

SPP Type

Firm : Contract Term > 5 Years
Non-Firm : Contract Term ≤ 5 Years

- SPPs can sell their electricity and steam to industrial customers located next to the SPP plant

VSPP

Very Small Power Producer (VSPP):

- A very small generator whose power generating process is generated from renewable energy, specific fuels, and energy with no more than 10 MW of electricity capacity
- VSPPs are able to sell power to the Distribution Utility

Availability Payment



Energy Payment



Availability %
x
Availability Payment Rate (APR)



Energy cost regarding % Dispatch to EGAT

EGAT (Power)

Firm	Capacity Payment	+	Energy Payment
Non-Firm	K factor (seasonal weight)	×	Energy Payment

Industrial Customers

Electricity	PEA tariff TOU Rate 4.2*
Steam	Steam Base Cost x (Gas index + CPI index)

Base Tariff



Ft



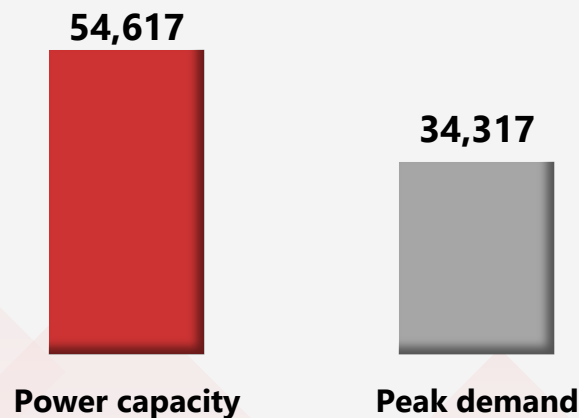
adder

Feed in Tariff

*<https://www.pea.co.th/Documents/Rate2015.pdf>
Reference rate with conditions

Key Summary on Draft of Thailand PDP2018

Thailand Power Statistic as of September 2018



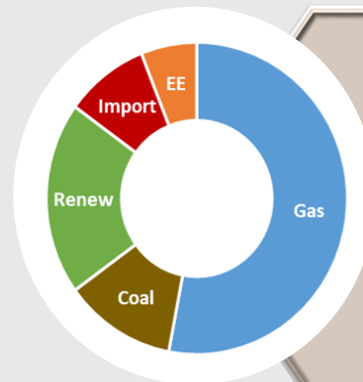
Implication

- Consideration on new demand and reserve capacity by regions will create opportunities for new round IPP bidding. Western region should be the first lot within 2019.
- This PDP revision is possible to adjust due to new AEDP&EEDP, study on smart grid study, energy storage, SPP power pool, private PPA are not finished, therefore the next revision will be launched recent year.



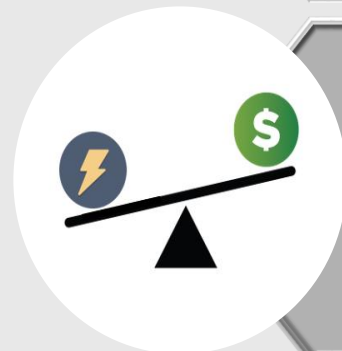
Demand

- System demand is not changed significantly.
- National demand (System demand plus Captive demand (IPS)) will be considered in PDP instead of only System demand as earlier.
- Supply will be considered by Regions.



Fuel mix

- Natural gas returns to be a major roles but Coal is limited.
- Renewable portion is increased especially in Private Solar however, most of all will be moved to mid-end PDP's period.
- Import power is not changed significantly.



Reserve Margin

- Change concept to determine safety margin of power supply, from Dependable capacity to Reliable capacity.
- Criteria of Reliable capacity shall be always higher than System demand

Key Summary on Draft of Thailand PDP2018

Comparison of Energy Generating by Source of Fuel

(Unit: %)

Source of Fuel	PDP 2015 (at 2036)	New PDP (at 2037)
Natural Gas	37	53
Coal / Lignite	23	12
Hydro Power	15	9
Renewable	20	20
Nuclear	5	-
Others	0.1	0.06
Energy efficiency	-	6

Source: Ministry of Energy

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Petroleum Authority of Thailand PLC (PTT), GPSC's parent company : the largest energy conglomerate in Thailand











Upstream

Intermediate

Downstream

Technology & Engineering

Business Area	Company	PTT's Holding (%)	Activities
 E&P	PTTEP	65.29%	Exploration and production
 Coal	PTT Global Management	100%	Coal business
 Gas	Gas Pipeline*	100%	Sole owner/operation of the transmission pipeline
	S&M*	100%	Supply & marketing of natural gas
	GSP*	100%	Extracting hydrocarbon contents in natural gas for petrochemical's feedstock
 Trading	Trading*	100%	Import/Export/Out-out trading of petroleum and petrochemical products
 Oil Marketing	PTTOR**	100%	Retail service stations and commercial marketing
 Petrochemical & Refining	PTTGC	48.73%	Petrochemical flagship
	TOP	49.06%	Refinery flagship
	IRPC	48.05%	Integrated refinery & petrochemical
 Power		22.58%	New S-Curve business of PTT group

As of December 2018

Note: * International trading is Business operated directly by PTT PLC

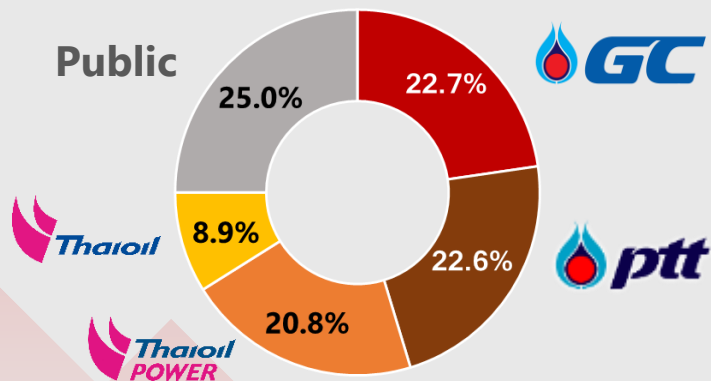
**Transferred asset to PTTOR on July 1, 2018

Source: PTT's Investor Update November 2018



GPSC Innovative Power Company at a Glance

Shareholding Structure



Thai Oil Power is 73.99% held by Thai Oil and 24.01% by PTT
As of 16 November 2018

Company Information

Head Office	555/2 Energy Complex Building B, 5th Floor, Vibhadi-Rangsit Road, Chatuchak, Bangkok
Business Type	Energy & Utilities
Registered Capital (Fully Paid)	THB 14,983 million
Market Cap (As of 17 January 2019)	THB 82,407 million

By Year of 2020, total Committed Generating Capacity Electricity 1,955 MWe, Steam 1,585 T/H



COMBINED CYCLE / COGENERATION

Electricity 1,550 MW
Steam 1,585 T/H
Industrial Water 2,080 Cu.m./H
Chilled Water 12,000 RT



RENEWABLE ENERGY

Electricity 58 MW



HYDROELECTRIC

Electricity 347 MW



OTHER BUSINESSES

24M Technologies, Inc. (USA)
Business Service Alliance Co., Ltd.

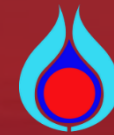
Remark: Capacity includes projects under construction

GPSC Customers' Profiles



LONG TERM OFF TAKE CONTRACTS

- ✓ Guaranteed market and source of revenue
- ✓ Guarantee a minimum level of profit in regards to their investment
- ✓ Price adjustment formula, varying with fuel price



49% Power Flagship of PTT Group



42% EGAT



9% Industrial Users

GPSC's Business Portfolio : 11 Affiliates in 4 Countries

Combined Cycle / Cogeneration

Sriracha Power Plant (IPP)

100%

- Electricity: 700 MW
- Industrial water: 80 Cu.m./h



Rayong Power Plant (SPP Non-firm)

100%

CUP 1-3

- Electricity: 339 MW
- Steam: 1,340 T/h
- Industrial water: 2,000 Cu.m./h



CUP 3 Expansion (SCOD in Mar 2019)

- Electricity: 15 MW

Rayong Expansion - CUP 4 (SCOD in Q3/2019)

- Electricity: 45 MW
- Steam: 70 T/h

IRPC Clean Power (SPP Firm)

51%

Total

- Electricity: 240 MW
- Steam: 300 T/h



Phase 1

- Electricity: 45 MW
- Steam: 170 T/h

Phase 2 (COD in Nov 2017)

- Electricity: 195 MW
- Steam: 130 T/h

Combined Heat and Power Producing (VSPP)

100%

- Electricity: 5 MW
- Chilled water: 12,000 RT



Nava Nakorn Electricity Generation (SPP Firm)

30%

- Electricity: 125 MW
- Steam: 30 T/h



Expansion Phase (SCOD in 2020)

- Electricity: 60 MW
- Steam: 10 T/h

Bangpa-in Cogeneration (SPP Firm)

25%

Phase 1

- Electricity: 117 MW
- Steam: 20 T/h

Phase 2 (COD in June 2017)

- Electricity: 117 MW
- Steam: 20 T/h



Ratchaburi Power (IPP)

15%

- Electricity: 1,400 MW



Renewable Energy

Thai Solar Renewable (VSPP)

40%

- Electricity: 80 MW



Ichinoseki Solar Power

99%

(COD in Dec 2017)

- Electricity: 20.8 MW



CHPP Solar Cooperatives (VSPP)

100%

- Electricity: 5 MW



Hydroelectric

Xayaburi Power (IPP)

25%

(SCOD in October 2019)

- Electricity: 1,285 MW



Nam Lik 1 Power

40%

(SCOD in Q3/2019)

- Electricity: 65 MW



Other Businesses

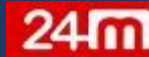
Business Service Alliance

25%



24M Technologies

18%



Project under construction Project COD in 2017

GPSC Strategic Direction and Growth Strategy



The global leading innovative and sustainable power company



Operation Excellence

- Maximize Core Business
- Manage Invested companies



3 Growth Engines

- Growth along with PTT Group
- International
- Renewable



New S-curve

- Battery
- Energy Storage System Integrator
- Energy Management Solution Provider

Digitalization – Improve internal work process to operation excellence

Sustainability – DJSI, OEMS, ESG, Customer Oriented

Finance - Support growth with competitive cost of debt

Human Resource & Corporate Value - People development and Drive GPSC "IT'S POWER" Culture



GPSC Electricity Growth Pipeline

Electricity Equity (MWe)

4,766
+76.5% CAGR by 2020



Future Growth

Growth along with PTT

- ERU Project (250 MW; expected to COD in Sep/23)
- Business expansion together with PTT Group

International Power Project

- Myanmar; Both small & large power plants are under study
- New opportunities in others countries

Renewable

- Explore new opportunities of renewable plant in scheme of adder & FIT programs
- Explore and focus more to international opportunities in coming year

Battery and System Integrator

- Explore marketing strategy to commercialize battery package
- Expand ESS business to Non-PTT Group by using past-record information from past projects

+2,811

Inorganic Growth

Operating Solar Project

- 39.5 MW
- Expected to complete in Q1/19

Glow Energy PLC.

- 2,771 MW (exclude SPP1)
- Expected to complete in Q2/19

1,955

+425

Under Construction Projects

COD in 2019

- CUP3 expansion (Steam Turbine Generator): 15 MW
- XPCL Hydro Power Plant: 321 MW
- NL1PC Hydro Power Plant: 26 MW
- Rayong Power Plant Expansion (CUP4) : 45 MW + 70 T/h

COD in 2020

- NNEG Expansion: 18 MW + 3 T/h

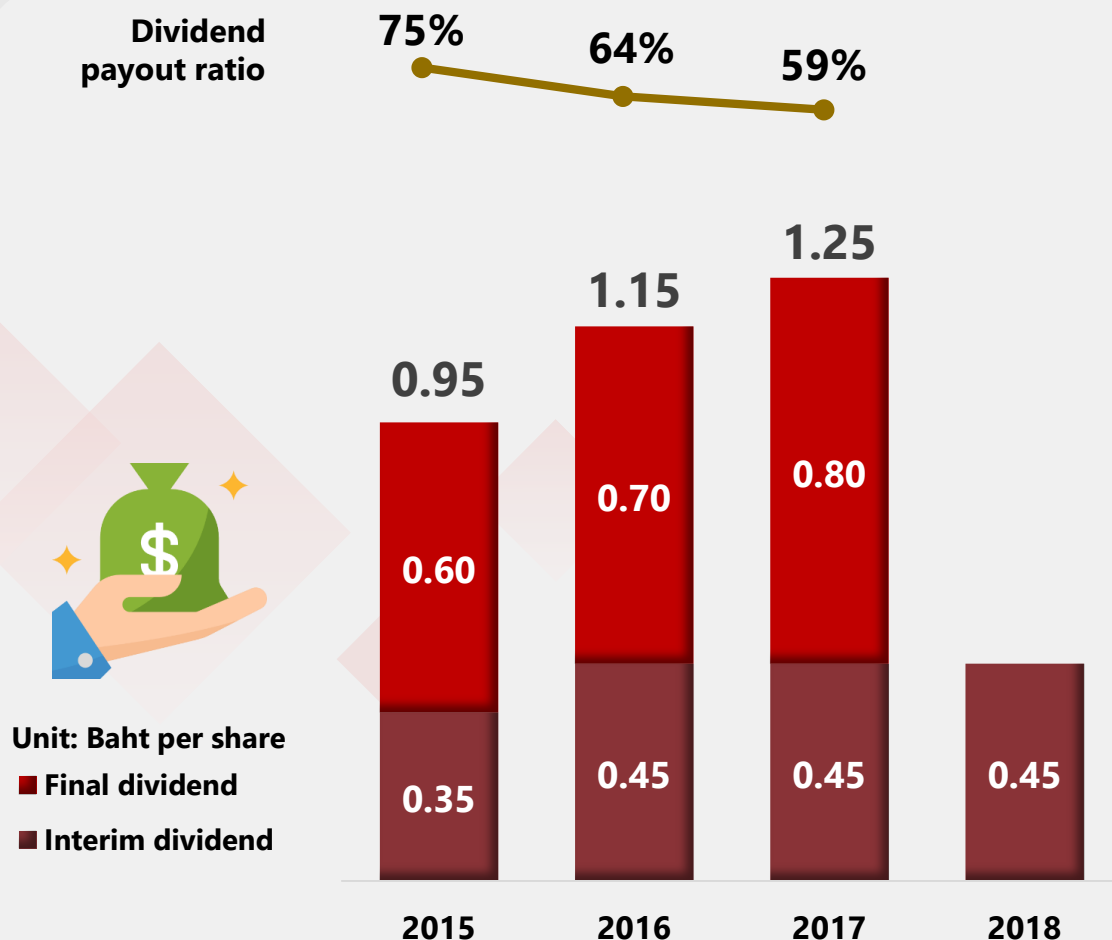
1,530



Current Capacity

Electricity 1,530 MW
Steam 1,512 T/H
Industrial Water 2,080 Cu.m./H
Chilled Water 12,000 RT

2018 Interim Dividend Payout Ratio



- **Interim dividend for 1H/2018 performance at the rate of Baht 0.45 per share** or approximately 34% of the net profit of consolidated financial statements
- **Dividend Policy :**
Minimum of 30% of net income according to a financial statement, after deductions of tax, reserve capital requirement (with additional conditions)

Remark: *Dividend yield calculated from accumulated dividend declared amounts for the last 12 months/Stock closing price on the period end date

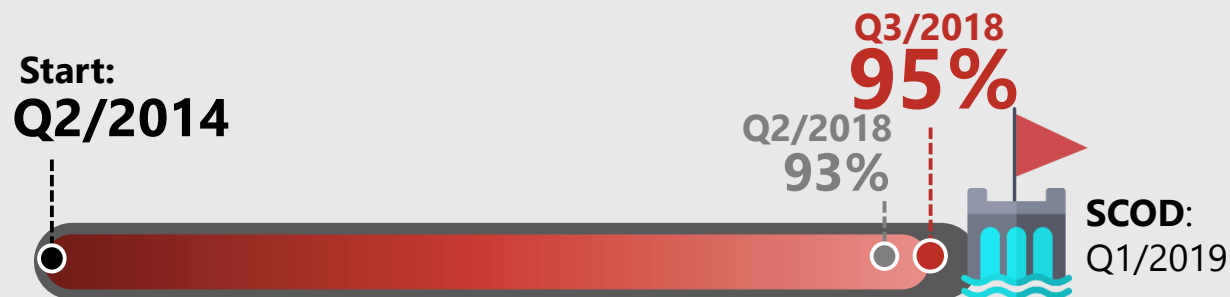
Industry Overview

Company Overview

Investment in Affiliates

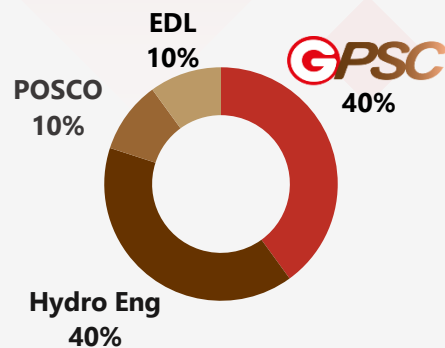
GPSC's Growth Story

Financial Performance



Type:	Run-of-River Hydropower
Electricity:	64.7 MW
Customer:	Electricity: EDL 63.8 MW (30 years PPA)

Shareholding:

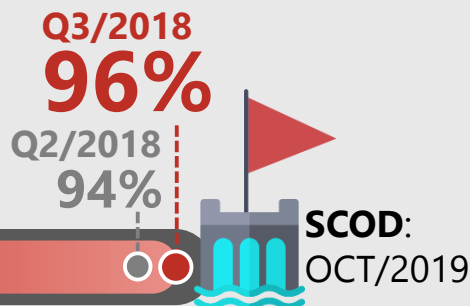


Progress update:

- As of 30 September 2018, the construction progress as appraised by technical advisor was at 95%.
- The main activities such as turbine and equipment installation in Powerhouse, and submit documents to the government are in the process.

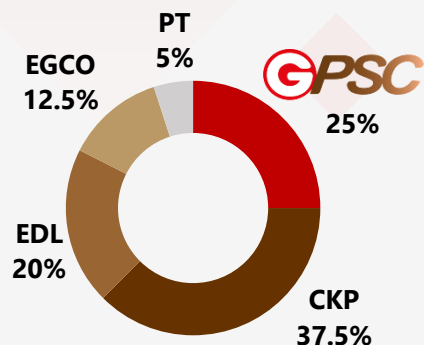


Start:
Q1/2012



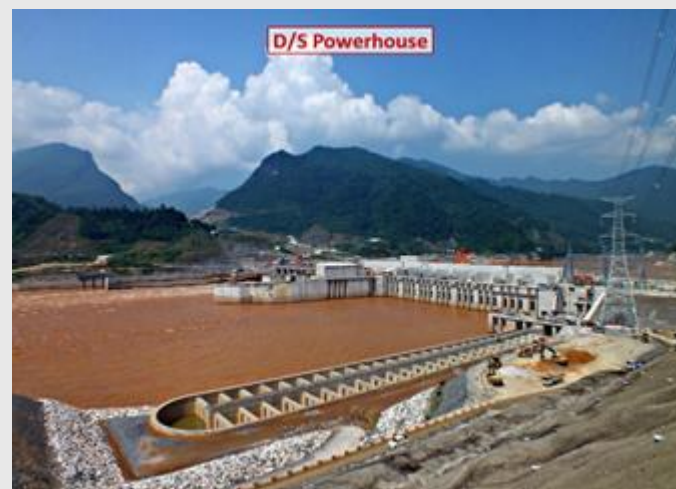
Type:	Run-of-River Hydropower
Electricity:	1,285 MW
Customer:	Electricity: EGAT 1,220 MW, EDL 60 MW

Shareholding:



Progress update:

- As of 30 September 2018, the construction progress was at 96% , appraised by of Lao PDR's technical advisor.
- Main tasks : power house, intermediate block fish ladder and 500 kV transmission line was in progress.





Central Utility Plant 4 : CUP4 (Thailand)



Type: Gas-fired Cogeneration

Electricity: 45 MW

Steam: 70 T/h

Customer:

- PTT Group
- Non-PTT Group
- EGAT

Shareholding:



Progress update:

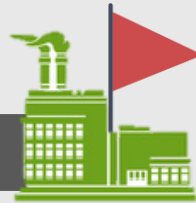
- The project is in the stage of design of connecting CUP-4 to CUP-3 exiting operating system.
- End of Q3/2018, engineering design progress is about 80% and site office construction and infrastructure of 10%.



Nava Nakorn Electricity Generation (NNEG) Expansion Project



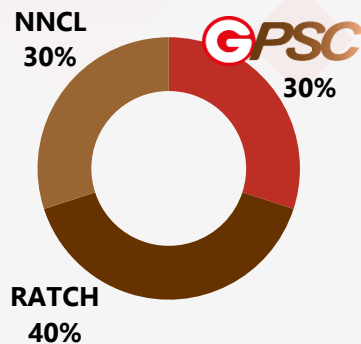
Start:
Q3/2018



SCOD:
Q3/2020

Type:	Gas-fired cogeneration
Electricity:	60 MW
Steam:	10 T/h
Customer:	• Non-PTT Group

Shareholding:



Progress update:

As of Q3/2018,

- EPC contractor has been awarded
- Kick off meeting between NNEG, technical engineer and EPC has been finished
- EPC got notice to proceed and already accessed to the site to start fence installation



Industry Overview

Company Overview

Investment in Affiliates

GPSC's Growth Story

Financial Performance



Acquisition Transaction

Global Renewable Power Company Limited

Transaction Overview

Transaction Structure

- GPSC has entered into SPA to acquire 100% shares from Brookfield Renewable Partners
- The operating solar power plant of 3 companies (NPS Star Group Co., Ltd., World X Change Asia Co., Ltd., and PP Solar Ltd.) together with long term PPA with off-taker PEA, total capacity of 39.5 MW
- Terra Form Operating (Thailand) Co., Ltd., that provide operation and maintenance service for solar power plants.

Transaction size

- Total value of the transaction is 3,070 MTHB which divided into the share purchasing for 2,325 MTHB and the loan from the original shareholders for 745 MTHB.

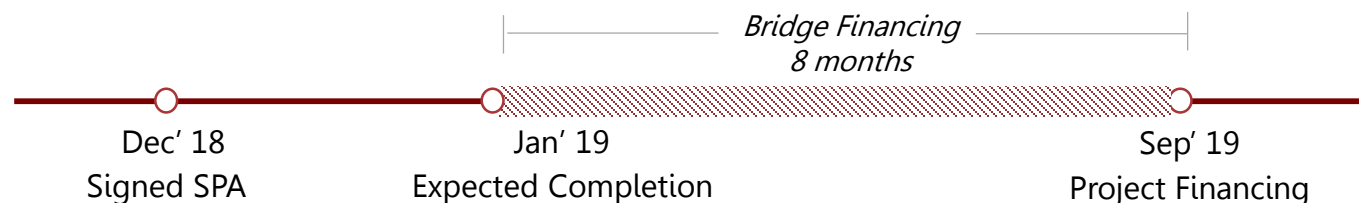
Condition Precedent

- ERC approval

Acquisition Funding

- 70% bridge and shareholder loans

Tentative timeline



GLOW Energy PLC.

Transaction Overview

Transaction Structure

- Global Power Synergy PLC (GPSC) to acquire Glow Energy PLC (GLOW) in 2 steps
 - Initial acquisition: Acquire shares (directly and indirectly) of Glow from Engie Global Developments B.V, major shareholders of GLOW, 69.11%
 - Tender Offer: Subsequently trigger mandatory tender offer for remaining shares, 30.89%

Transaction size

- Not more than THB 140 bn for total equity value

Condition Precedent

- GPSC's EGM's approval with 75% supporting votes
- ERC approval

Acquisition Funding

- 100% bridge financing (tenor 12 month), with possible of bond/debt instruments and equity take-out plan

GLOW Acquisition: Rationales

1 Rare & Sizable Growth Opportunity

- **GPSC (post-merger) will rank #3 Power Producer** with total committed capacity of 4,751 equity MW
- Larger portfolio with higher stability and credibility

2 Highly Focused on SPP

- **GPSC will become #1 SPP** in contracted capacity equity capacity of 2,177 MW
- Favorable conditions to have renewal of SPP contracts

3 High Performance Organization with Strong Cash Flow

- **Strong historical and forecasted operating performance** with immediate cashflow generation

Why?

5 Strategic Move as PTT Flagship to become major power generation player in Thailand

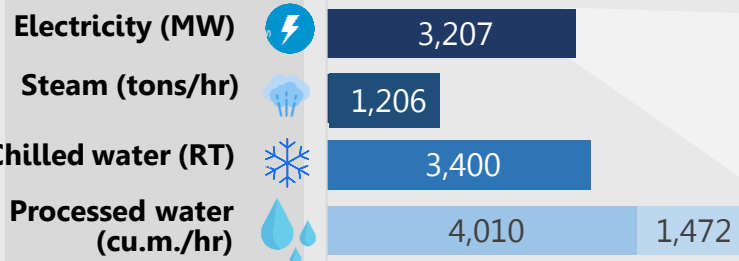
- GPSC Growth Strategy to expand customers in Maptaphut area and add other IU customers

4 Potential Synergies and Diversification

- Enhanced **Reliability, Availability, Efficiency, and cost savings** from Integrated Power & Steam Distribution Network, Load Management, and Spare Part Management
- Diversified customers, power plant profile, and source of fuel

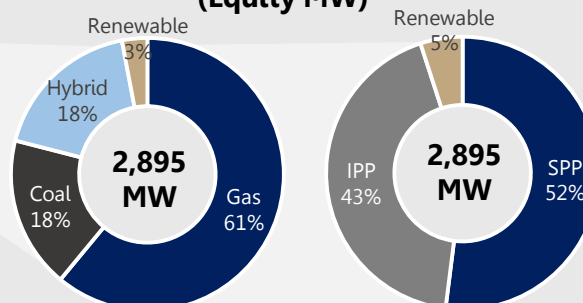
GLOW is a major power producer in Thailand

Glow Production Portfolio

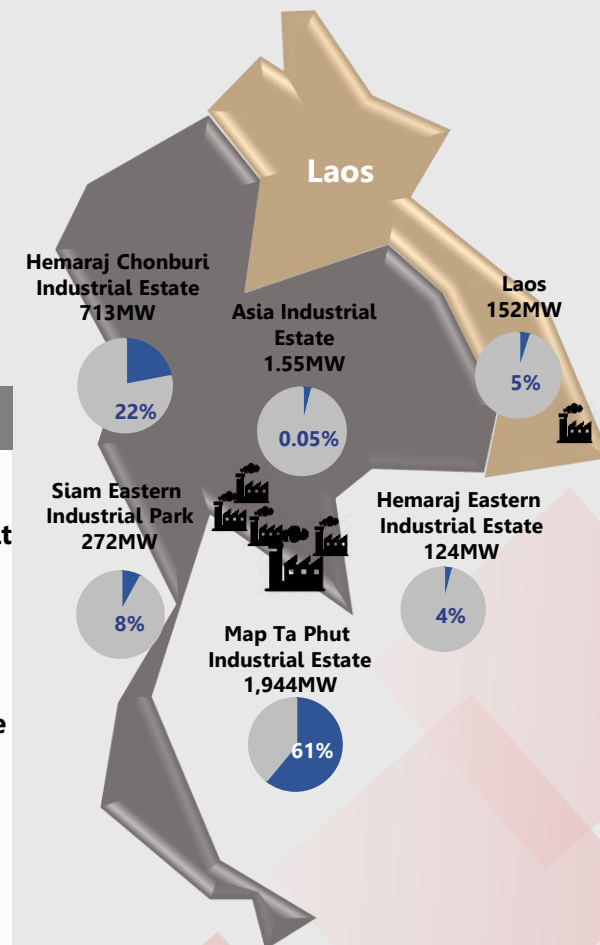


Electricity Generation Capacity

(Equity MW)



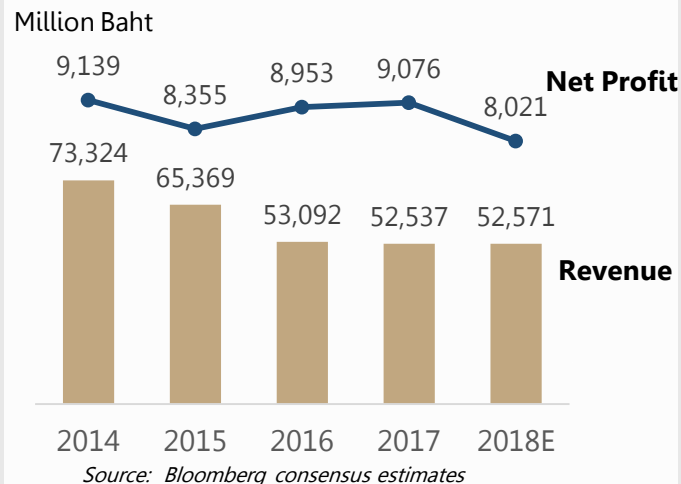
Diverse Area of Power Plant



About GLOW

Type of business	Generate and supply of electricity, steam and water for industrial use and electricity to Electricity Generating Authority of Thailand (EGAT)
Registered Capital	14,828,650,350 Baht
Paid-up Capital	14,628,650,350 Baht
Market Capitalization	130,194,988,115 Baht 3,969,359,394 USD*

Revenue and Net Profit



Potential Synergies and Diversification (1/3)

The Combination of 2 High Performance Companies



High performance organization

Growth Organization

High margin SPP firm contract

Power Flagship of PTT

Lower cost of fuel (coal)

Opportunities for new investments

High Experienced Operator- SPP Pioneer

Strong Business Development team

Better Electricity and Steam Demand Management

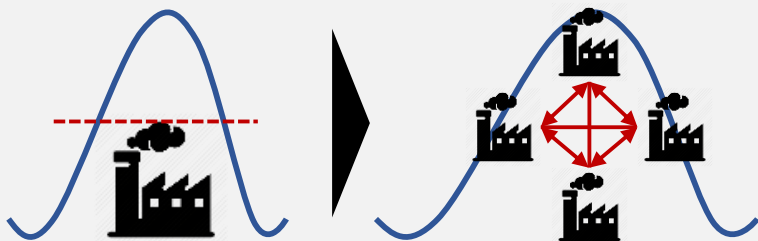
Spare Part Management (shared spare parts among plants reduce cost of spare part)

SG&A Saving, Operating & Maintenance Saving (+ -250 MB per year)

Potential Synergies and Diversification (2/3)

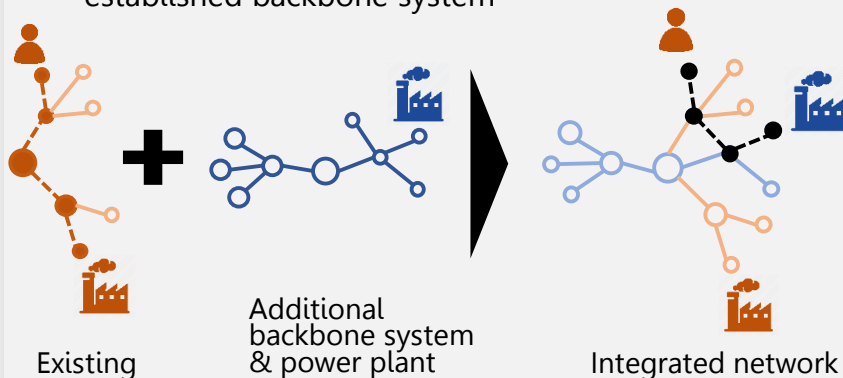
Higher Reliability

- Better Load Management (shifting loads between plants)



Higher Availability

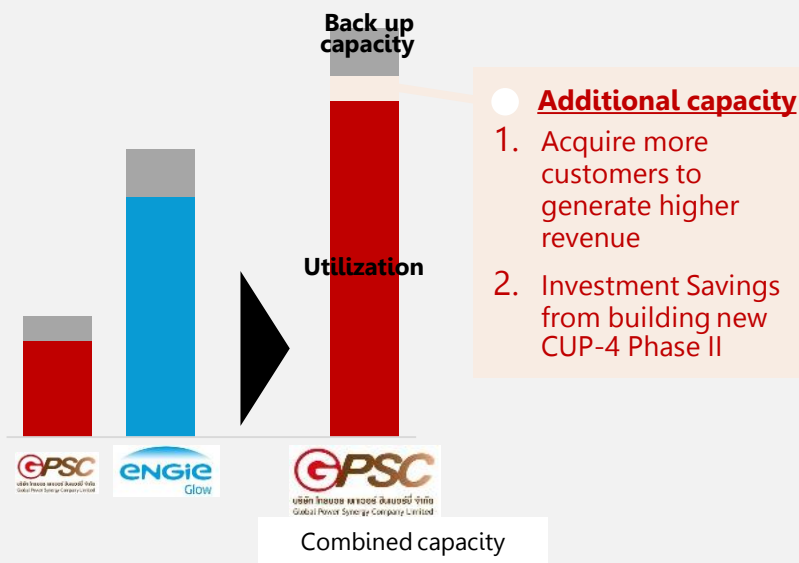
- More integrated power plant network under a well-established backbone system



Integrated combined power plant network within the same area enables GPSC to achieve better operating performance

Higher Efficiency

- Capacity Sharing
- Heat rate improvement and transmission loss reduction



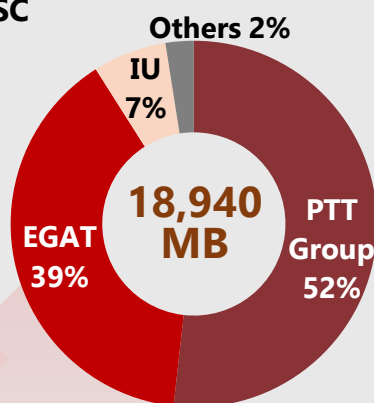
Potential Synergies and Diversification (3/3)

Volume sales by customer 9M 2018

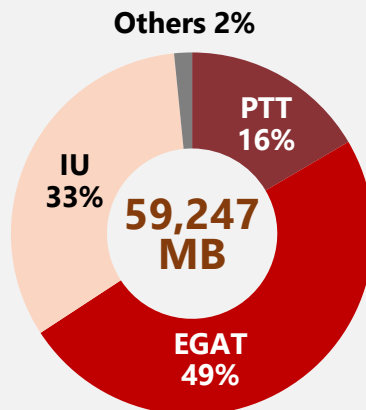
(MB)

(Post-merger)

GPSC



GPSC+GLOW

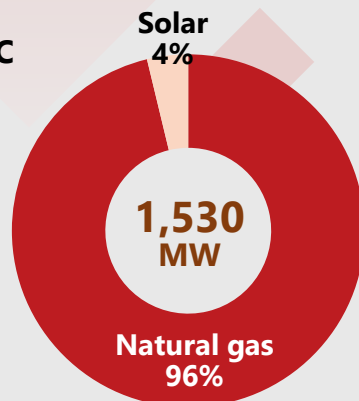


GPSC will **diversify customer profile from rely mainly on PTT Group customers to have more proportion of EGAT and IU customers.** This is in line with GPSC's growth strategy to acquire more IU customers in Thailand.

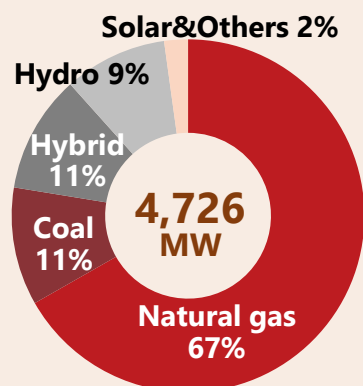
Portfolio by source of fuel

(MW)

GPSC



GPSC+GLOW



GPSC's **source of fuel will be more diversified and less focus on Natural gas.** As a result, cost of fuel will be less volatile from change in natural gas price.

Note: Volume sales based on current operation

Capacity 4,726 MW based on after merger and start COD all project in pipeline (without Global renewable Power and ERU Project)

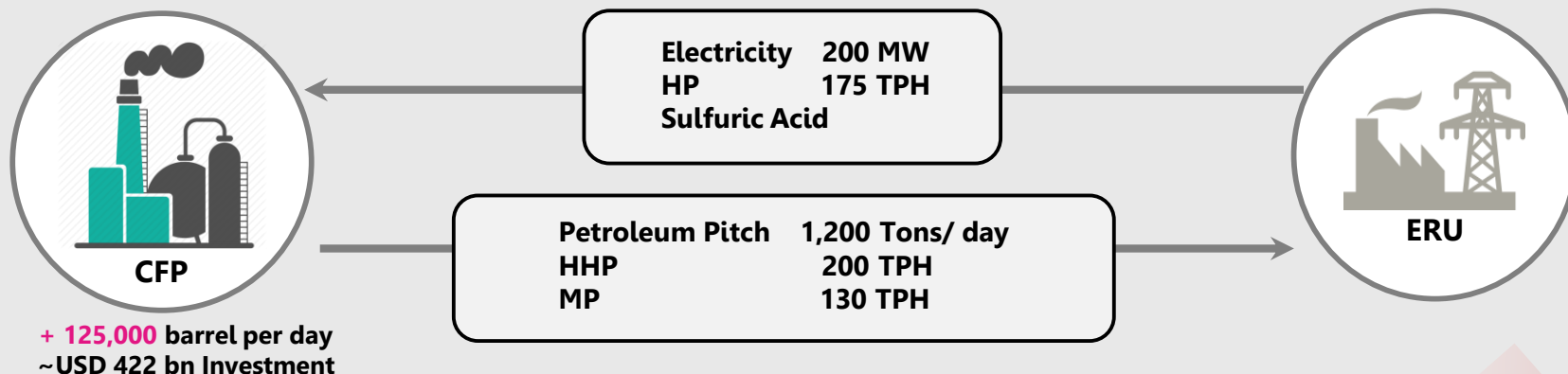


ERU Project Update

ERU as a power and steam supporting unit of CFP Project

Project Description	<ul style="list-style-type: none">• The CFP project will improve effectiveness in the production process by means of increasing crude distillation units which are capable of refining heavy crude oil and decreasing the raw material procurement cost.• The CFP project will also capable of transforming fuel oil and bitumen into jet fuel and diesel.
Location	Near Laem Chabang Port
Investment Cost	Approximately USD 757 mm
Construction Period	4 – 5 years
SCOD	Q2 / 2023
Electricity Demand	200 MW
Steam Demand	175 T/H

CFP as a product off-taker of all electricity and steam produced by ERU



Investment



- ~ Total investment cost of USD 757 mm *(inclusive of 10% contingency)*
- Milestone payment of 20 – 30% of total investment cost during construction
- Remaining amount will be paid by GPSC at Closing Date (after PAC)

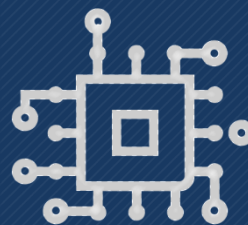
COD



- ERU COD : Q1 2023
- Target PAC*: Q3 2023

**PAC: Provisional Acceptance Certification of CPF*

Technology



- Main feedstock: Petroleum Pitch**
- Process unit of ERU**

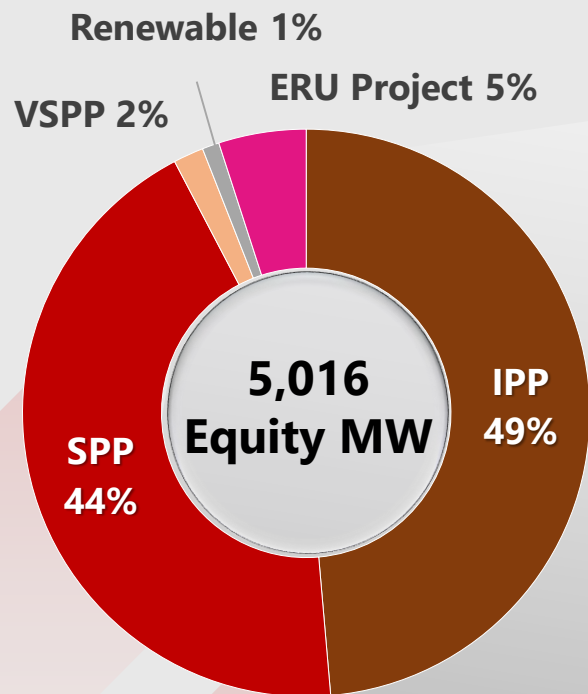
Main Equipment	# installed unit
1. Pitch Solidification	6 units
2. CFB boiler	3 units
3. STG and Condenser	2 units
4. Flue gas treating (Sox, Nox, dust)	3 units
5. Deaerator and BFW preheating System	2 units

GPSC's Post-Mergers Business Portfolio

Contract Type	Power Plants	GPSC's share %	Total Installed Capacity (MW)	Equity Capacity (MWe)	Equity in Operation (MWe)
IPP	Sriracha Power Plant	100%	700	700	700
	Ratchaburi Power	15%	1,400	210	210
	Xayaburi Power	25%	1,285	321	-
	Glow IPP*	95%	713	677	677
	GHECO-One*	65%	660	429	429
	Huay Ho*	67%	152	102	102
	Total IPP		4,910	2,439	2,118
SPP	IRPC Clean Power	51%	240	122	122
	Nava Nakorn Electricity Generation	30%	185	56	38
	Bangpa-in Cogeneration Phase 1-2	25%	234	59	59
	Rayong Power Plant (CUP1-3)	100%	354	354	339
	Rayong Power Plant (CUP4)	100%	45	45	-
	Cogeneration Business of GLOW*	100%	1,556	1,556	1,556
	Total SPP		2,614	2,192	2,114
VSPP	Combined Heat and Power Producing	100%	5	5	5
	CHPP Solar Cooperatives	100%	5	5	5
	Thai Solar Renewable	40%	80	32	32
	Global Renewable Power**	100%	40	40	40
	Glow Energy Solar*	100%	2	2	2
	Chonburi Clean Energy*	33.33%	8	3	-
	Total VSPP		140	87	84
Renewable Energy	Ichinoseki Solar Power	99%	21	20	20
	Nam Lik 1 Power	40%	65	26	-
	C&I Rooftop Solar*	100%	2	2	-
	Total Renewable Energy		88	48	20
Others	ERU Project	100%	250	250	250
	Total		7,987	5,016	4,586

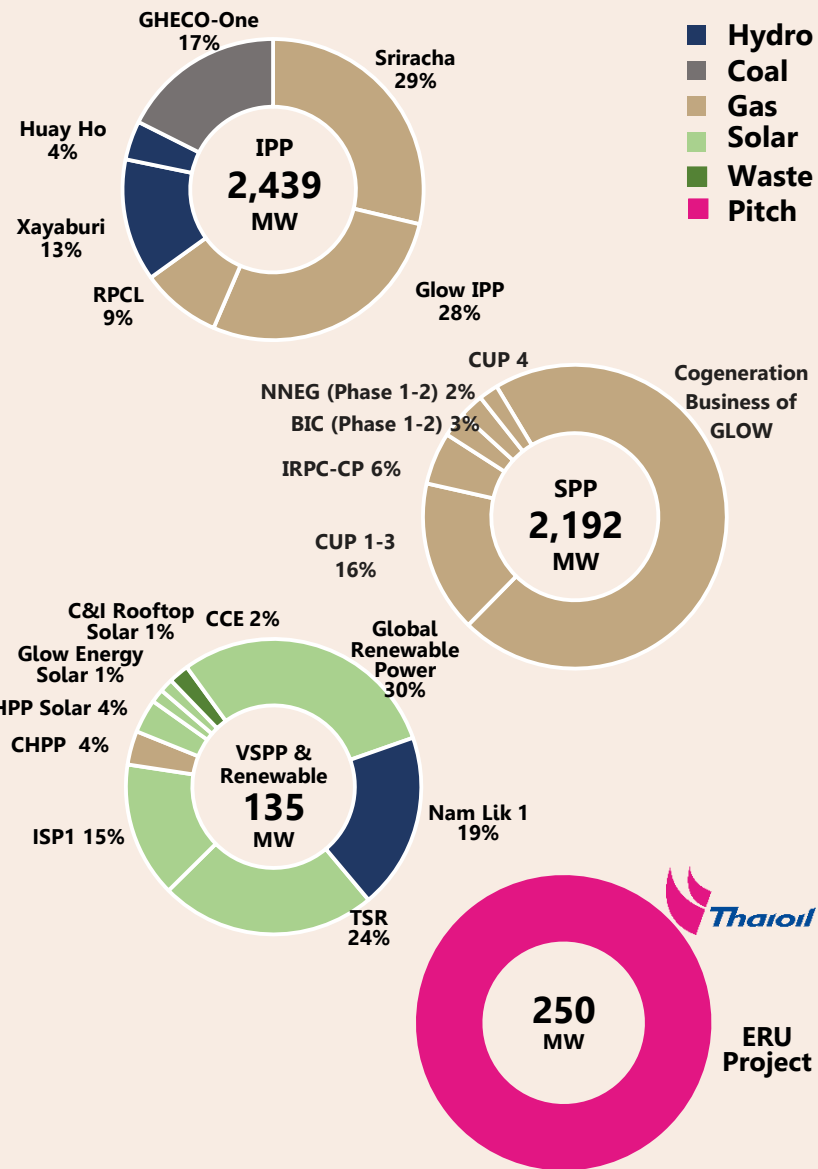
Remark: * = Asset of GLOW Energy
 ** = Asset of Global Renewable Power

GPSC's Post-Mergers Business Portfolio



Power Plants	Total Installed Capacity (MW)	Equity Capacity (MW)	Equity in Operation (MW)
IPP	4,910	2,439	2,118
SPP	2,599	2,192	2,114
VSPP	140	87	84
Renewable Energy	88	48	20
ERU Project	250	250	250
Total	7,987	5,016	4,586

Note: MW in pie chart is Equity MW



Industry Overview

Company Overview

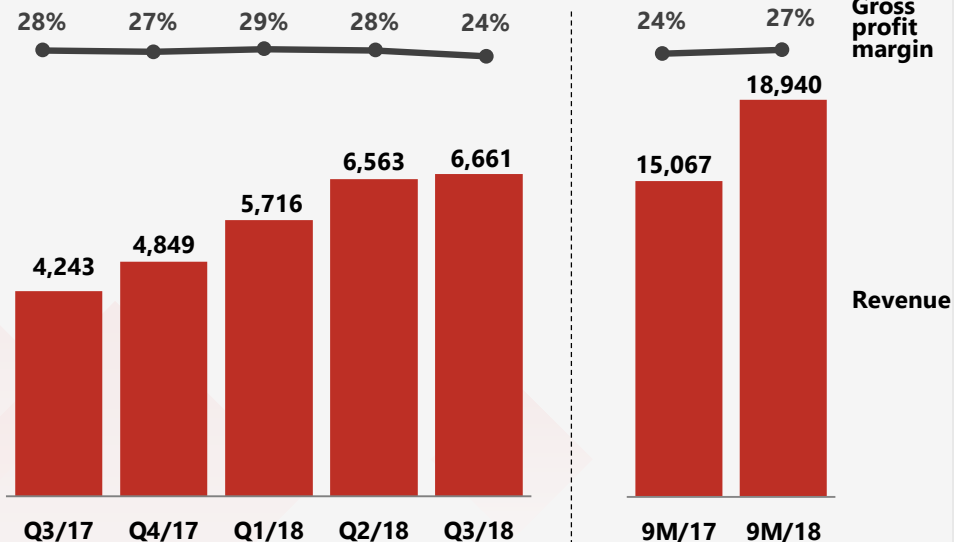
Investment in Affiliates

GPSC's Growth Story

Financial Performance

Q3/2018 Financial Performance Summary (1/2)

Quarterly Revenue & Gross Profit Margin (THB Million,%)



YoY

▲ Rev. +2,418 / +57%
▼ GPM -4%

QoQ

▲ Rev. +98 / +1%
▼ GPM -4%

9 Months

▲ Rev. +3,873 / +26%
▲ GPM +3%

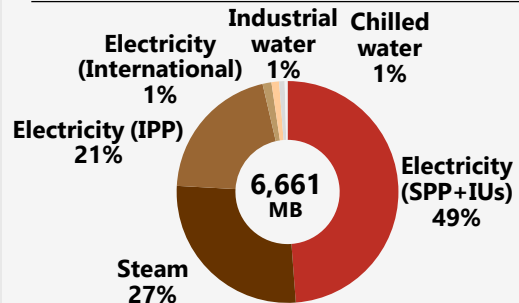
Q3/18 Revenue

- **YoY, 9M: Higher revenue** was mainly from an increase in electricity sales from the COD of IRPC-CP Phase 2 and ISP1 since Q4/2017
- **QoQ: The increase** was from higher dispatched volume of Sriracha Power Plant to EGAT

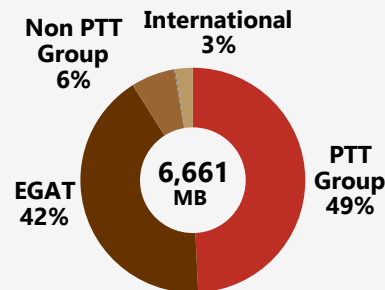
Q3/18 Gross Profit Margin

- **QoQ, YoY: GPM decreased 4%** due to a rise in natural gas prices while Ft rate remained constant
- **9M: GPM increased 3%** due to better efficiency in 2018 than 2017

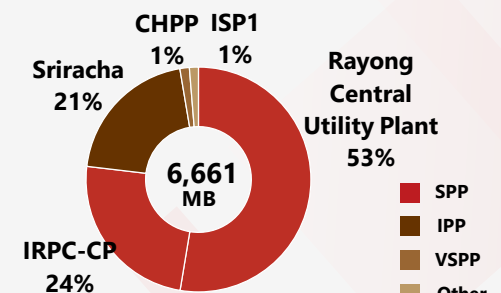
Q3/18 Revenue by product (THB Million)



Q3/18 Revenue by customer (THB Million)

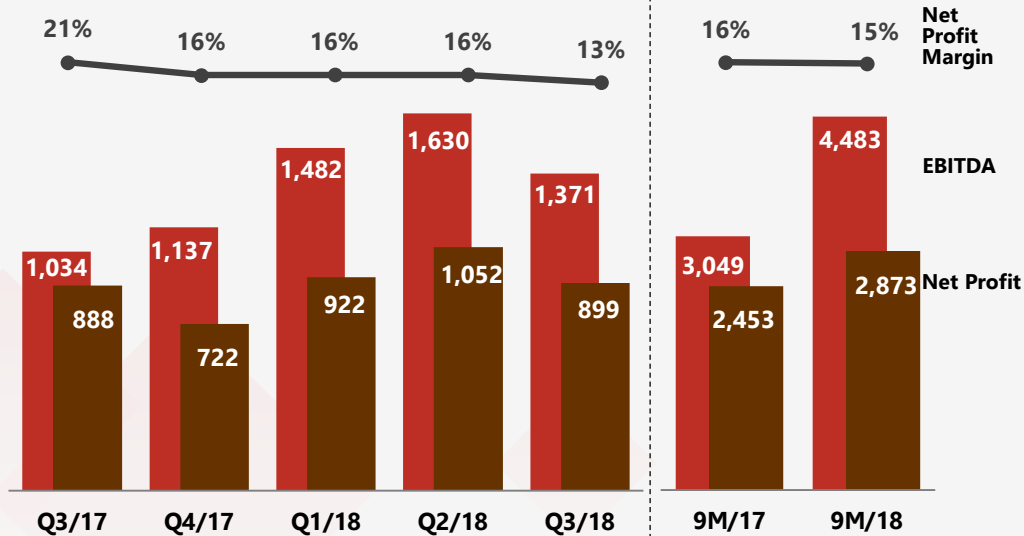


Q3/18 Revenue by plant (THB Million)



Q3/2018 Financial Performance Summary (2/2)

EBITDA, Net Profit* and Net Profit Margin (THB Million,%)



YoY	QoQ	9 Months
▲ EBITDA +337 / +33%	▼ EBITDA -259 / -16%	▲ EBITDA +1,438 / +47%
▲ NP +11 / +1%	▼ NP -153 / -15%	▲ NP +420 / +17%
▼ NPM -8%	▼ NPM -3%	▼ NPM -1%

Q3/18 EBITDA

- YoY, 9M: EBITDA increased due to The increase in electricity sales from the COD of IRPC-CP Phase 2 and ISP1 since Q4/2017
- QoQ: EBITDA decreased due to a rise in natural gas prices while Ft remained constant

Q3/18 Net Profit

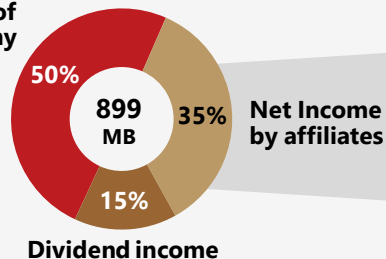
- YoY, 9M: Net profit increased according to COD of IRPC-CP Phase 2 and ISP1 in Q4/2017
- QoQ: Net profit decreased due to the rise in natural gas prices while Ft remained constant and a decrease in revenue from Availability Payment (AP) of Sriracha Power Plant

Q3/18 Net Profit Margin

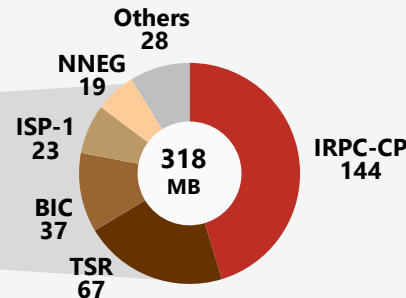
- YoY, 9M: Net profit margin decrease mainly from drop in dividend income of RPCL from 270 to 135 and increase in depreciation of ISP1 which was COD in December 2017.
- QoQ: Net profit margin decrease due to significant rise in natural gas price which is main operating cost of power plant

Q3/18 Net Profit by source (THB Million)

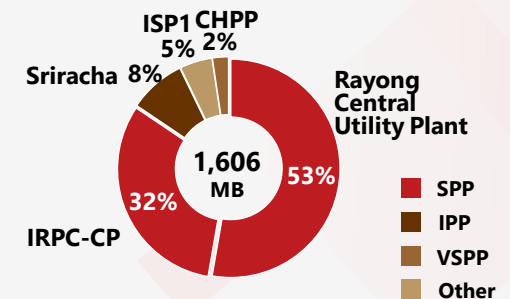
Earnings from operation of the company



Q3/18 Net Profit by Affiliates (THB Million)



Q3/18 Gross Profit by plant (THB Million)

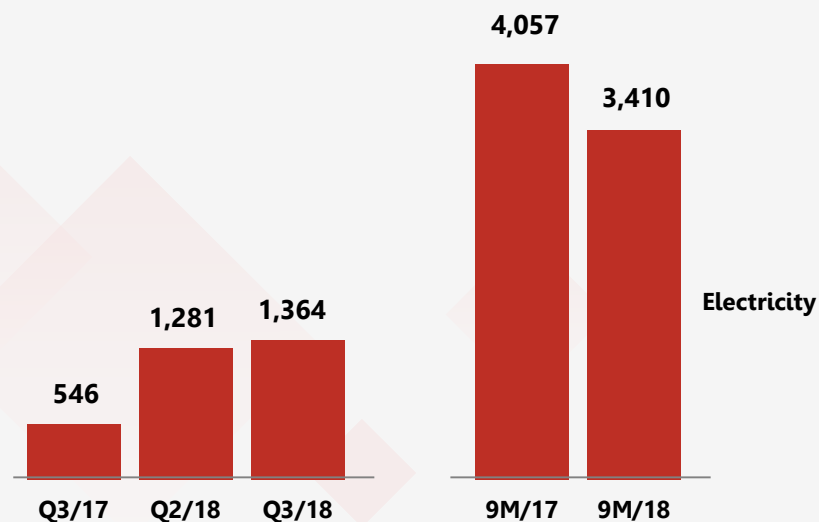


Remark: *Net profit-Owners of the company

Sriracha Power Plant : Revenue & Gross Profit

Quarterly Revenue (THB Million, %)

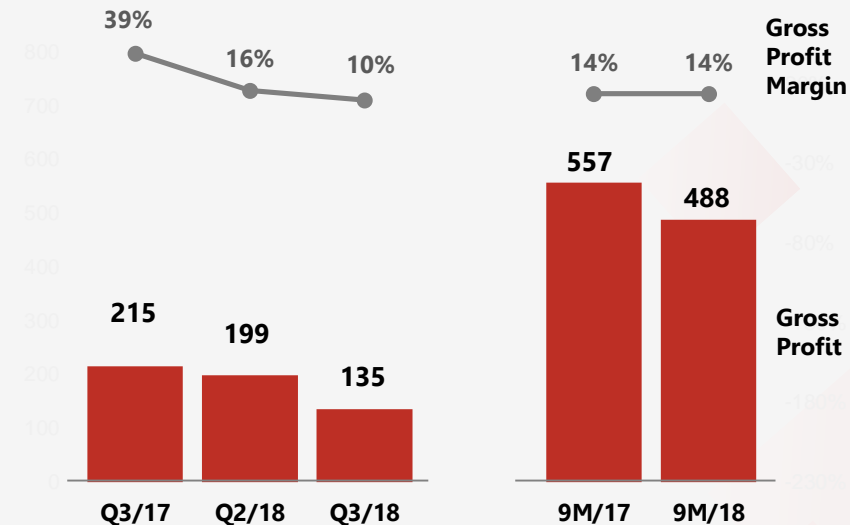
YoY	QoQ	9 months
▲ Rev. +818 / n/a	▲ Rev. +83 / +6%	▼ Rev. -647 / -16%



- **QoQ, YoY: Total revenue increased** due to the rise in revenue from Energy Payment (EP) from the increase in dispatched volume to EGAT
- **9M: Total revenue decreased** due to the adjustment of finance lease receivable according to TFRIC4

Quarterly Gross Profit & Gross Profit Margin (THB Million, %)

YoY	QoQ	9 months
▼ GP -80 / -37%	▼ GP -64 / -32%	▼ GP -69 / -12%
▼ GPM -29%	▼ GPM -6%	GPM Unchanged



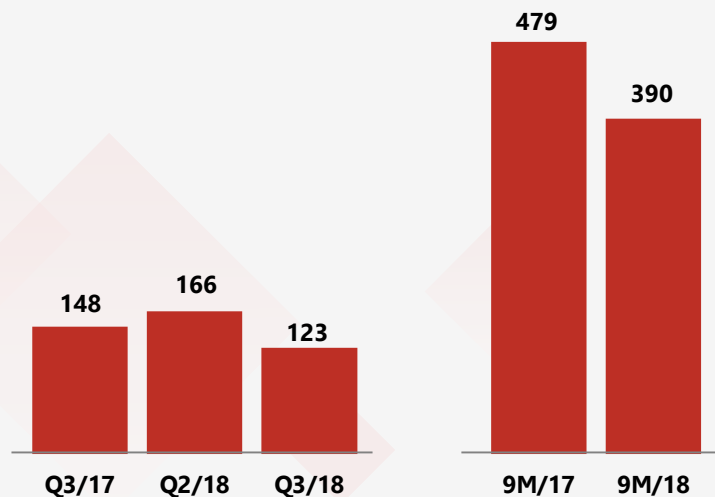
- **QoQ: Gross profit of Sriracha Power Plant decreased** from the drop in revenue from Availability Payment (AP) from lower Weight factor during rainy season, together with the higher maintenance cost followed greater dispatched volume to EGAT.
- **YoY, 9M: Gross profit decreased** due to the adjustment of finance lease receivable according to TFRIC4

Remark: *Revenue from Electricity (IPP) includes income from electricity sales and finance lease

Sriracha Power Plant : Availability Payment (AP)

Quarterly revenue from Availability Payment (AP) (THB million)

YoY	QoQ	9 months
▼ AP -25 / -17%	▼ AP -43 / -26%	▼ AP -89 / -19%

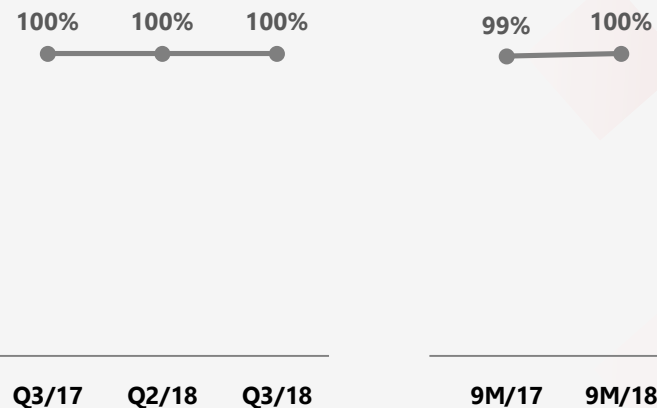


Revenue from AP

- **YoY, 9M: AP decreased** due to the adjustment of finance lease receivable according to TFRIC4
- **QoQ: AP decreased** due to the decline in Weight factor during rainy season

Quarterly Availability Rate (%)

YoY	QoQ	9 months
Unchanged	Unchanged	▲ AR +1%

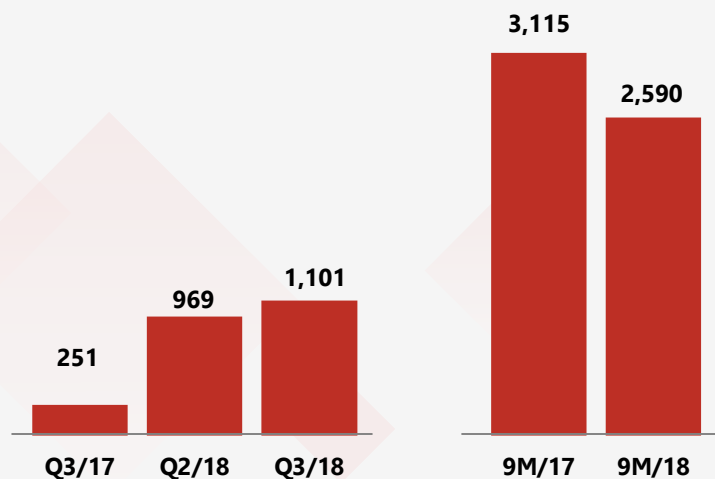


- **Availability rate: reached 100%, QoQ, YoY, and 9M** from better efficiency of Sriracha Power Plant

Sriracha Power Plant : Energy Payment (EP)

Quarterly revenue from Energy Payment (EP) (THB million)

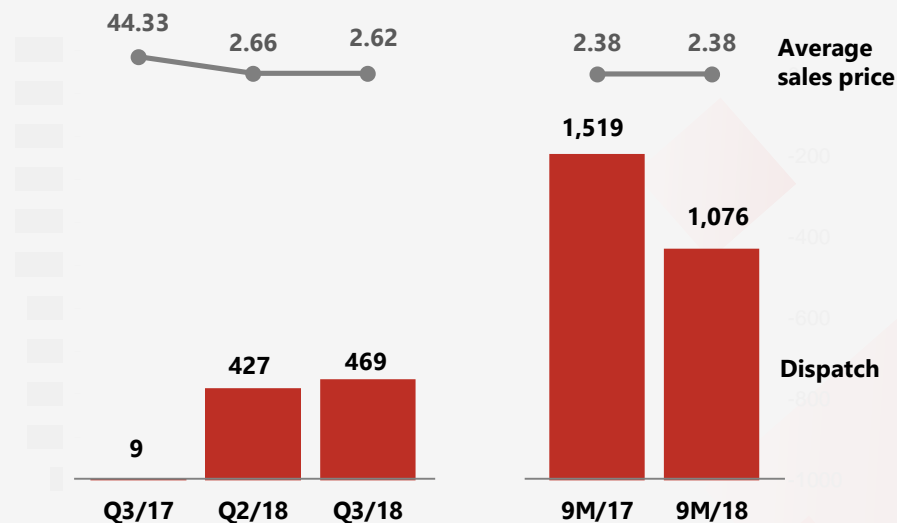
YoY	QoQ	9 months
▲ EP +850 / n/a	▲ EP +132 / +14%	▼ EP +525 / -17%



Revenue from EP

- **QoQ, YoY: EP increased** due to the increase in dispatched volume according to EGAT's dispatch instruction
- **9M: EP decreased** due to the decrease in dispatched volume according to EGAT's dispatch instruction

Quarterly average sales price & dispatch (Baht/kWh, GWh)

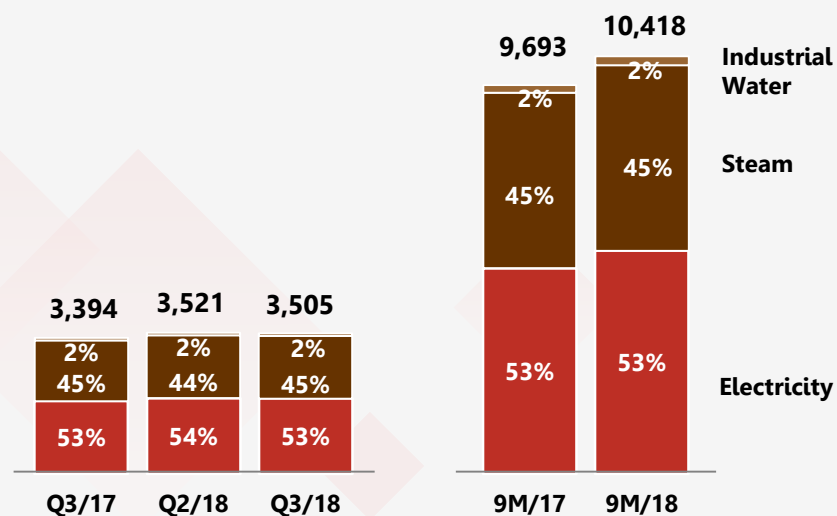


- **QoQ, YoY: Average sales price decreased** due to the increase in dispatched volume to EGAT as instructed
- **Dispatched volume:** increased YoY and QoQ but decreased in 9M according to EGAT's dispatch instruction

Rayong Power Plant (SPP) : Revenue & Gross Profit

Quarterly Revenue (THB Million, %)

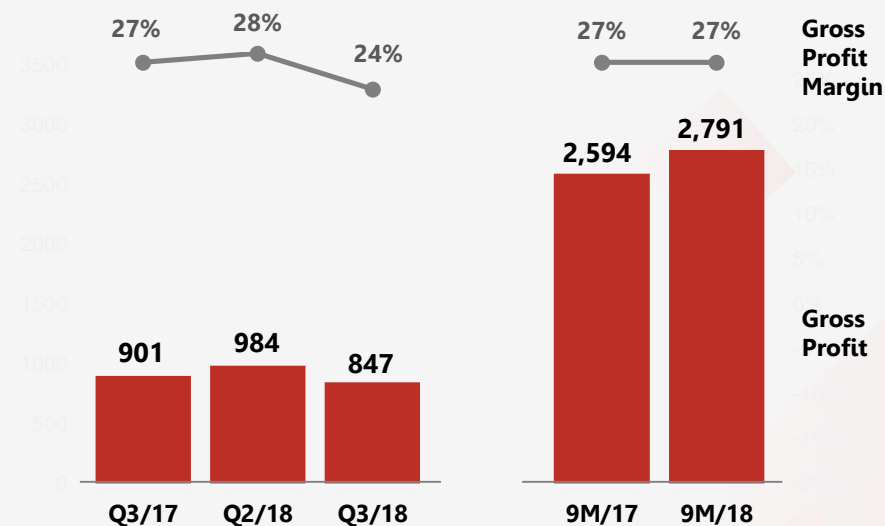
YoY	QoQ	9 months
▲ Rev. +111 / +3%	▼ Rev. -16 / -0.1%	▲ Rev. +725 / +7%



- **QoQ, YoY: Total revenue were quite stable**
- **9M: Total revenue increased** mainly from higher sales volume and sales price of both power and steam

Quarterly Gross Profit & Gross Profit Margin (THB Million, %)

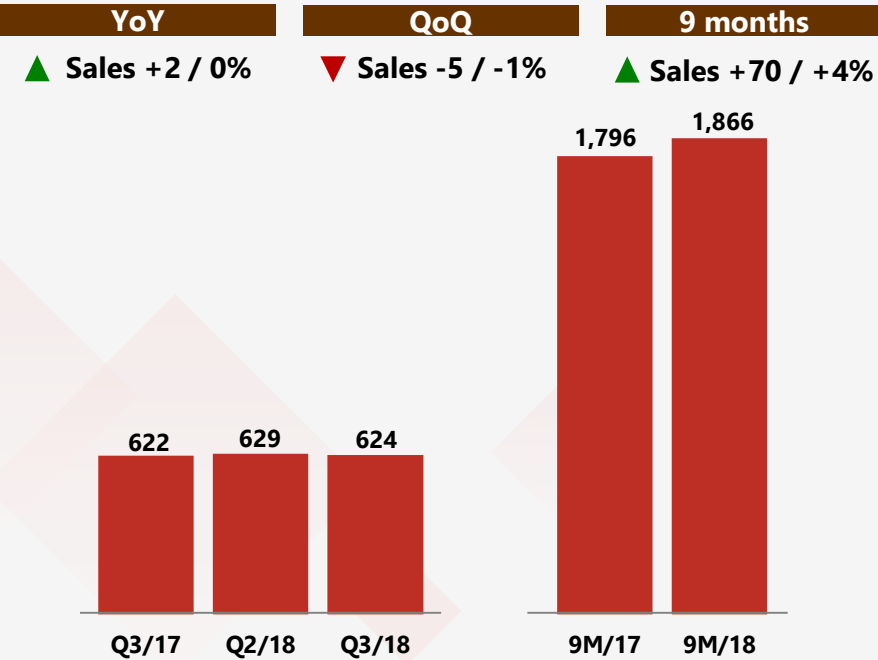
YoY	QoQ	9 months
▼ GP -54 / -6%	▼ GP -137 / -14%	▲ GP +197 / +8%
▼ GPM -3%	▼ GPM -4%	■ GPM unchanged



- **QoQ, YoY: Gross profit decreased** due to an increase in natural gas prices which is main cost of power plant operation
- **9M: Gross profit increased** mainly from higher sales volume and sales price of both power and steam

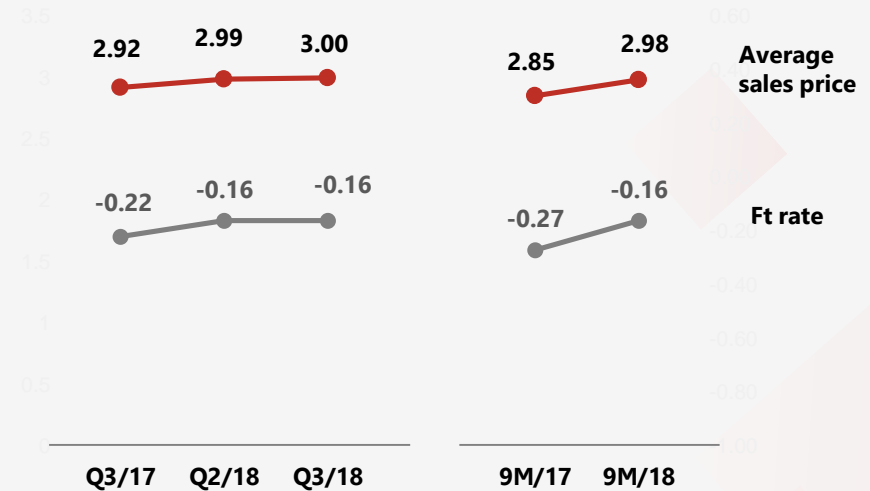
Rayong Power Plant (SPP) : Power Sales

Quarterly power sales volume (GWh)



- **QoQ, YoY: Power sales volume were quite stable**
- **9M: Power sale volume** increased due to current customers expanded production capacities

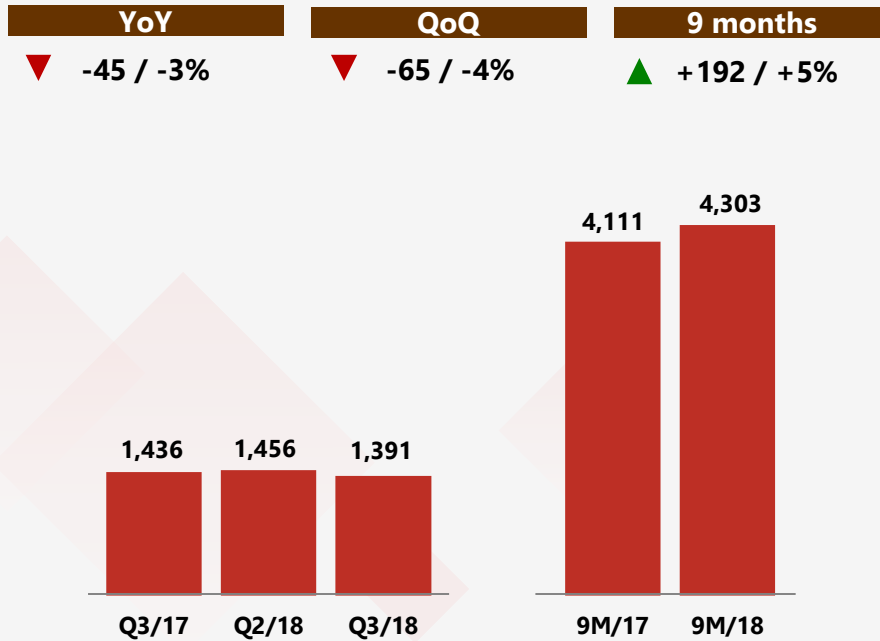
Quarterly average sales price & Ft rate (THB/kWh, THB)



- **YoY, 9M: Average sales price** increased following the increasing trend of Ft rate and natural gas prices

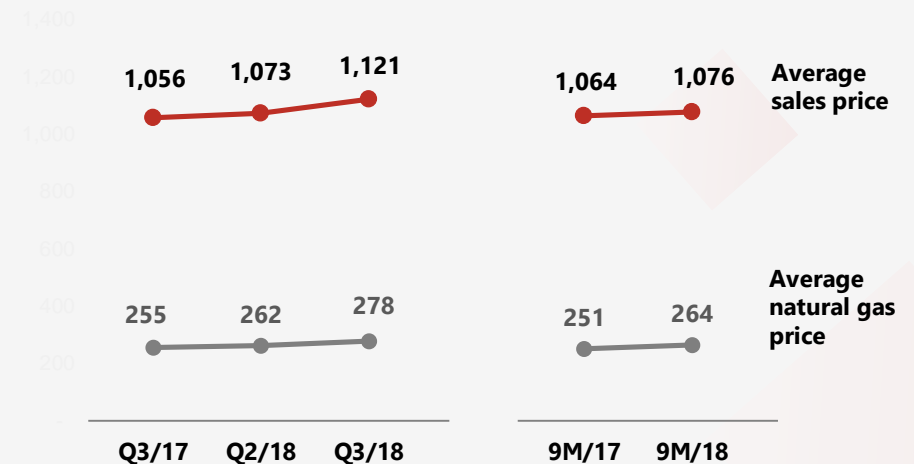
Rayong Power Plant (SPP) : Steam Sales

Quarterly steam sales volume ('000 tons)



- **QoQ, YoY: Steam sales volume decreased** due to maintenance shutdown of main customers in Q3/2018
- **9M: Steam sales volume increased** due to the maintenance shutdown by main customers during 9M/2017

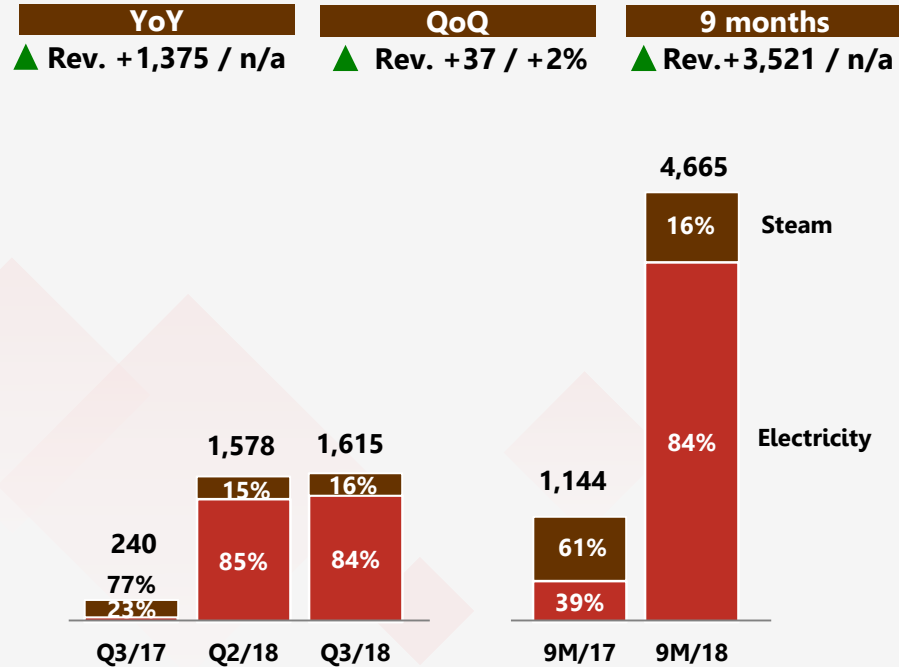
Quarterly average sales price & Average natural gas price (THB/ton, THB/MMBTU)



- **Average sales price QoQ, YoY, 9M increased** in line with the increasing trend of natural gas prices

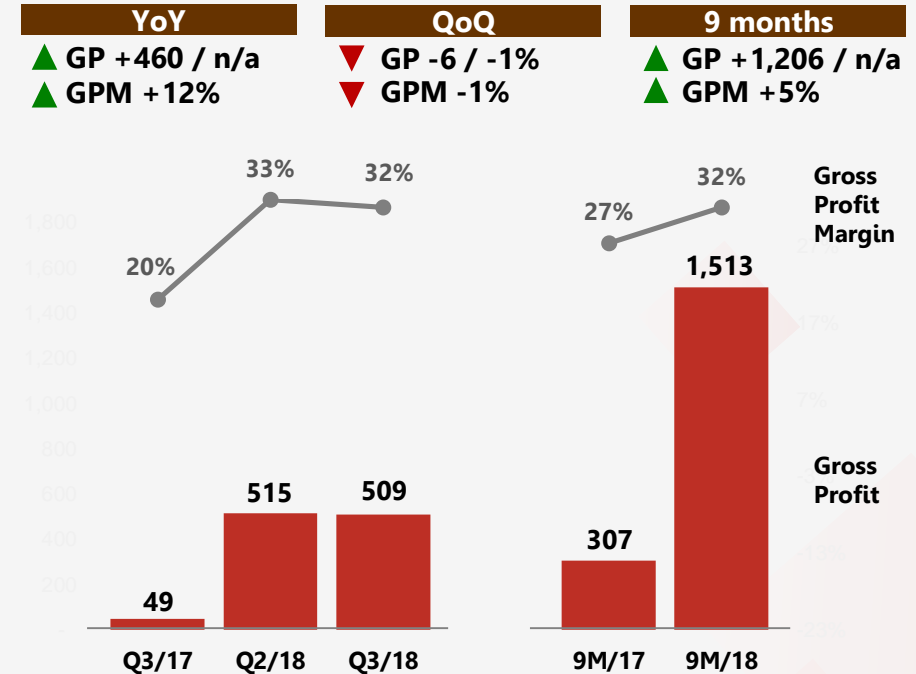
IRPC-CP Power Plant (SPP) : Revenue & Gross Profit

Quarterly Revenue (THB Million, %)



- **YoY, 9M: Total revenue increased** from higher electricity sales volume due to the COD of both phases since November 2017 and higher sales price
- **QoQ: Total revenue increased** from higher electricity sales price following the increase in natural gas prices

Quarterly Gross Profit & Gross Profit Margin (THB Million, %)

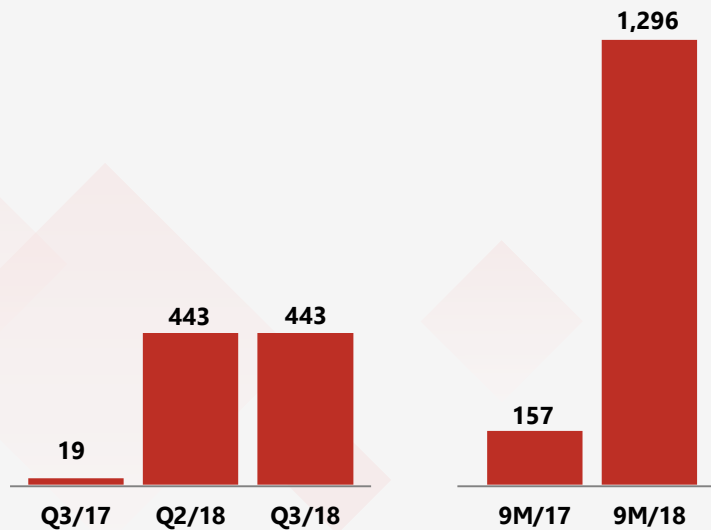


- **YoY, 9M: Gross profit increased** from higher electricity sales volume due to the COD of both phases since November 2017 and higher sales price
- **QoQ: Gross profit slightly decreased** from the increase in natural gas prices while Ft rate remained constant

IRPC-CP Power Plant (SPP) : Power Sales

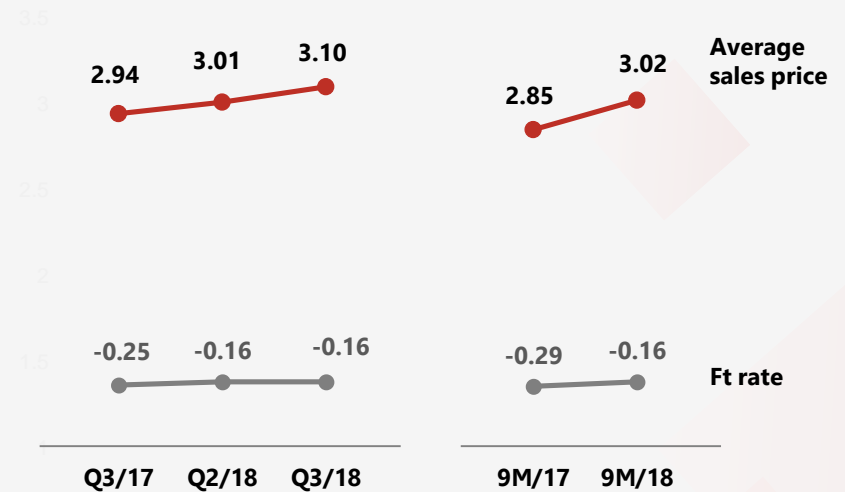
Quarterly power sales volume (GWh)

YoY	QoQ	9 months
▲ +424 / n/a	Unchanged	▲ +1,139 / n/a



- **YoY, 9M: Power sales volume increased** due to the COD of both phases since November 2017
- **QoQ: Power sales volume remain the same**

Quarterly average sales price & Ft rate (THB/kWh, THB)

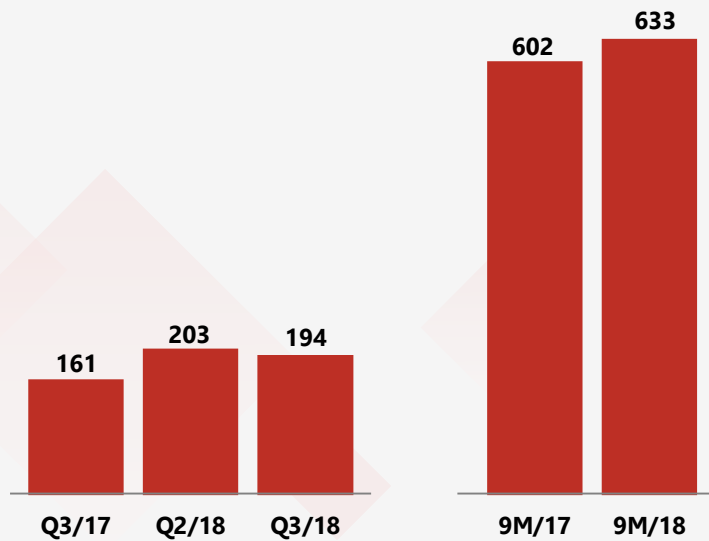


- **QoQ, YoY, 9M: Average sales price increased** following the increasing trend of natural gas prices

IRPC-CP Power Plant (SPP) : Steam Sales

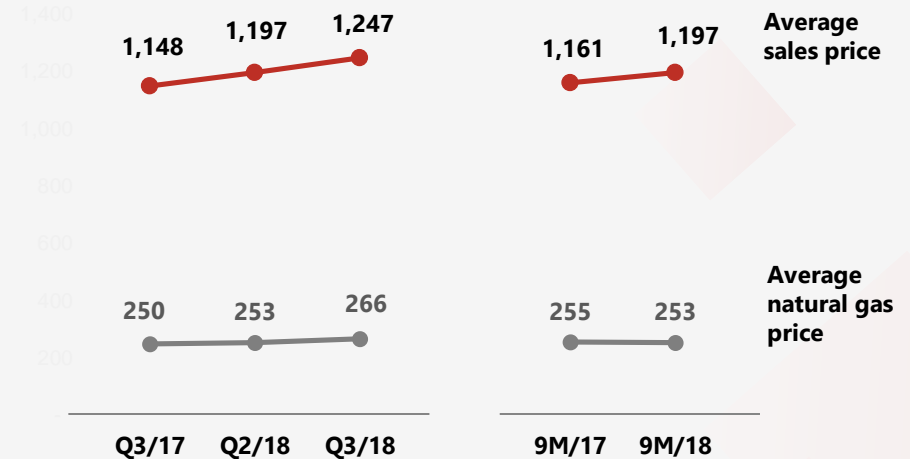
Quarterly steam sales volume ('000 tons)

YoY	QoQ	9 months
▲ +33 / +20%	▼ -9 / -4%	▲ +31 / +5%



- **YoY, 9M: Steam sales volume increased** due to the COD of both phases since November 2017.
- **QoQ: Steam sales volume slightly decreased**

Quarterly average sales price & Average natural gas price (THB/ton, THB/MMBTU)

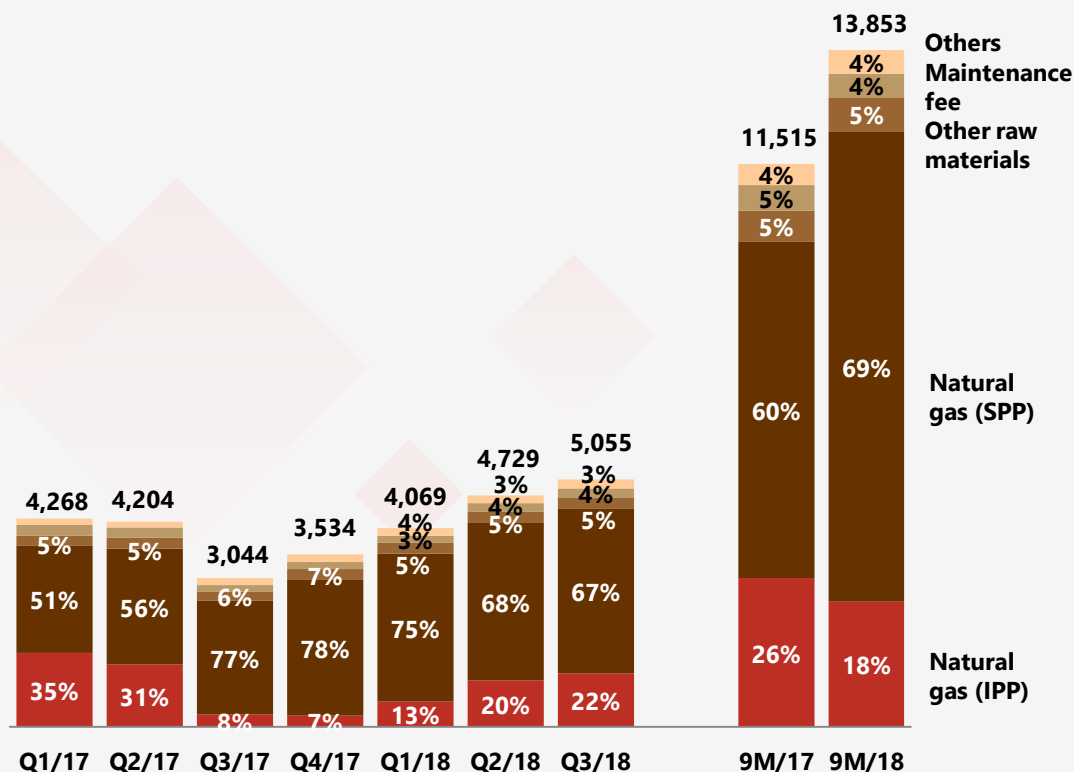


- **QoQ, YoY, 9M: Average sales price increased** following the increasing trend of natural gas prices

Cost of Sales and Services

Quarterly cost of sales and services*

(THB Million)



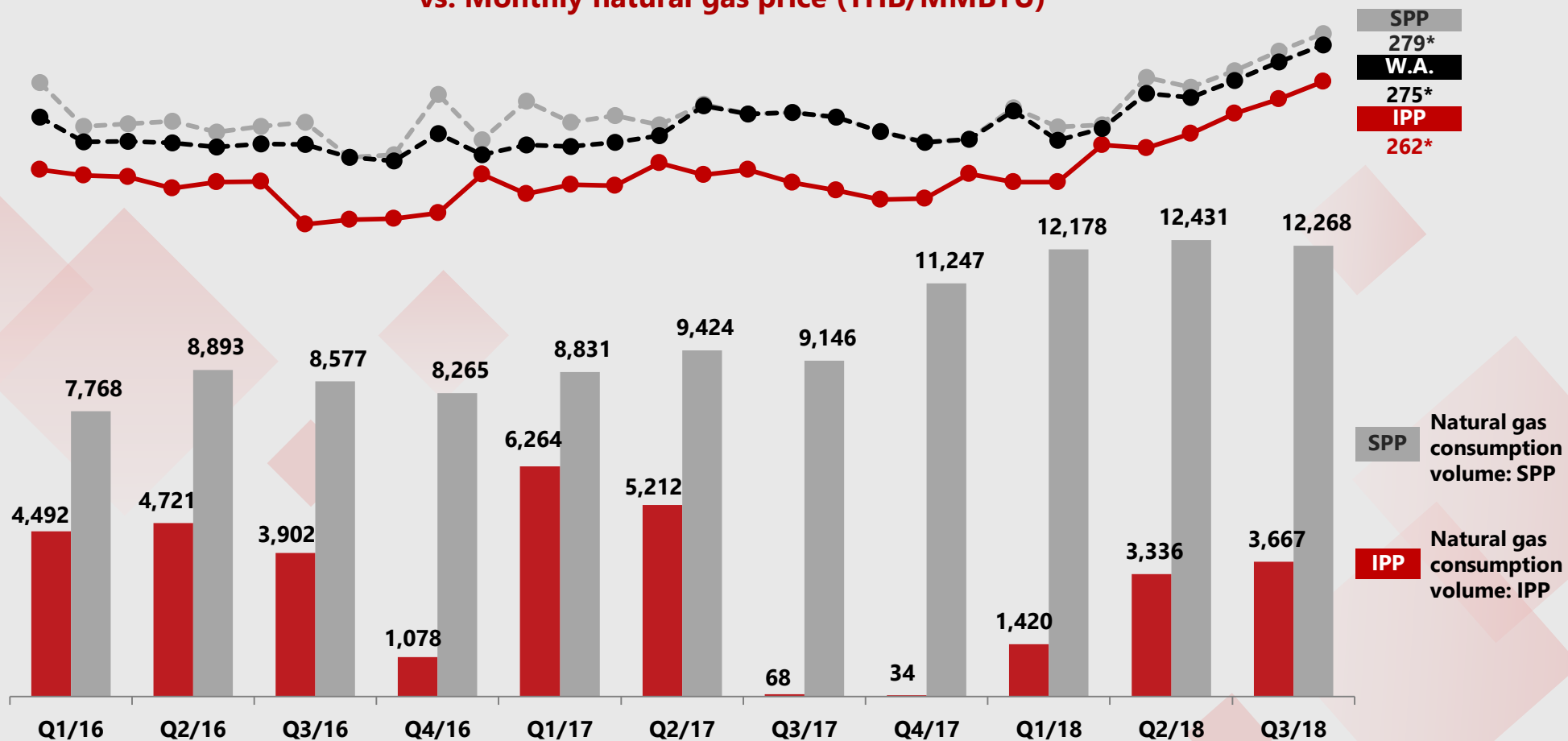
YoY	QoQ	9 Months
▲ +2,011 / +66%	▲ +326 / +7%	▲ +2,338 / +20%

- **YoY, 9M: Cost of sales and service increased** due to higher SPP natural gas consumption from full operation of IRPC-CP and higher natural gas prices
- **QoQ: Cost of sales and service increased** due to higher natural gas prices, with slight increase in natural gas consumption from Sriracha Power Plant

Remark: *Cost of sales and services excludes depreciation and amortization expenses

Natural Gas Consumption vs Price Trend

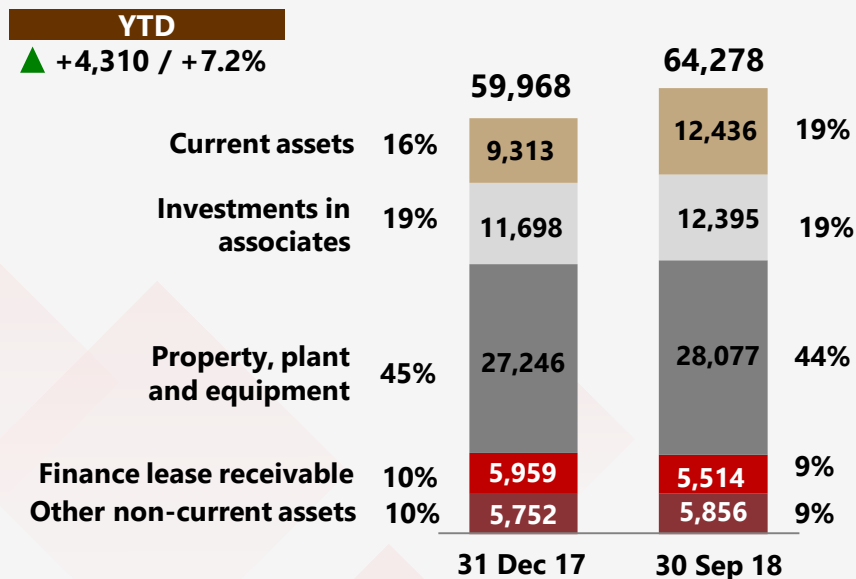
Quarterly natural gas consumption ('000 MMBTU)
vs. Monthly natural gas price (THB/MMBTU)



Remark: *Latest prices as of 30 September 2018

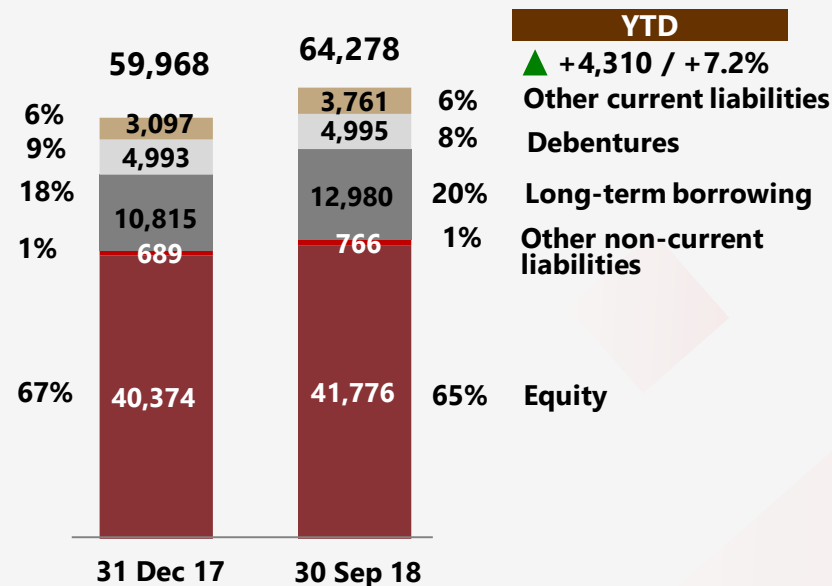
Financial Position of GPSC and Subsidiaries

Total Assets (THB Million)



- **Total assets** were Baht 64,278 million, increased by Baht 4,130 million or 7% from 31 December 2017.
- The main increase resulted from the increase in current assets, additional investments in the additional capital paid-up in the associates and the increase in property, plant & equipment that are still under construction.

Total Liabilities & Shareholders Equity (THB Million)

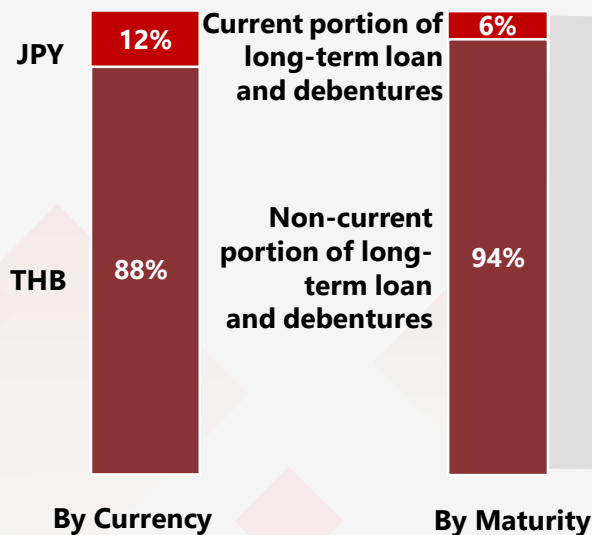


- **Total liabilities** were Baht 22,502 million, increased by Baht 2,908 million or 15% from 31 December 2017 mainly due to long-term loan from financial institutions and other payables.
- **Equity** were was Baht 41,776 million, increased by Baht 1,402 million or 3% from 31 December 2017, mainly from increase in the unappropriated retained earnings and increase in non-controlling shareholders equity.

Debt Profile

Debt Profile

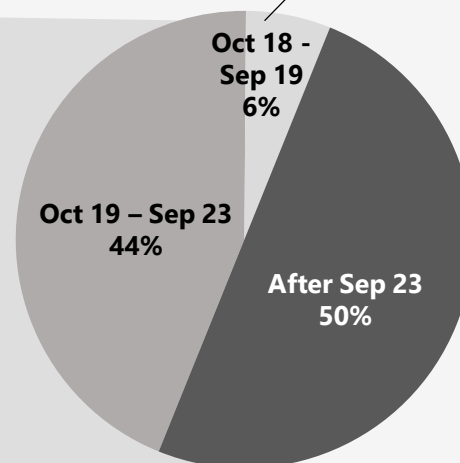
Total interest-bearing debt : THB 17,974 million



- As of 30 September 2018, total debt at was in THB and JPY currency.
- The interest-bearing debt is comprised of long-term loan and debentures which includes 6% of current portion.

Debt Repayment Plan

Current portion due within 1 year
THB 1,049 million

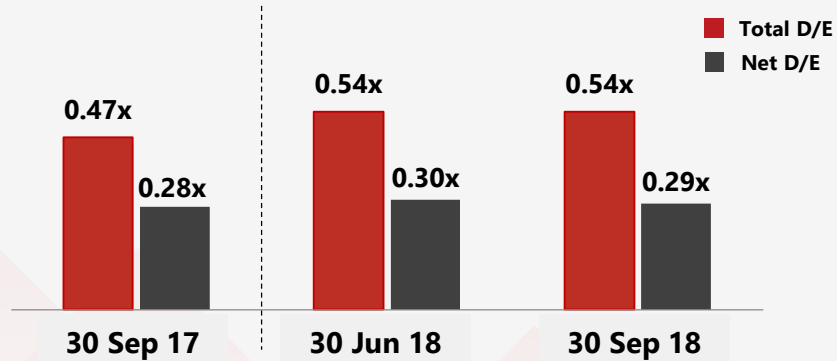


% of total interest-bearing debt

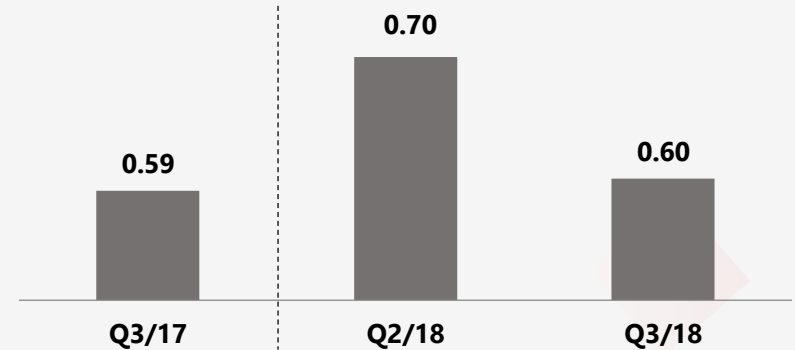
- Non-current portion of interest-bearing debt equals to THB 16,924 million while current portion equals to THB 1,049 million.
- 44% of total interest-bearing debt will be repaid between October 2019 – September 2023.

Key Financial Ratios

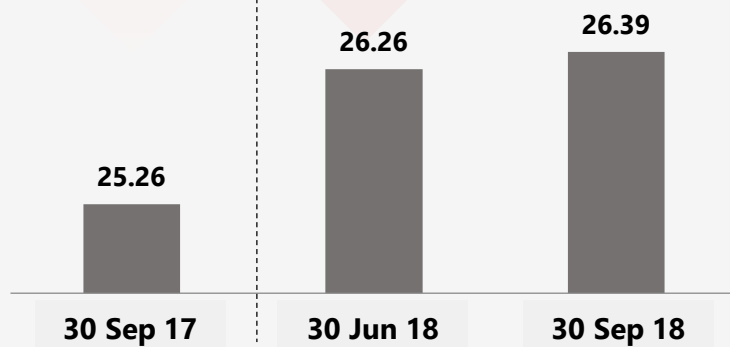
Total D/E and Net Debt/ Equity ratio (Times)



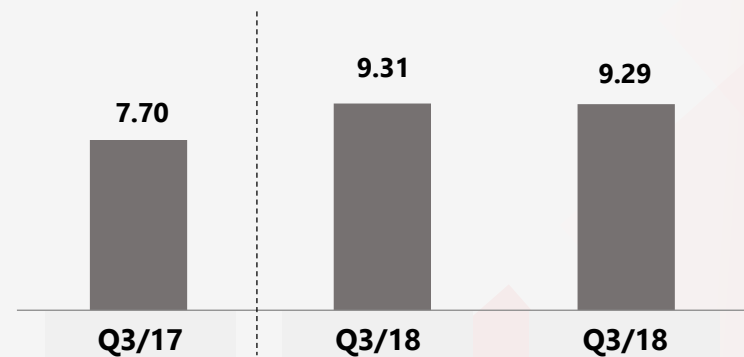
Earning per share (EPS) (Baht/share)



Book value per share (BVPS) (Baht/share)



ROE (%)



THANK YOU

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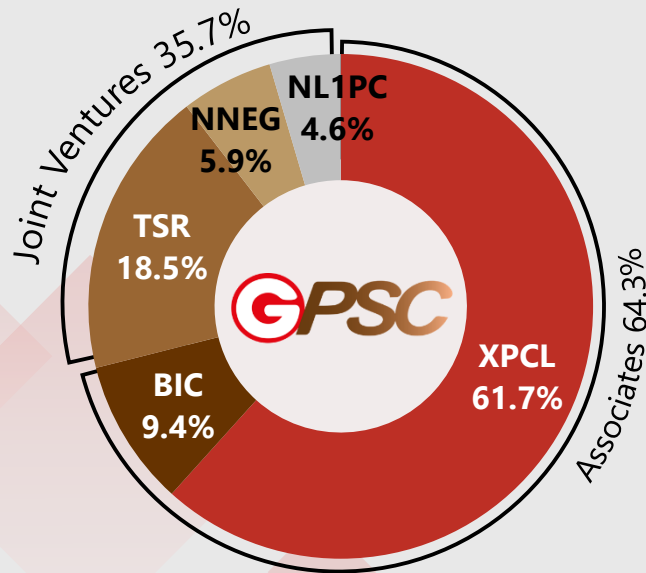
APPENDIX

Global Power Synergy Public Company Limited

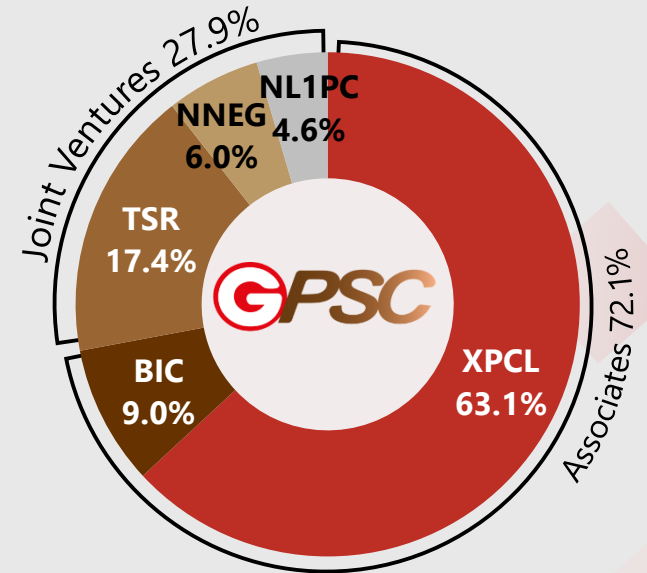
555/2 Energy Complex, Building B
Vibhavadi Rangsit Rd. Chatuchak, Bangkok 10900

Investment in Associates and joint ventures

Proportion of GPSC's investment in associates and joint ventures at Q2/18 and Q3/18 (THB Million, %)



Q2/2018: Total of THB 9,343 million



Q3/2018: Total of THB 9,472 million

- GPSC's investment in associates and joint ventures increased from THB 9,343 million at Q2/18 to THB 9,472 million at Q3/18 or **approximately THB 129 million or 1.38% increase.**
- The **increase in investment in Q2/18 was mainly from the investment in XPCL which increased by THB 215 million** while the share of profit from associates and joint ventures in Q3/18 contributed to an increase in the investments for THB 131 million.

2018-2019 Maintenance schedule: Sriracha and Rayong plants

Plant	Tag no.	Description	2018						2019					
			Q3			Q4			Q1			Q2		
			Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
CUP-1	H-13701	Aux. Boiler.11									15 3Y 28			
	N-13901	GTG11								12 MI 5				
	H-13702	HRS11								12 3Y 5				
	N-13902	GTG12												
	H-13703	HRS12										07 1Y 17		
	N-13903	GTG13	7 HG 20											
	H-13704	HRS13	7 3Y 20											
	N-13904	GTG14							17 HG 30					
	H-13705	HRS14							17 3Y 30					
	N-13961	GTG15												
	H-13761	HRS15				16 1Y 26								
	N-13962	GTG16												
	H-13762	HRS16							3 1Y 13					
CUP-2	H-23701	Aux. Boiler.21	1 1Y 11											
	N-23901	GTG21												
	H-23701	HRS21									9 1Y 19			
	N-23902	GTG22												
	H-23702	HRS22											12 1Y 22	
	N-23911	Steam Turbine21												
CUP-3	H-33701	Aux. Boiler 31		4 1Y 14										
	H-33711	Aux. Boiler 32				26/9 1Y 6/10								
	H-33712	Aux. Boiler 33				14 1Y 24	14/10 – 1/12							
SRC	11MB	GT11												
	1-211-SG-101	HRS1#1												
	12MB	GT12												
	1-211-SG-201	HRS2#2												
	STG	Steam Turbine 10												

Notes Rayong Site

GTG

HG Hot Gas Path Inspection for Gas Turbine 14 days
MI Major Inspection for Gas Turbine 22 days

STG

Minor Minor Inspection for Steam Turbine 15 days
1MO 2nd Major Overhaul for Steam Turbine 23 days
2MO 2nd Major Overhaul for Steam Turbine 27 days

AB

1Y One Year Inspection Aux. Boiler 11 days
3Y Three Year Inspection Aux. Boiler 13 days

HRS1

1Y One Year Inspection HRS1 11 days
3Y Three Year Inspection HRS1 14 days

Other

1Y One Year Inspection NG Station Test Online
5Y Five Year Inspection NG Station (NDT) Online
FO Forced Outage Depending on physical damage

Notes Sriracha Site

GTG

CI Combustion Inspection for Gas Turbine 8 days
HGPI Hot Gas Path Inspection for Gas Turbine 26 days
MO Major Overhaul for Gas Turbine 33 days
RCIE Rotor and Casting Inspection Evaluation 49 days

HRS2

1Y One Year Inspection HRS2 8 days
3Y Three Year Inspection HRS2 33 days

Other

1Y One Year Inspection NG Station Test Online
5Y Five Year Inspection NG Station (NDT) Online
FO Forced Outage Depending on physical damage

2018-2019 Maintenance schedule: IRPC-CP

Plant	Unit	2018				2019			
		Q1 (A)	Q2 (A)	Q3 (A)	Q4 (F)	Q1 (F)	Q2 (F)	Q3 (F)	Q4 (F)
IRPC-CP	Block 1								
	CTG 21	E			A				
	HRSR 21	E			A				
	CTG 22	E			A				
	HRSR 22	E			A				
	STG 23								
	Block 2								
	CTG 31	E			A				
	HRSR 31	E			A				
	CTG 32	B						6	
	HRSR 32	B						6	
	STG 33							3	
	Aux. Boiler		YI			7			

Notes

- YI Yearly Inspection 5 days
- YI Yearly Inspection Aux Boiler 15 days
- A CTG Inspection Level A 5 days
- B CTG Inspection Level B 20 days
- C CTG Inspection Level C 24 days
- E EPC Inspection End of Warranty 3 days

* For 2019: numbers on the table are number of maintenance days