



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

Q3 2016 Results Presentation Analyst Meeting

17th November 2016



Q3 2016 Significant Events



Financial Performance



Project Update

rowing *P*rofit with *S*ustainability and *C*ontrol

Revenue and margin growth from SPP

GPSC has been recognizing **more revenue and stable growth in gross profit** in which SPP plants contribute to higher gross profit compare to IPP. Also, GPSC will gain more revenue and profit margin from the under construction power plants, once finished. Construction, where 4 projects will start COD within 2017.



THB 724 Million in profit

Net profit of Q3/16 increased by THB 38 million from Q2/16 mainly due to a dividend income from RPCL amounting to THB 240 million. Moreover, net profit of Q3/16 also

increased by THB 158 million from Q3/15 mainly from the increase in revenue from COD of IRPC-CP and NNEG.



FTSE Asia Pacific ex Japan Index

GPSC has been included in **FTSE Asia Pacific ex Japan Index** after the inclusion in **MSCI Index** and **SET50**. The company also received awards & recognitions regarding corporate governance and disclosure of information including **ESG100, Best CFO Awards, Investors' Choice Award** and currently was ranked "**Excellent**" for **CGR scoring** by Thai Institute of Directors (IOD).



ISP1 NNEG CHPP achieved milestones

ISP1 succeeded the first drawdown of JPY 1,835 million from lender in August 2016. While **NNEG** generated revenue of THB 618 million in first full operating quarter, increased by 247% from Q2/16. **CHPP Solar Cooperatives** had 26% construction progress in this quarter which is expected to COD within 31st December, 2016.

GPSC has been included in FTSE Index in 3Q/16 to reflect stock's performance

THB / Share

45

40

35

30

25

20

GPSC's Stock Price

(May 15 – November 16)



Ranked "Excellent" for CGR Scoring by Thai Institute of Directors (IOD) (26 Oct 2016)



Best CFO Award from IAA (15 Jul 2016)

Investors' Choice Award (27 Jul 2016)



ESG 100 (29 Apr 2016)

Global Small Cap Indexes (30 Nov 2015)



Included in SET100 (4 Jan 2016)

First trading Day (18 May 2015)

Included in SET50 (4 Jul 2016)

Asia Pacific ex Japan Small Cap (19 Sep 2016)

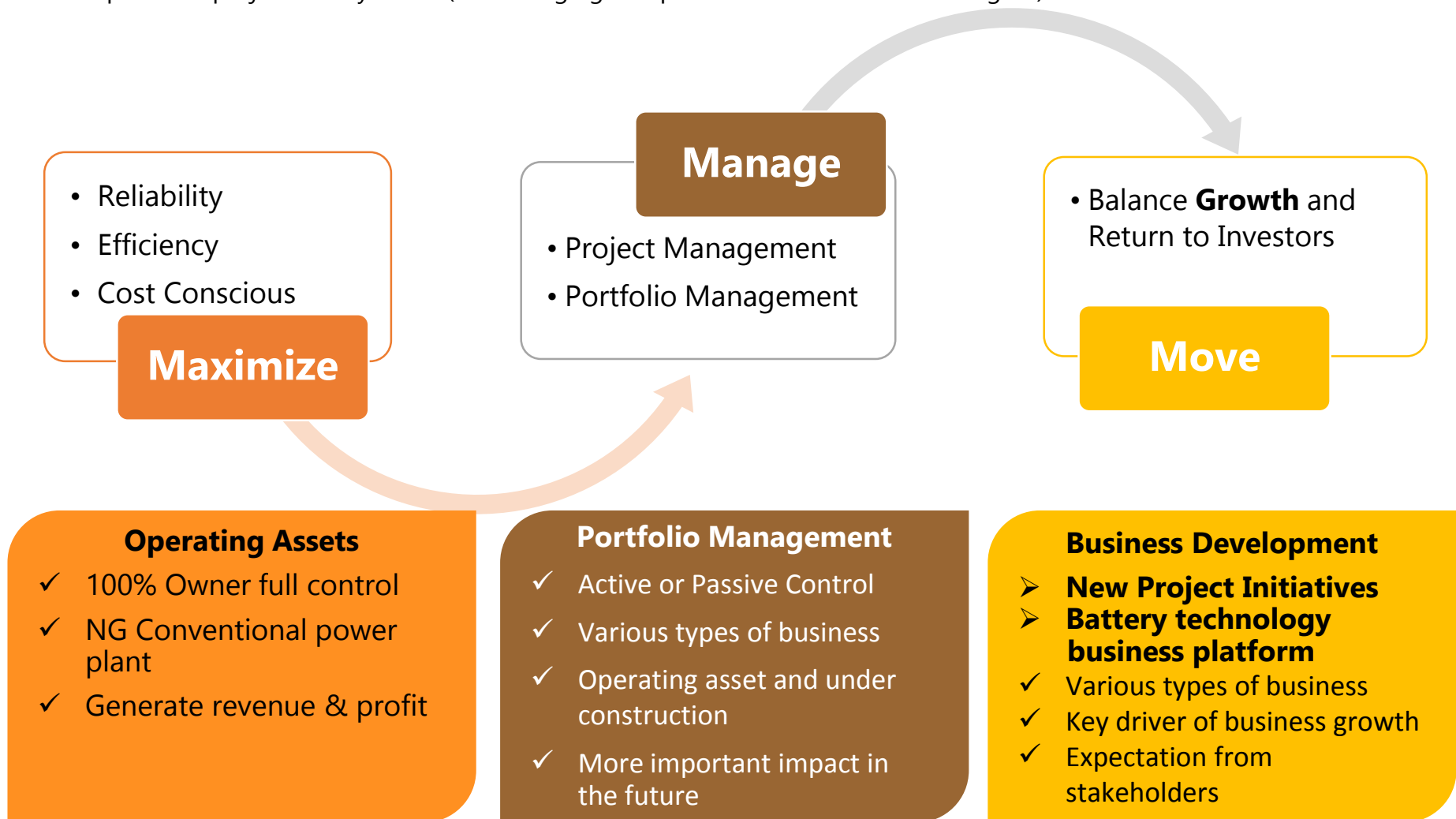


May-15 Jun-15 Jul-15 Aug-15 Sep-15 Oct-15 Nov-15 Dec-15 Jan-16 Feb-16 Mar-16 Apr-16 May-16 Jun-16 Jul-16 Aug-16 Sep-16 Oct-16 Nov-16

- IPO in May 2015, GPSC have been growing our business with continuously increased market capitalization.
- Starting from November 2015 where GPSC has been included in the Global standard, namely **MSCI Index** and recently in September 2016 GPSC is just included in **FTSE Index**.
- GPSC was classified **to be in SET100** in January 2016 and then in July 2016 **qualified as SET50**.
- In April 2016, GPSC has been shortlisted **in ESG 100** as one of 100 companies listed in SET with sustainable business by Thaipat Institute and recently in July 2016, GPSC was ranked "**Excellent**" for **CGR Scoring** by Thai Institute of Directors (IOD)
- **These are the results of confidence on GPSC performance from all stakeholders.**

GPSC Strategic Framework : 3M

- ✓ **GPSC is PTT Group's Power Flagship**
- ✓ Currently GPSC's portfolio is in Thailand (one of the current largest consumers) and Laos PDR. However, there are also potential projects in Myanmar (the emerging and potential consumers of the region)



Personal Safety

Fatality case = 0
Lost Work day = 0

Recordable case
Medical Treatment Case = 0
Restricted work = 0

First aid incidents case = 0

**Audit Findings &
Management system failings**

Process Safety

Tier1 Process safety event Case
LOPC with Fire = 0
LOPC With out Fire = 0
Indicator of serious process safety failures

Tier2 Process safety event Case
LOPC with Fire = 0
LOPC With out Fire = 0
Recording of other safety event

Tier 3 Process safety Event
Challenges to safety systems
Indicators to measure system trips shutdown

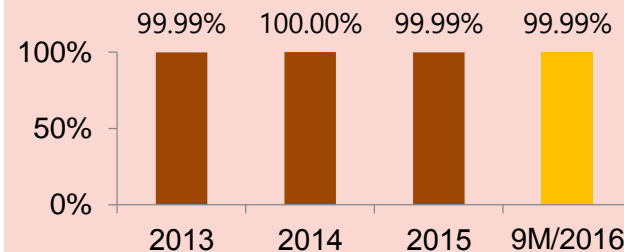
**Operating Discipline & Management system
Performance indicators**

SSHE Performance

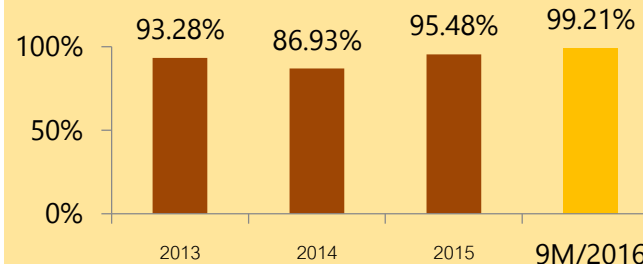
Update 31 Oct 2016

%Availability

Rayong Power Plant



Sriracha Power Plant



Plant Optimization



CHPP Solar Cooperatives (100%)

Type	Solar
Capacity	Electricity: 5 MW
Customer	PEA
SCOD	December, 2016
Total Investment	244 THB million
D/E	3:1



% Progress
as of Q3/16

3Q16
26%



Bangpa-In Cogeneration Company Limited (BIC) Phase 2 (25%)

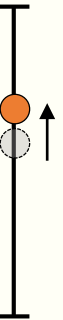
Type	SPP
Capacity	<ul style="list-style-type: none"> Electricity: 117 MW Steam: 20 T/h
Customer	<ul style="list-style-type: none"> Electricity: EGAT 90 MW (25 years), IUs 27 MW Steam: IUs 20 T/h
SCOD	June, 2017
Total Investment	5,340 THB Million
D/E	3:1



% Progress
as of Q3/16

3Q16
78%

2Q16
62%



IRPC Clean Power Company Limited (IRPC-CP) Phase 2 (51%)

Type	SPP
Capacity	<ul style="list-style-type: none"> Electricity: 240 MW Steam: 180-300 T/H
Customer	<ul style="list-style-type: none"> Electricity: EGAT 2x90 MW (25 years), IRPC 60 MW (27 years) Steam: IRPC 180-300 T/H
SCOD	June, 2017
Total Investment	13,600 THB Million
D/E	3:1



% Progress
as of Q3/16

3Q16
90%

2Q16
86%



ICHINOSEKI
SOLAR POWER 1 GK

Ichinoseki Solar Power 1GK (ISP1) (99%)

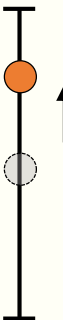
Type	Solar
Capacity	Electricity: 20.8 MW
Customer	Tohoku Electric Power (20 years)
SCOD	Q4 2017
Total Investment	~10,000 JPY million
D/E	4:1



% Progress
as of Q3/16
(Land Preparation)

3Q16
84%

2Q16
57%



Growth on Equity MW

GPSC's Target Growth

Unit: Secured MW

1,922

Growth along with PTT Group

CUP-4 and Expansion

- Growth domestically and internationally along with upstream and downstream business of PTT Group
- Focus on SPP and Cogeneration as utilities provider along with PTT group presence

Quick Win

Renewable Energy

M&A

- Renewable business
- Acquisition of operating/ under-construction assets
- Cash flow from the operating assets

Big Win

International

Coal

Gas

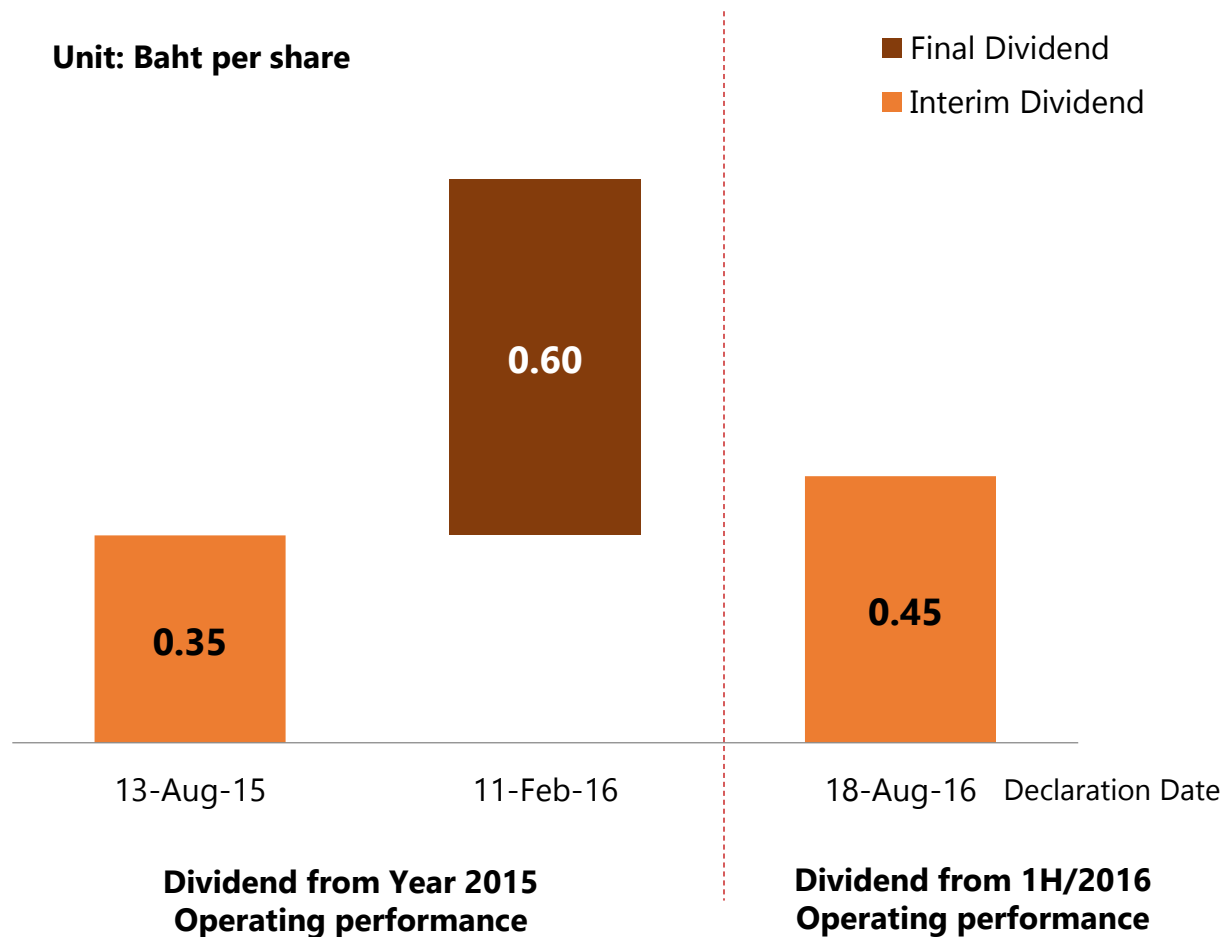
- Investment in international mega projects with potential partners

Adjacent & Support Opportunities

- Energy Storage technology
- Operation and Maintenance services
- Transmission and Distribution business

2016

Unit: Baht per share



- **On 18 August 2016, BOD approved** a resolution for the payment of interim dividend for 1H/2016.
- The **dividend per share is 0.45 Baht** which is higher than 2015 interim dividend, resulting from the better operating results.
- **The Record Date was on 1 September 2016** for the right to receive the dividend.
- **The dividend payment date was on 14 September 2016.**
- The dividend will be paid from the tax exemption profit portion wherein **individual shareholders shall not include as taxable income** and not be entitled to a dividend tax credit.

- **Dividend Policy :**
Minimum of 30% of net income according to a financial statement, after deductions of tax, reserve capital requirement (with additional conditions)



Q3 2016 Significant Events



Financial Performance



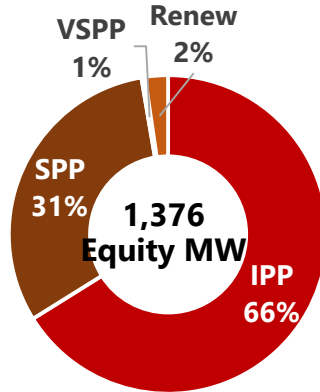
Project Update

Majority of GPSC's revenue is from electricity, PTT Group is GPSC's major customer

In Operation : 1,736 Equity MW equivalent
(Electricity 1,376 Equity MW, Steam 1,441 T/H)

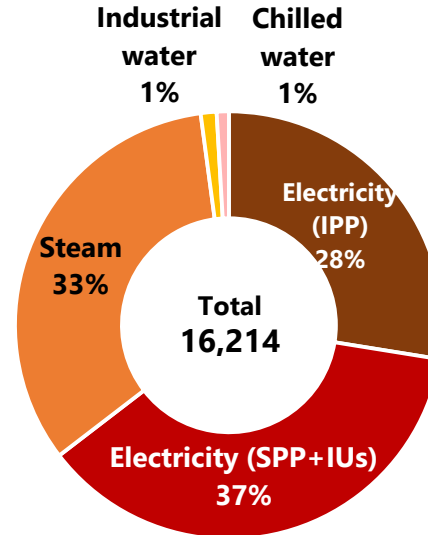
ELECTRICITY CAPACITY BREAKDOWN

Unit: Equity Megawatt



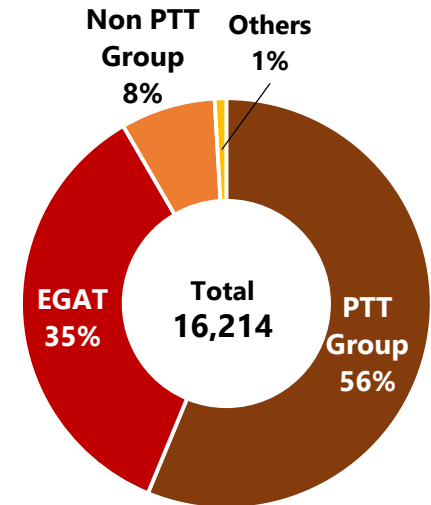
Name	Type	GPSC's share %	Total capacity (MW)	Equity capacity (MW)	Steam (T/H)	MW equivalent
IN OPERATION						
Sriracha	IPP	100%	700	700	-	700
CUP-1	SPP	100%	226	226	890	448.5
CUP-2	SPP	100%	113	113	170	155.5
CUP-3	SPP	100%	-	0	280	70
CHPP	VSPP	100%	5	5	-	5
IRPC-CP Phase 1	SPP	51%	45	23	87	44.7
Consolidate to Financial Statement				1067	1426.7	1423.7
TSR	Renew	40%	80	32	-	32
NNEG	SPP	30%	125	38	9	40.3
BIC-1	SPP	25%	117	29.25	5	30.5
RPCL	IPP	15%	1,400	210	-	210
Share of Profit / Dividend Income				309	14	312.8
Total operating				1,376	1,441	1,736.5

9M16 Revenue by product (THB million)



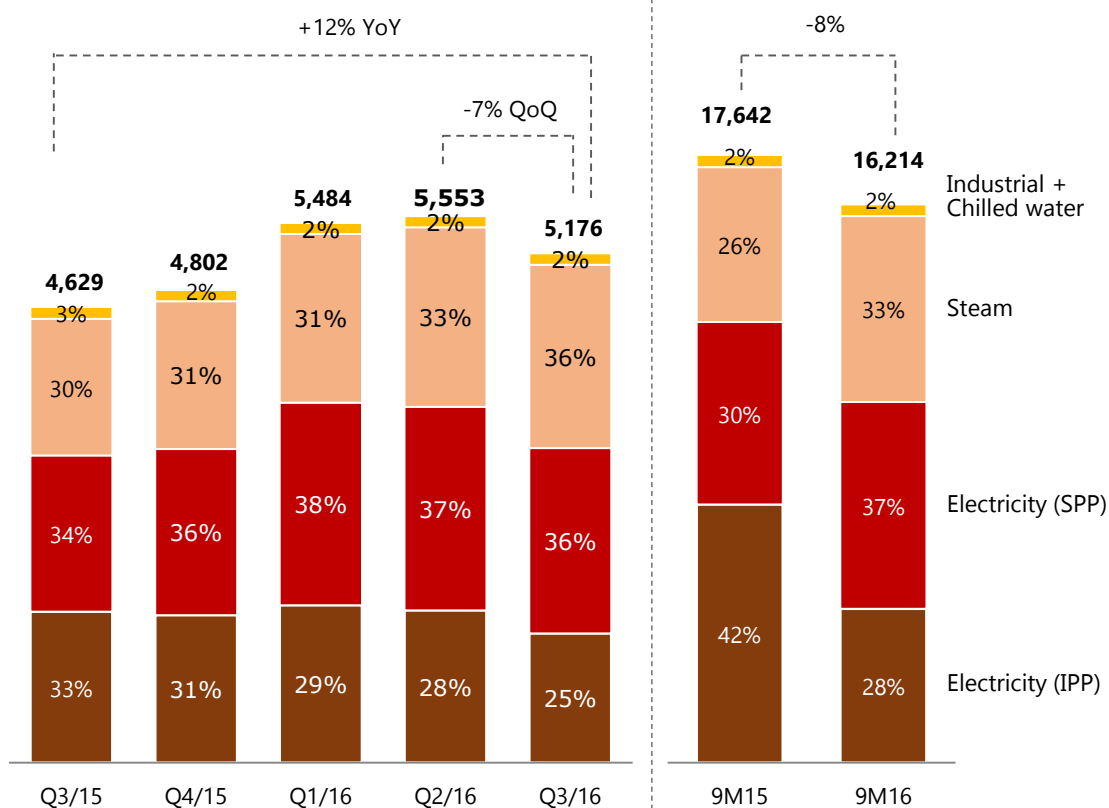
- Electricity and Steam are major source of GPSC's revenue, accounted for 98% of total revenue.

9M16 Revenue by customer (THB million)



- Accounted for more than 50% of total revenue, PTT Group is the largest customer of GPSC in 9M/16.

Quarterly revenue (THB MM)



Q3/16 VS Q2/16 (QoQ)

- Operating revenue in Q3/16 decreased by THB 377 MM or 7%.
- The decrease was due to the decline in revenue from Energy Payment (EP), from the lower sales volume of Sriracha plant and the lower sales price due to the reduction of Ft.

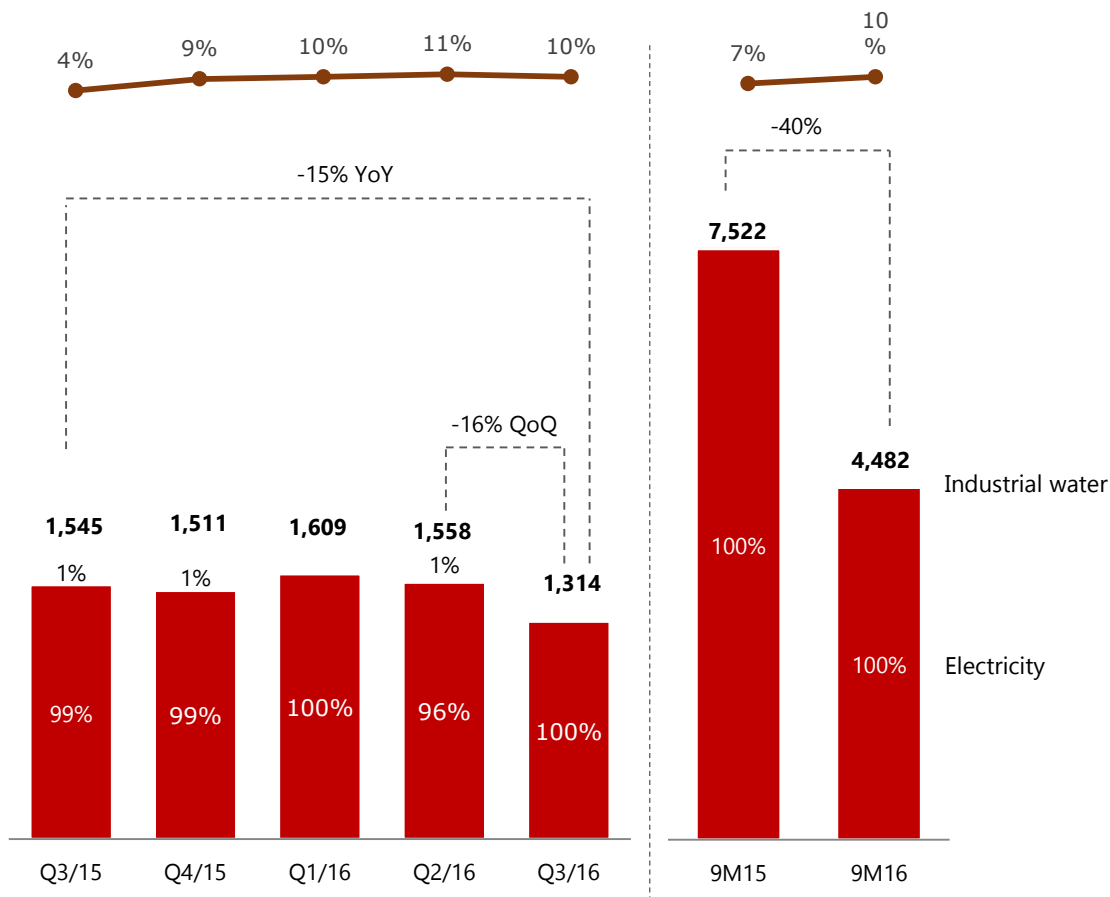
Q3/16 VS Q3/15 (YoY)

- Operating revenue in Q3/16 increased by THB 547 MM or 12%.
- The increase was due to higher sales volume of Rayong plant both from existing and new customers.

9M/16 VS 9M/15

- Operating revenue in 9M/16 decreased by THB 1,428 MM or 8% from lower sales volume to EGAT of Sriracha plant and the declining in the sales price followed the reduction in gas price.

Quarterly revenue & gross profit margin (THB MM, %)



Q3/16 VS Q2/16 (QoQ)

- Total revenue in Q3/16 decreased by THB 244 MM or 16% due to lower sales volume per EGAT's dispatch instruction.
- Gross profit decreased by THB 49 MM or 28% due to lower availability rate, weight factor and sales volume.

Q3/16 VS Q3/15 (YoY)

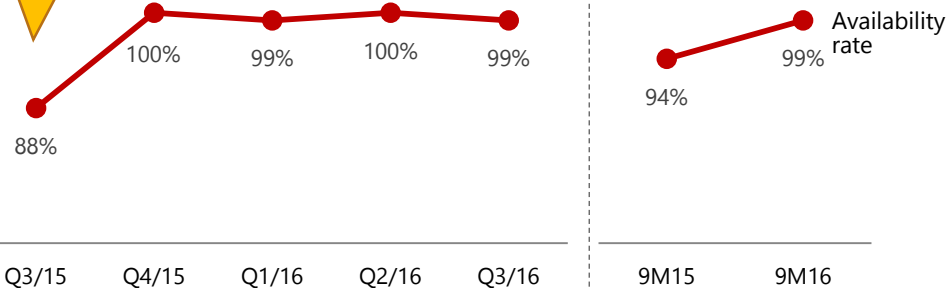
- Total revenue in Q3/16 decreased by THB 231 MM or 15% from lower sales volume per EGAT's dispatch instruction and the lower sales price due to reduction of gas price.
- Gross profit increased by THB 635 MM or 100% due to higher availability rate and lower of maintenance cost due to CI in Q3/15.

9M/16 VS 9M/15

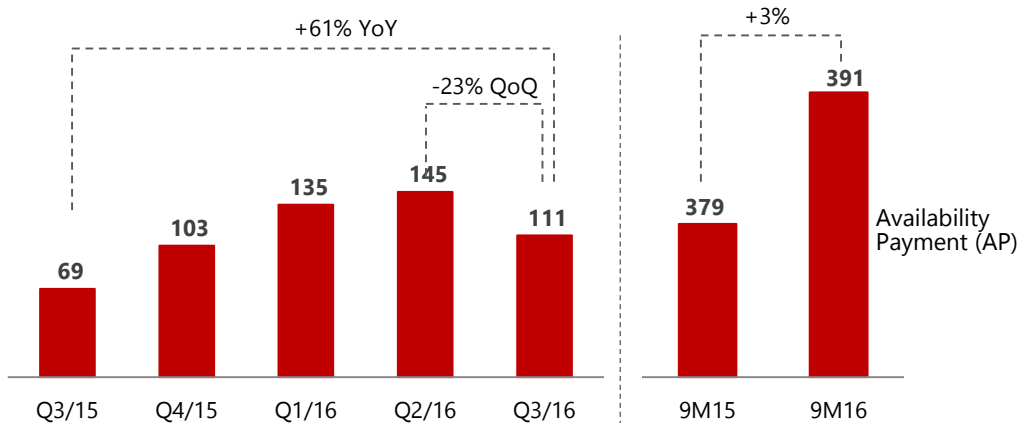
- Total revenue in 9M/16 decreased by THB 3,040 MM or 40% because of lower dispatch and sales prices.
- Gross profit margin increased by 3% resulted from the lower maintenance cost caused by the lower production volume.

Quarterly Availability Payment Rate (%)

Combustion inspection & Reserved shutdown



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



Q3/16 VS Q2/16 (QoQ)

- Availability payment rate in Q3/16 slightly decreased from almost 100% to 99%.
- Revenue from Availability Payment (AP) in Q3/16 also decreased by THB 34 MM or 23% from lower weight factor.

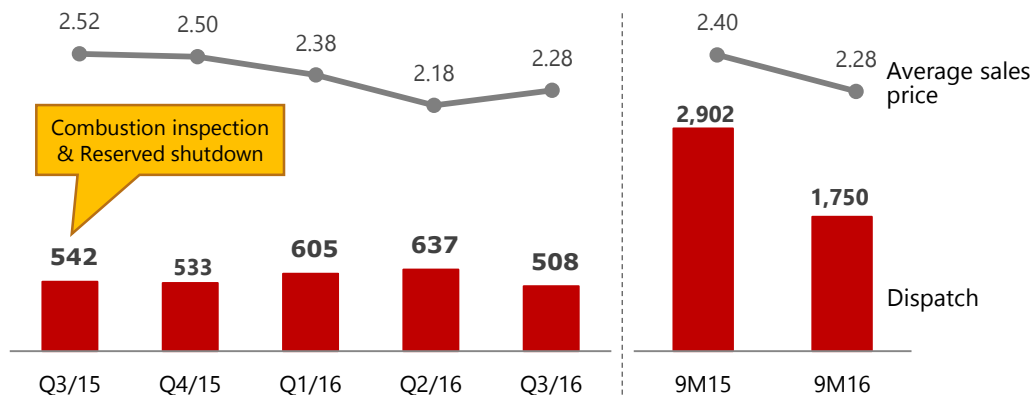
Q3/16 VS Q3/15 (YoY)

- Availability payment rate in Q3/16 increased by 11% from Q3/15 when there was scheduled plant shutdown for inspection.
- Revenue from Availability payment increased by THB 42 MM or 61% due to scheduled plant shutdown in Q3/15.

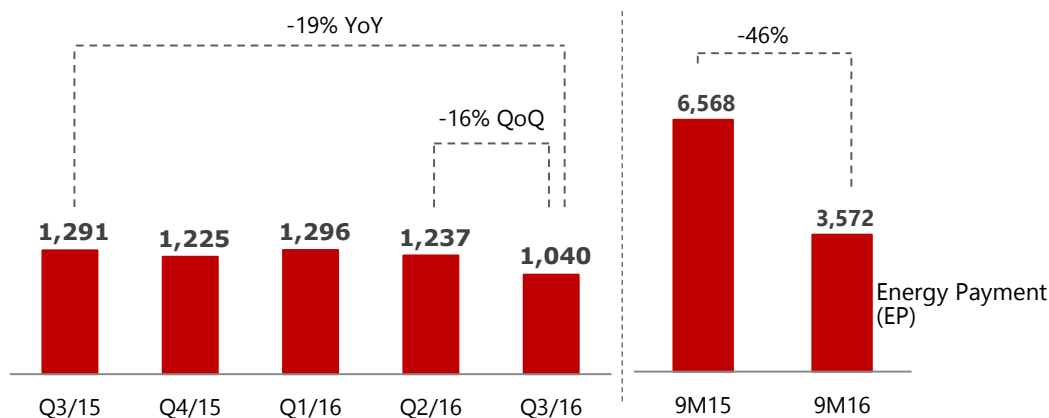
9M/16 VS 9M/15

- Availability payment rate in 9M/16 increased by 5% from higher reserved capacity for EGAT.
- Revenue from AP also increased by THB 12 MM or 3% resulted from scheduled plant shutdown in 2015.

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



Quarterly revenue from Energy payment (EP) (THB MM)



Q3/16 VS Q2/16 (QoQ)

- Average sales price in Q3/16 increased by 0.10 Baht per kWh, from the higher of gas price.
- In Q3/16, dispatch volume decreased by 129 GWh or 20% because of the lower submitted electricity volume per EGAT's instruction.
- Revenue from Energy Payment (EP) decreased by THB 197 MM or 16% according to dispatch volume decreased.

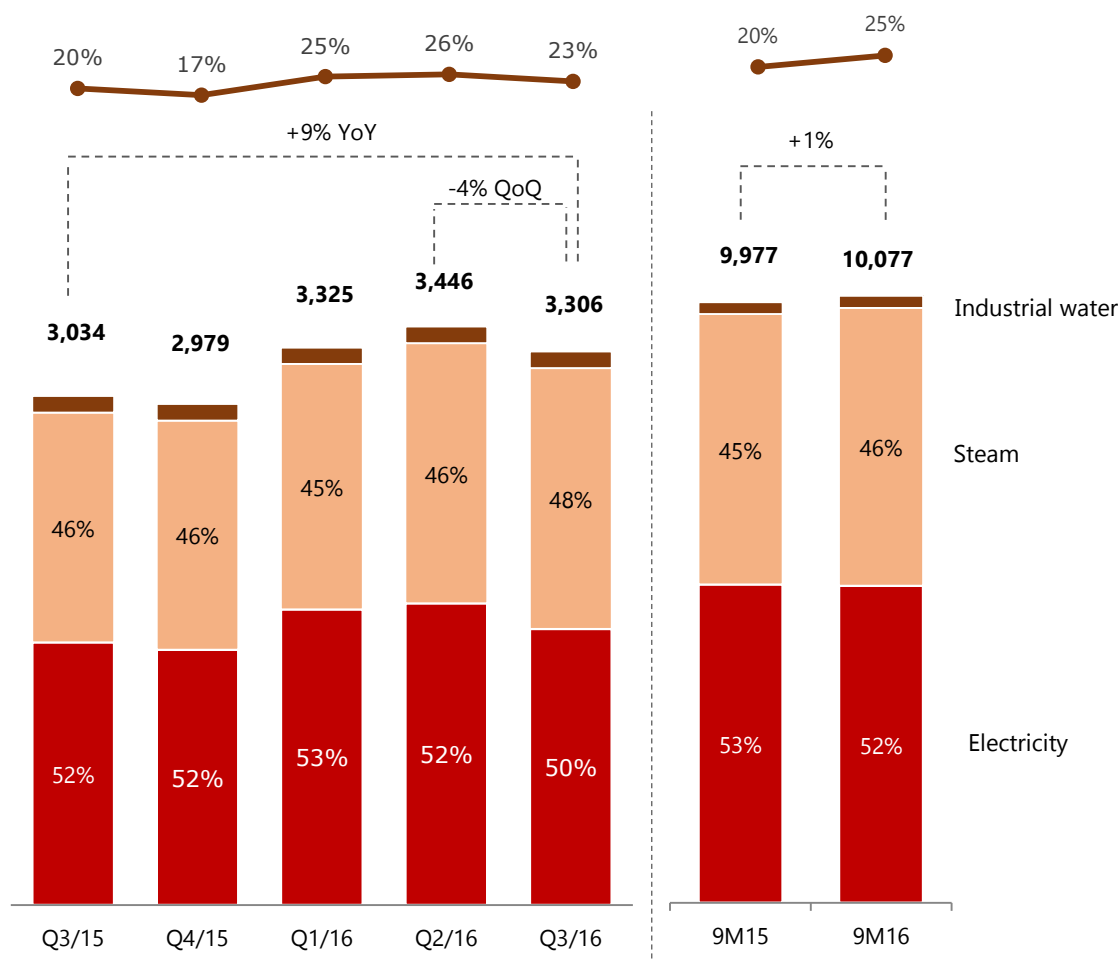
Q3/16 VS Q3/15 (YoY)

- Average sales price in Q3/16 decreased by 0.24 Baht per kWh or 9% from Q3/15 from the lower gas price.
- Dispatch volume also decreased by 34 GWh or 6% resulted from the decrease in sales volumes per EGAT's instruction.
- As a result, revenue from EP decreased by THB 251 MM or 19%.

9M/16 VS 9M/15

- Average sales price in 9M/16 decreased by 0.12 Baht per kWh or 5%, resulted from the decrease in gas price.
- Also, dispatch volume dramatically decreased by 1,152 GWh or 40%.
- Revenue from EP in 9M/16 decreased by THB 2,996 MM or 46% from lower sales price and sales volume.

Quarterly revenue & gross profit margin (THB MM, %)



Q3/16 VS Q2/16 (QoQ)

- Total revenue in Q3/16 decreased by THB 140 MM or 4% from lower of average sales price from the reduction in Ft rate.
- Also, gross profit decreased by THB 142 MM or 16% and GPM increased by 3% due to lower average sales price.

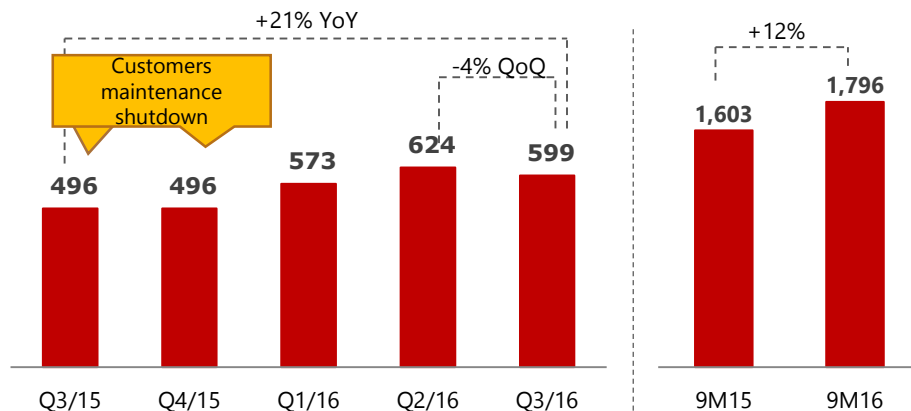
Q3/16 VS Q3/15 (YoY)

- Total revenue in Q3/16 increased by THB 272 MM or 9% from higher sales volume due to customers maintenance shutdown in Q3/15.
- Also, gross profit in Q3/16 increased by THB 142 MM or 9% and GPM increased by 3%

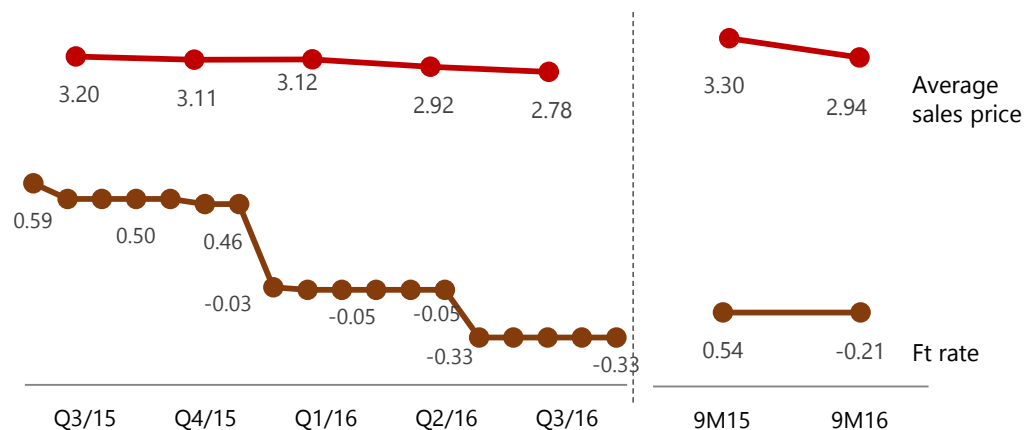
9M/16 VS 9M/15

- Total revenue in 9M/16 increased by THB 100 MM or 1% from the increased in sales volume.
- Gross profit significantly increased by THB 476 MM or 24% and GPM increased by 5% because of the increase in the sales volume and better cost management.

Quarterly power sales volume (GWh)



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



Q3/16 VS Q2/16 (QoQ)

- Volume** : decreased by 25 GWh or 4% due to lower export to EGAT under SPP non-firm according to the decreased in average sales price and k-factor.
- Price** : decreased by 0.14 Baht per kWh or 5% due to the decreases in Ft rate and natural gas price.

Q3/16 VS Q3/15 (YoY)

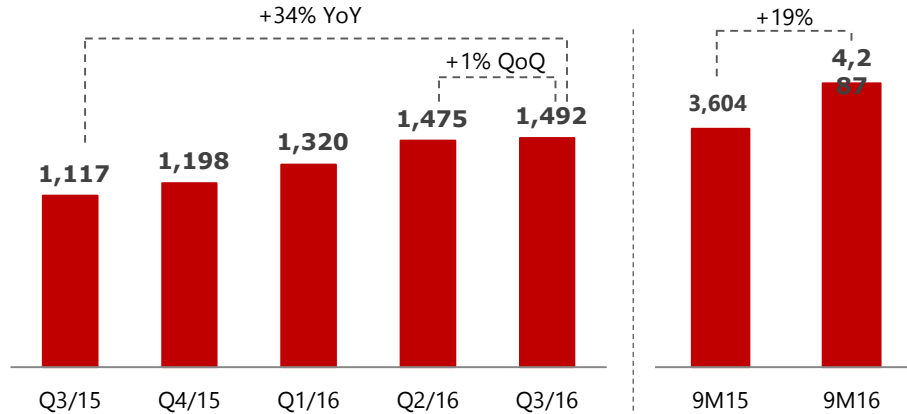
- Volume** : increased by 103 GWh or 21% resulted from higher demands from customers due to customers maintenance shutdown in Q3/15.
- Price** : decreased by 0.42 Baht per kWh or 13% due to the decreases in Ft rate and natural gas price.

9M/16 VS 9M/15

- Volume** : increased by 193 GWh or 12% from higher demands from existing and new customers while there was power plant shutdown for inspection in Q1/15 and customers maintenance shutdown in Q3/15.
- Price** : decreased by 0.36 Baht per kWh or 11% due to the decreases in Ft rate and natural gas price.

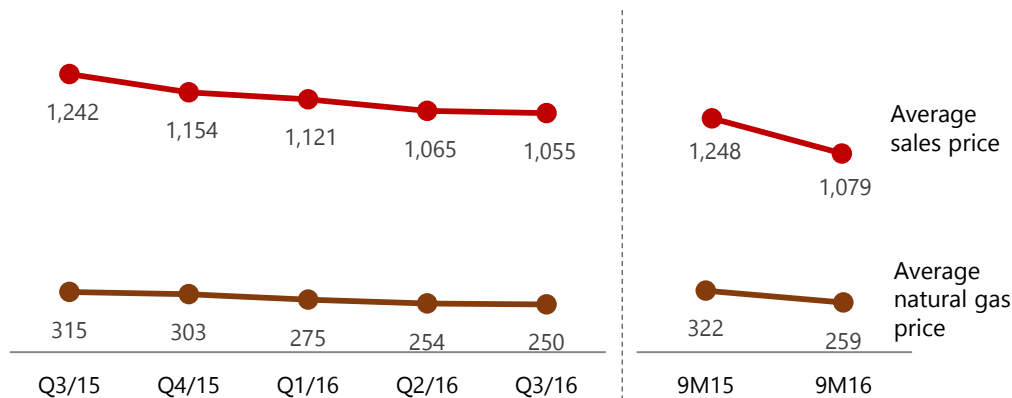
Quarterly steam sales volume

('000 tons)



Quarterly average sales price & average natural gas price

(THB/ton, THB/MMBTU)



Q3/16 VS Q2/16 (QoQ)

- Volume** : slightly increased by 17 thousand tons or 1% in Q3/16 resulted from a customer who recovered from shutdown in Q2/16.
- Price** : decreased by 10 Baht per ton or 9% in Q3/16 due to the decreases in natural gas price.

Q3/16 VS Q3/15 (YoY)

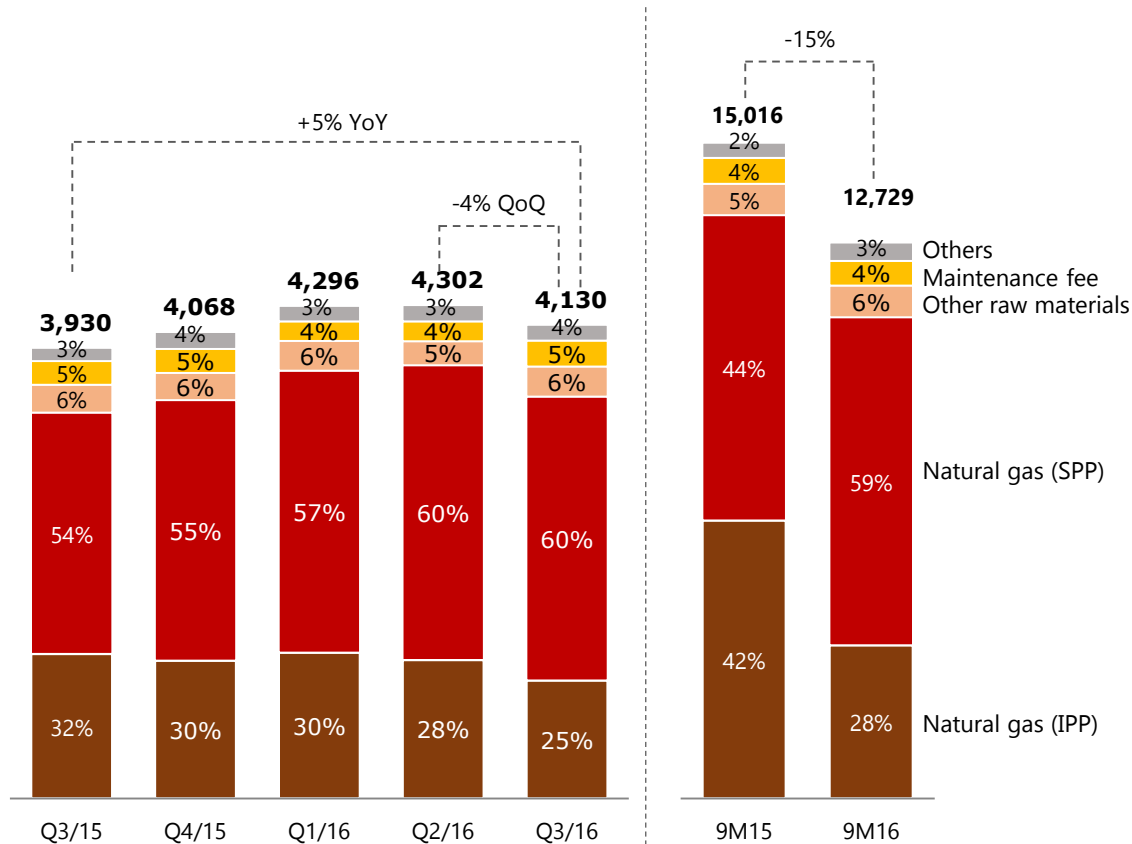
- Volume** : increased by 375 thousand tons or 34% from higher demands from the existing and new customers and there was customer's maintenance shutdown in Q3/15.
- Price** : decreased by 187 Baht per ton or 15% due to the decrease in natural gas price.

9M/16 VS 9M/15

- Volume** : increased by 683 thousand tons or 19% in 9M/16 resulted from higher demands from the existing and new customers.
- Price** : decreased by 169 Baht per ton or 14% following the decrease in natural gas price.

Decrease in cost of sales and services YoY mainly from lower gas price and plant optimization

Quarterly cost of sales and services* (THB MM)



Q3/16 VS Q2/16 (QoQ)

- Cost of sales and services in Q3/16 was decreased by THB 172 MM or 4%.
- The decreased was caused by a drop in cost of raw materials from lower dispatch to EGAT.

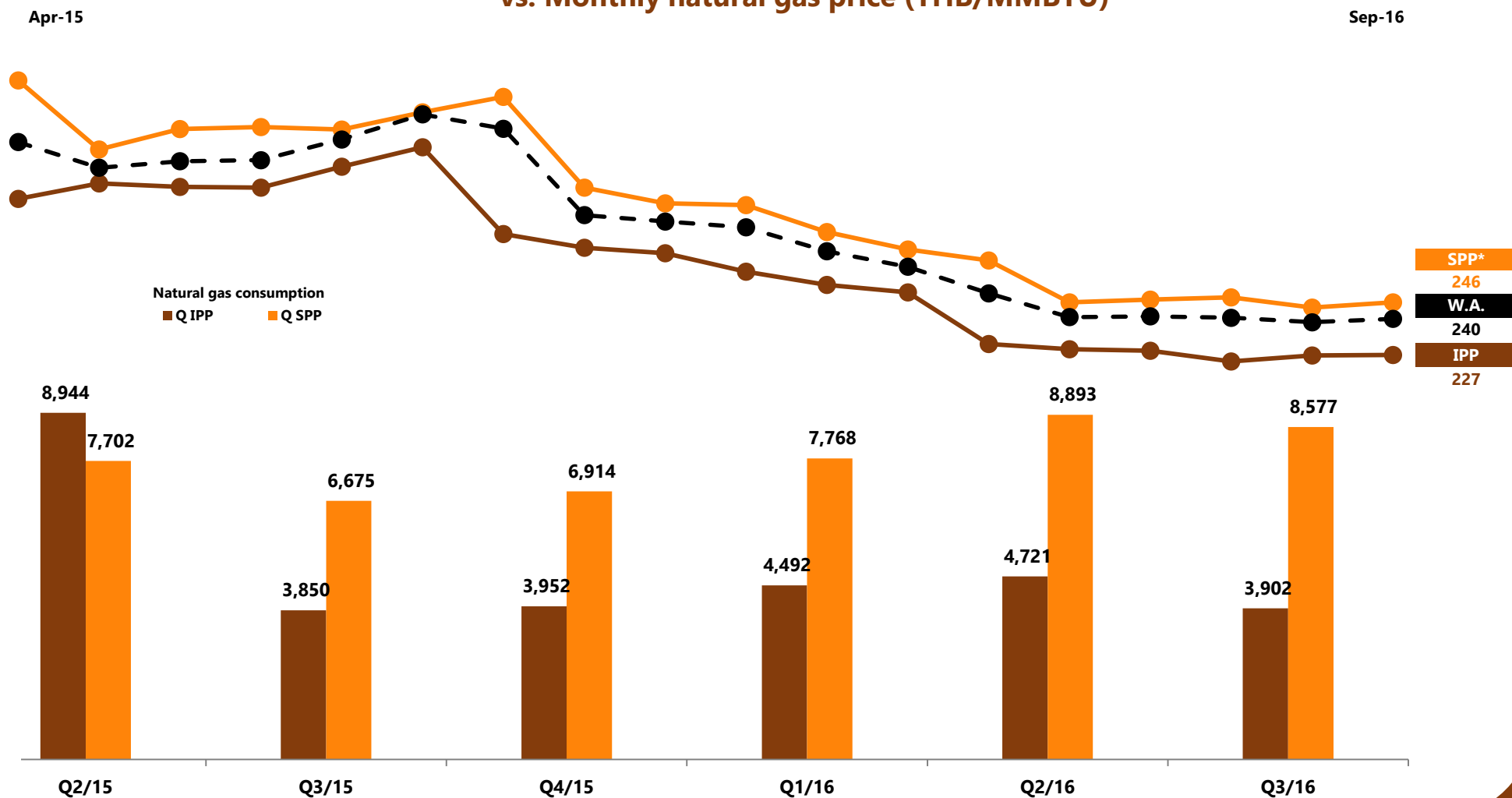
Q3/16 VS Q3/15 (YoY)

- When compared with Q3/15, cost of sales and services increased by THB 200 MM or 5%.
- The increase was from higher usage of natural gas (SPP) which inline with sales volume

9M/16 VS 9M/15

- Cost of sales and services in 9M/16 significantly decreased by THB 2,287 MM or 15%.
- The decrease in natural gas price, following the declining of the oil price, is the main factor in the reduction reinforced with the reduces in the dispatch volume.

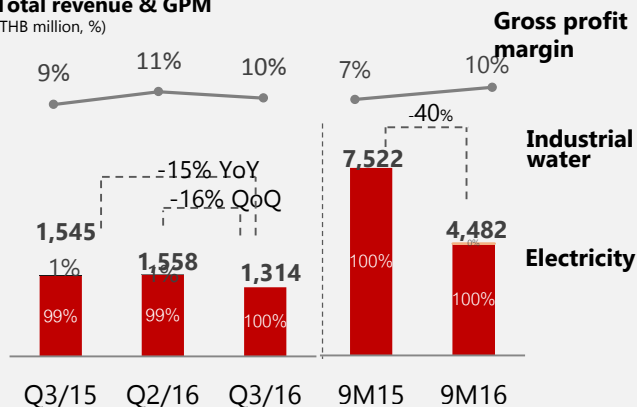
Quarterly natural gas consumption ('000 MMBTU)
vs. Monthly natural gas price (THB/MMBTU)



Remark:
*SPP monthly price are weighted average of all natural gas types used in SPP plants
IPP's natural gas price numbers shown are as of Sep 16

Sriracha Plant (IPP)

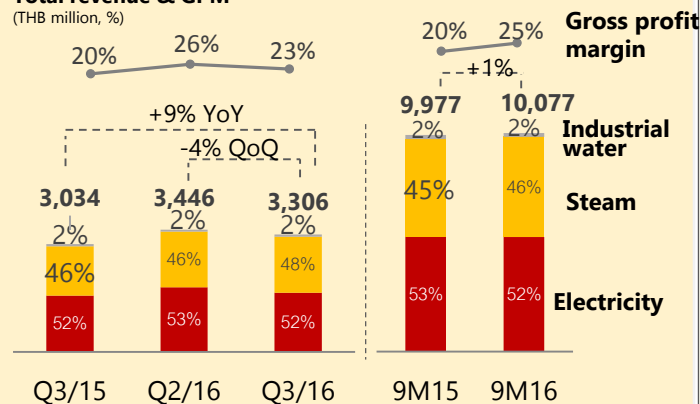
Total revenue & GPM
(THB million, %)



- **QoQ:** Total revenue was lower by 16% mainly from the decline in revenue of Energy Payment (EP) of natural gas cost which was resulted from dispatched instruction and lower weight factor from the decrease in demand of electricity consumption during rainy season.
- **YoY:** Total revenue decreased by 15%, mainly from electricity submitted volume to EGAT.
- **9M:** Total revenue dropped by 40% because of the reductions in electricity sales volume submitted to EGAT by 40% and sales price by 5%.

Rayong Plant (SPP)

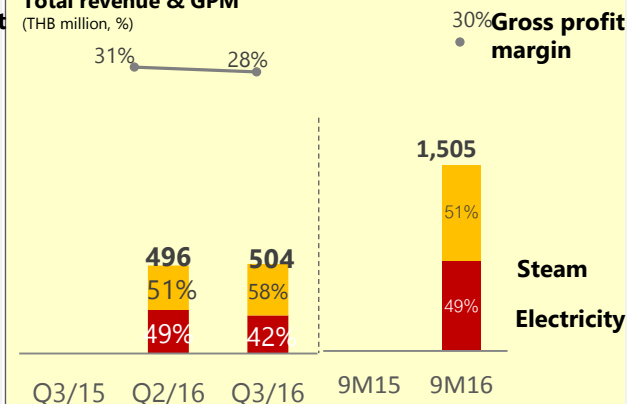
Total revenue & GPM
(THB million, %)



- **QoQ:** Total revenue was lower by 4% due to the drops in lower sales volume to EGAT under SPP Non-Firm type with the lower k-factor (Seasonal weight)
- **YoY:** Total revenue slightly increased by 9%, mainly from rises in sales volumes of steam and electricity caused by the increasing of industrial customer demand.
- **9M:** Total revenue slightly increased by 1% mainly from the increase in Industrial Users, with another factor that in August-September 2015 one of our major customer had a maintenance shutdown.

IRPC-CP Phase 1 Plant (SPP)

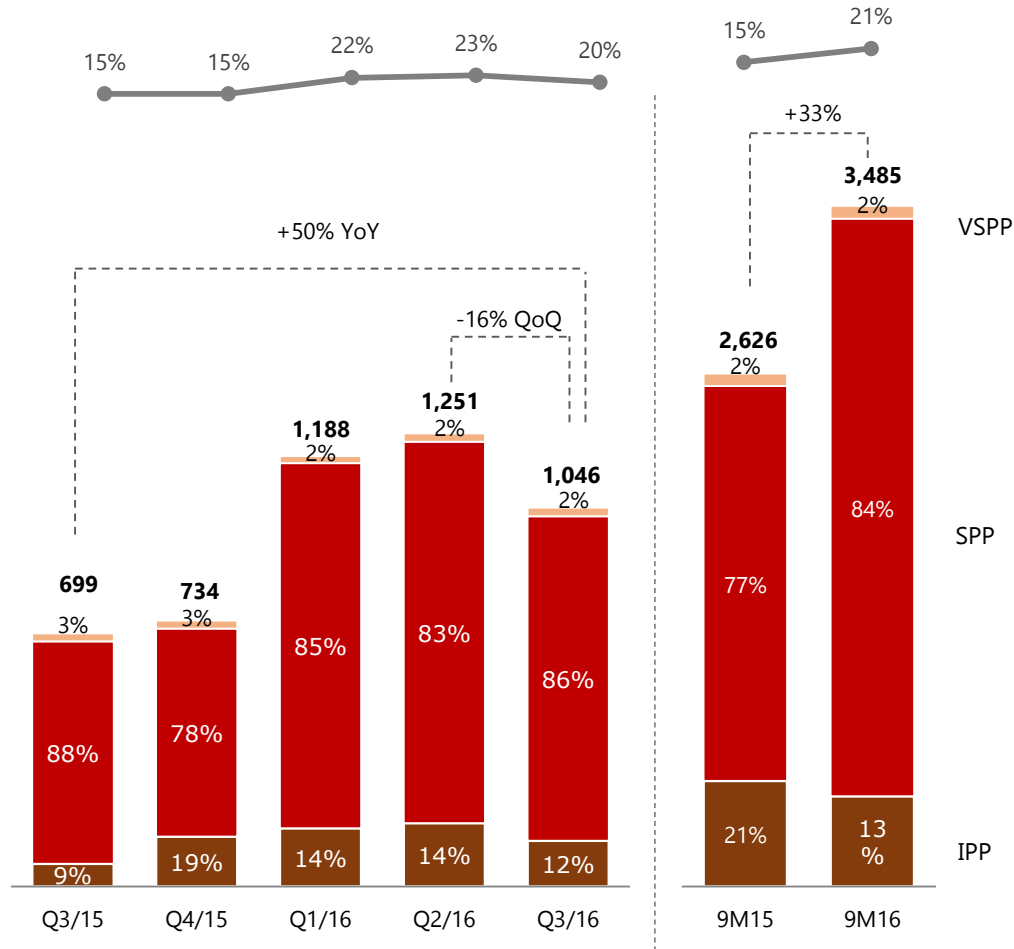
Total revenue & GPM
(THB million, %)



- **QoQ:** Total revenue increased by 2% mainly from the increase in sales volume of steam.

Gross profit improved 50% YoY, GPM improved to 21% from plant optimization and higher SPP's sales volume

Quarterly gross profit and gross profit margin* (THB million, %)



Q3/16 VS Q2/16 (QoQ)

- Gross profit in Q3/16 was THB 1,046 million decreased by THB 205 million or 16%.
- This mainly due to the lower sales volume and the increase in turbine maintenance cost at Rayong Plant.

Q3/16 VS Q3/15 (YoY)

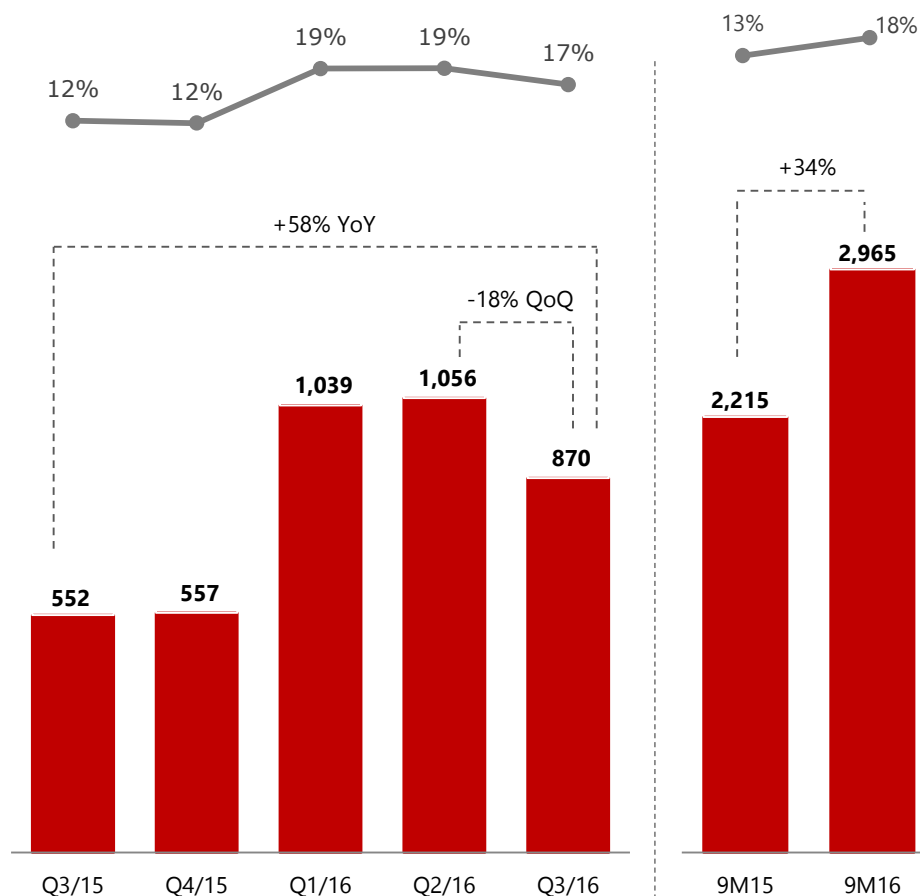
- Compare with Q3/15, gross profit increased by THB 347 million or 50%.
- The increase was from increase in revenue from sales of electricity and steam from the COD of IRPC-CP.

9M16 VS 9M15

- Gross profit in 9M16 significantly increased by THB 859 million or 33%.
- Mainly due to the increase in sales volumes from SPP plants together with lower natural gas price and maintenance cost.

Q3/16 EBITDA strongly increased by 58% YoY with better EBITDA margin of 17%

Quarterly EBITDA and EBITDA margin (THB MM, %)



Q3/16 VS Q2/16 (QoQ)

- EBITDA in Q3/16 was THB 870 MM decreased by THB 186 MM or 18% mainly due to the decrease in sales volume.

Q3/16 VS Q3/15 (YoY)

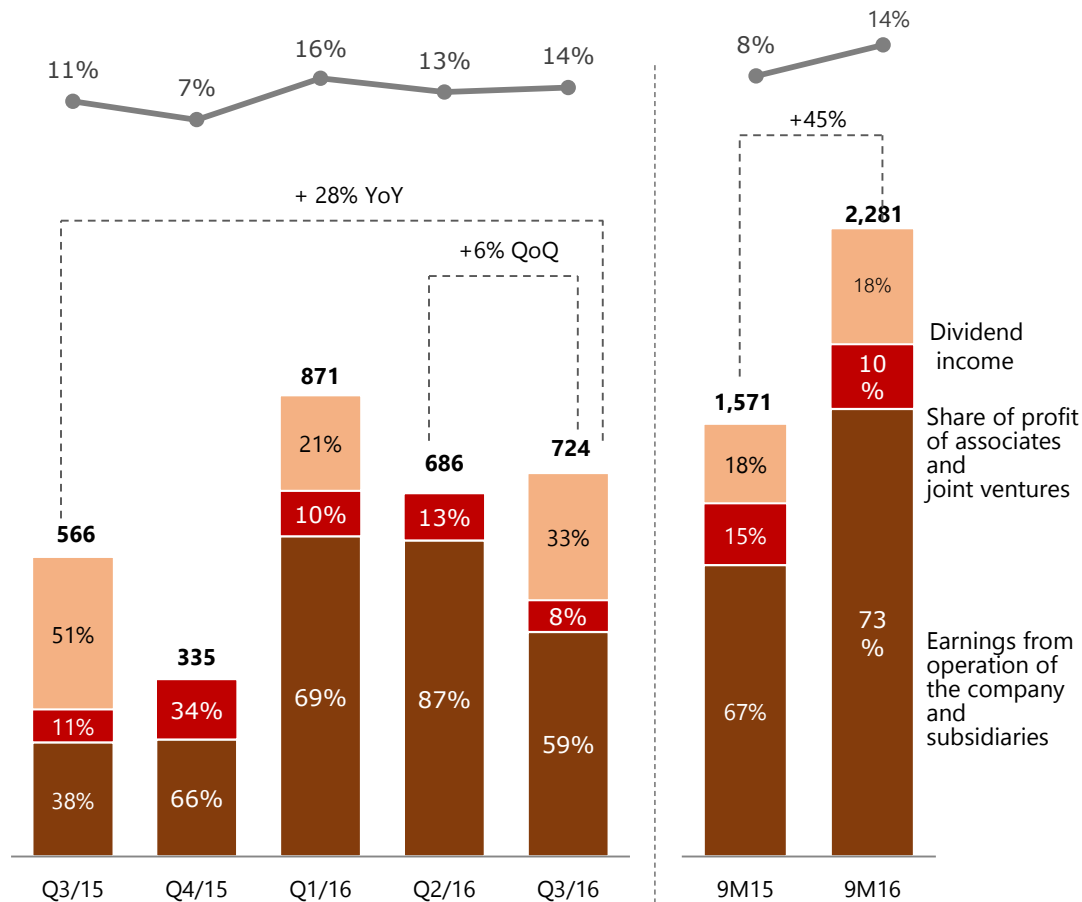
- Compare with Q3/15, EBITDA showed a strongly increase by THB 318 MM or 58%.
- The favorable outcome was mainly caused by the increase in sale volume from both existing and new power plants together with the drop in production costs resulting from the plant optimization.

9M/16 VS 9M/15

- EBITDA in 9M/16 significantly increased by THB 750 MM or 34%.
- The increase was mainly due to the Commercial Operation Date (COD) of IRPC Clean Power Company Limited (IRPC-CP) in November 2015, increase in sale volume from both existing and new customer together with the decrease in production costs resulting from the plant optimization.

Net profit for 9M/16 for the company increased 45% from better operating results and dividend income

Quarterly net profit and net profit margin (THB MM, %)



Q3/16 VS Q2/16 (QoQ)

- Net profit in Q3/16 was THB 724 million increased by THB38 million or 6%.
- The increase due to the dividend income of THB 240 MM from affiliate

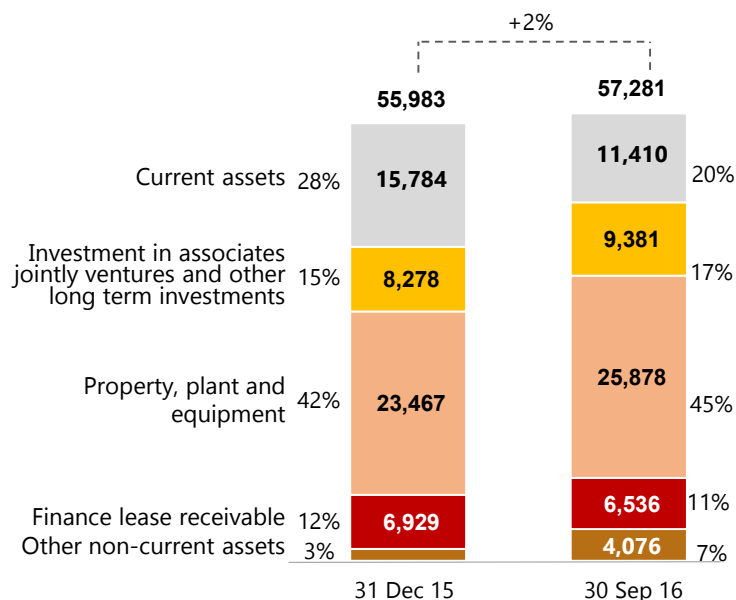
Q3/16 VS Q3/15 (YoY)

- Net profit increase by 158 million or 28%
- The increase due to higher demand of electricity and steam volume from existing and new customers of SPP (Rayong Power Plant) and lower natural gas cost with better cost management.

9M/16 VS 9M/15

- Net Profit in 9M/16 significant increased by
- Increase in earnings from production capacity expansion and cost optimization of SPP Rayong Plant and IRPC Clean Power Company Limited (IRPC-CP) Phase 1 which had COD in November 2015
- Dividend income increase from affiliate for THB 420 million during 9M/16

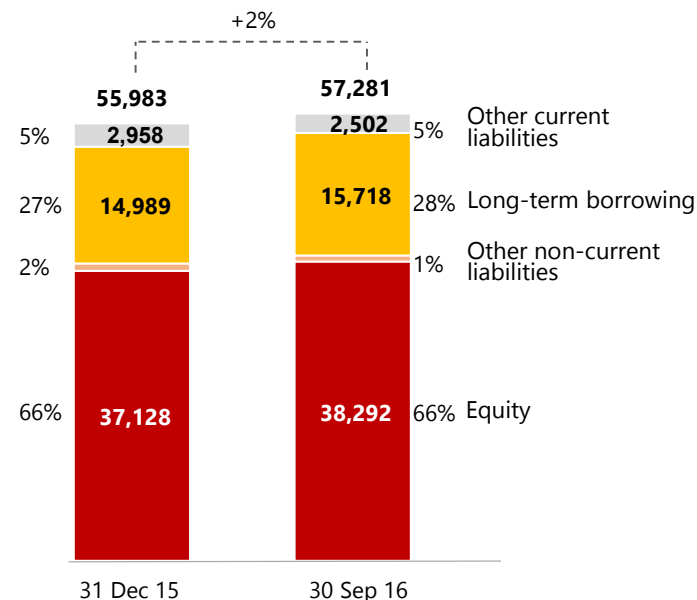
Total Assets (THB MM)



Total assets were THB 57,281 MM, increased by 2% from THB 55,983 MM.

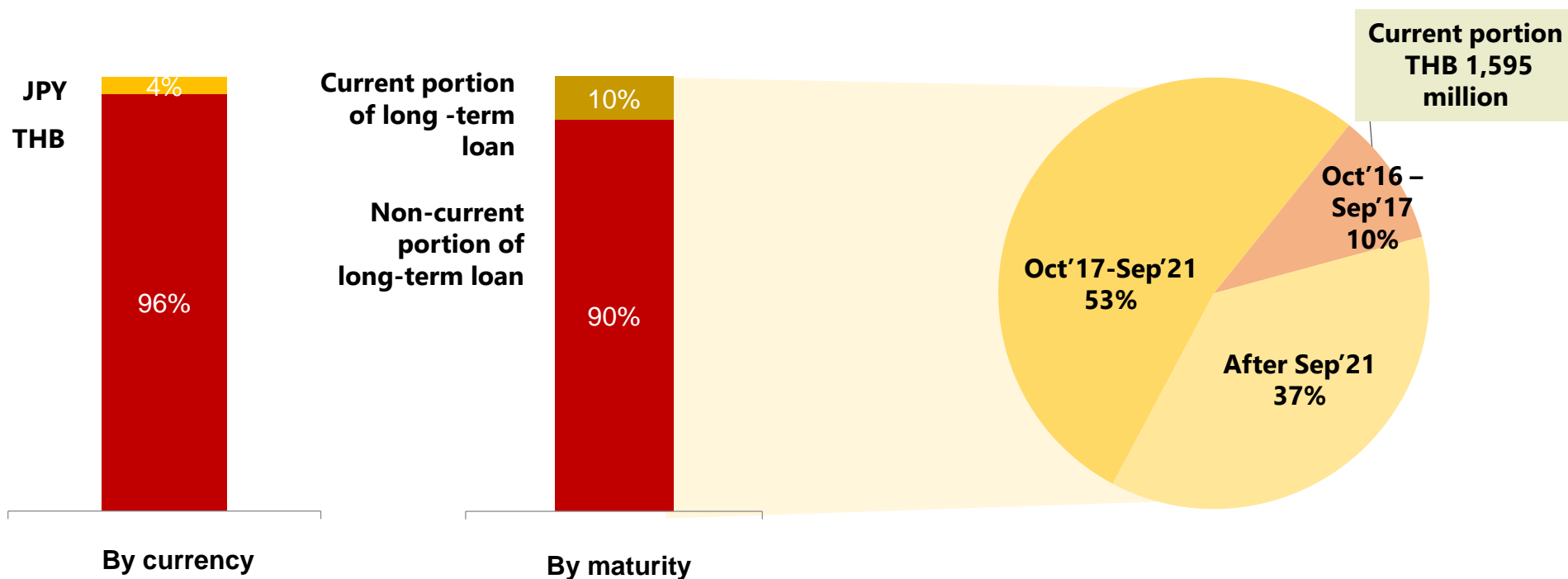
- Increases in investments from the better operating result of the associates and JV
- Increase in assets under constructions of IRPC-CP Phase 2.

Total Liabilities & Shareholders equity (THB MM)



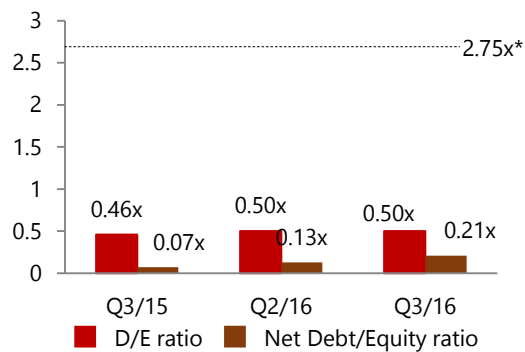
- Total liabilities were THB 18,989 million increased by THB 134 million or 1% mainly from the additional drawdowns of long-term loans for power plant constructions.
- Equity were THB 38,292 million increased by THB 1,164 million or 3% mainly from an increase in the unappropriated retained earnings.

Total interest-bearing debt: THB 15,718 million

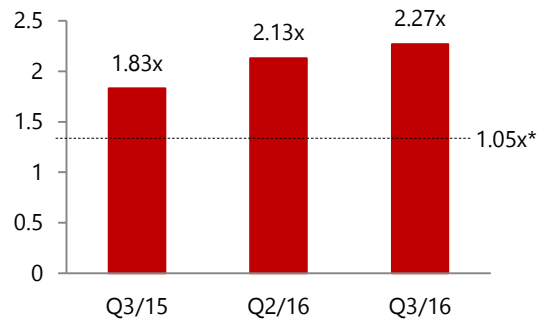


- The debt balance of the company and its subsidiaries as at 30 September 2016 was in Thai Baht and Japanese Yen currency.
- All interest-bearing debt is long-term debt, which includes 10% current portion.
- Non-current portion of long-term debt was THB 14,123 million.
- 53% of total long-term debt will be repaid between October 2017 to September 2021.

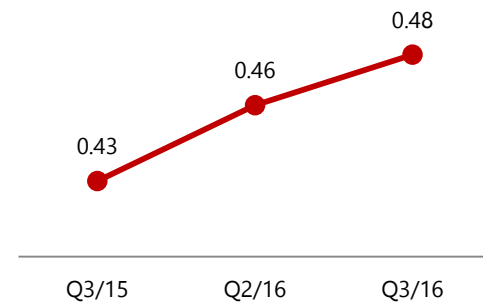
Total D/E and Net Debt/ Equity ratio (Times)



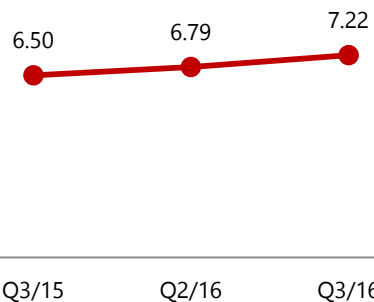
DSCR (Times)



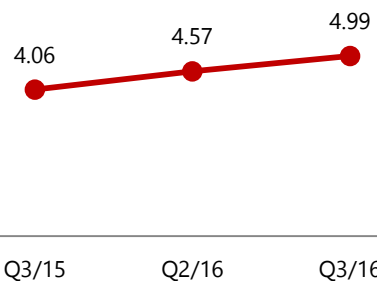
Earning per share (EPS) (Baht/share)



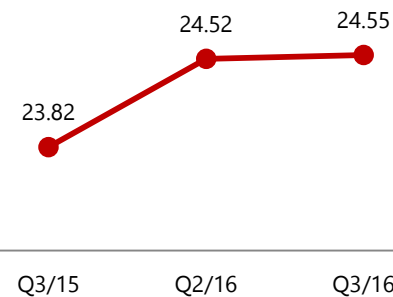
ROE (%)



ROA (%)

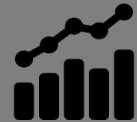


Book value per share (BVPS) (Baht/share)





Q3 2016 Significant Events



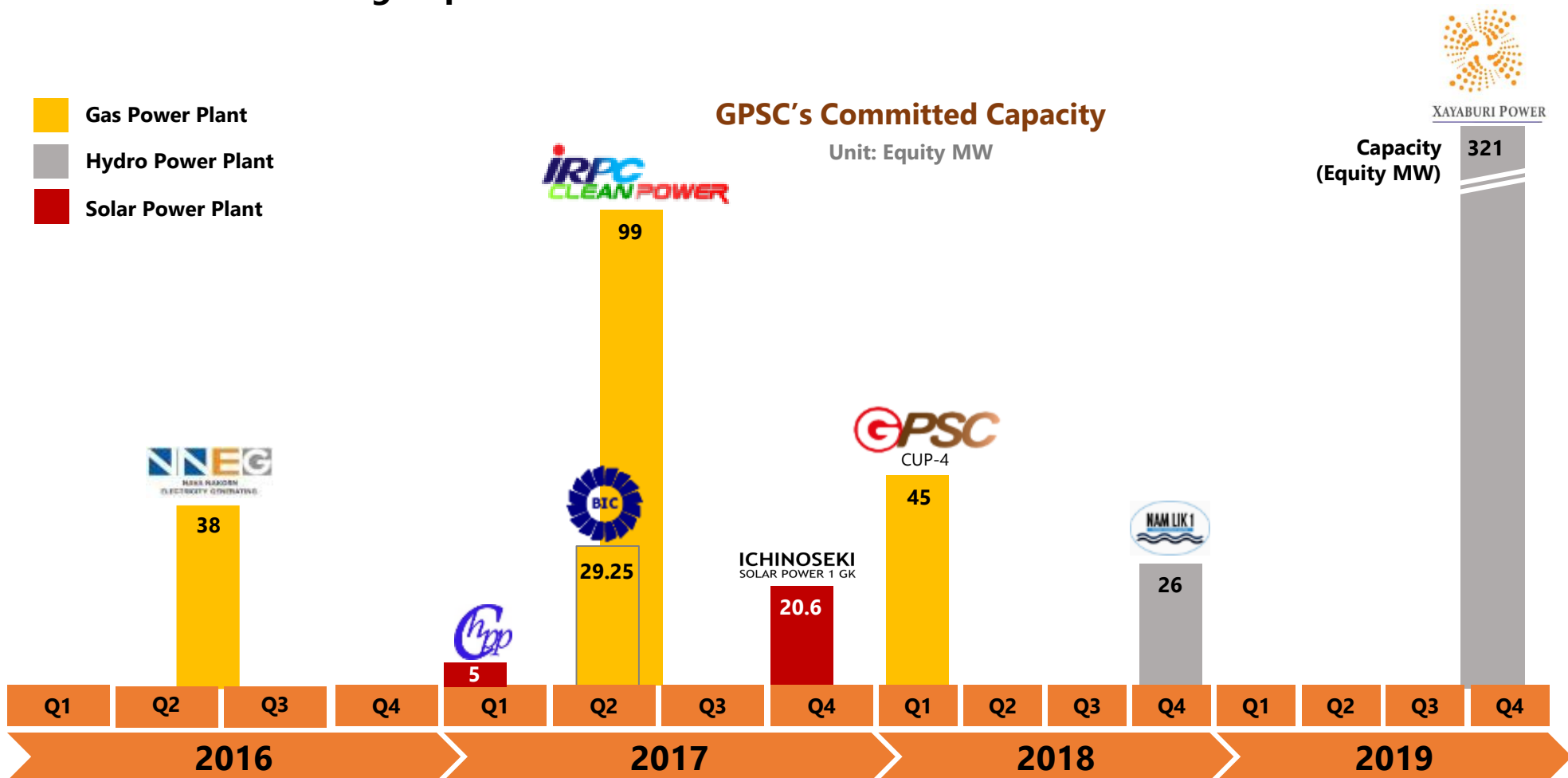
Financial Performance



Project Update

7 Committed Projects to operate by 2019

GPSC's Management team ensure efficient project management and high competent staffs, both domestic and international projects in order to meet the construction schedule and COD according to predetermined schedule.





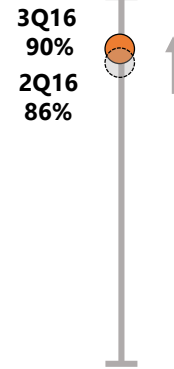
IRPC Clean Power Company Limited (IRPC-CP)
In IRPC Industrial Zone at Choeng Noen, Rayong Province
(118 Rai)



Equity Investment
3,400 THB Million



% Progress



Type	SPP Cogeneration
Capacity*	<ul style="list-style-type: none"> Electricity: 240 MW Steam: 180-300 T/H
Customer*	<ul style="list-style-type: none"> Electricity: EGAT 2x90 MW (25 years), IRPC 60 MW (27 years) Steam: IRPC 180-300 T/H
SCOD	June, 2017
Total Investment	13,600 THB Million
D/E	3:1

Progress update

Phase 2 Under Construction

- Main construction progress on 230 kV substation and transmission line in Cherngnern
- Part of land area in under construction while other parts are under negotiation to access the area

Shareholding



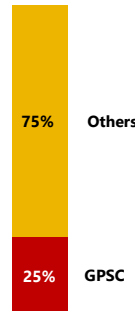


Activity	Start	End	Actual	Planned	Progress	Remarks
Site Preparation	2016-01-01	2016-03-31	100%	100%	100%	Completed
Foundation Work	2016-04-01	2016-06-30	100%	100%	100%	Completed
Structural Steel Erection	2016-07-01	2016-09-30	100%	100%	100%	Completed
Boiler Installation	2016-10-01	2016-12-31	100%	100%	100%	Completed
Gas Turbine Installation	2017-01-01	2017-03-31	100%	100%	100%	Completed
HRSG Installation	2017-04-01	2017-06-30	100%	100%	100%	Completed
Steam Turbine Installation	2017-07-01	2017-09-30	100%	100%	100%	Completed
Electrical Work	2017-10-01	2017-12-31	100%	100%	100%	Completed
Painting and Finishing	2018-01-01	2018-03-31	100%	100%	100%	Completed
Commissioning	2018-04-01	2018-06-30	100%	100%	100%	Completed

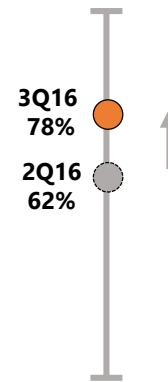


Bangpa-In Cogeneration Company Limited (Phase 2) Ayutthaya Province

Equity Investment
1,335 THB million



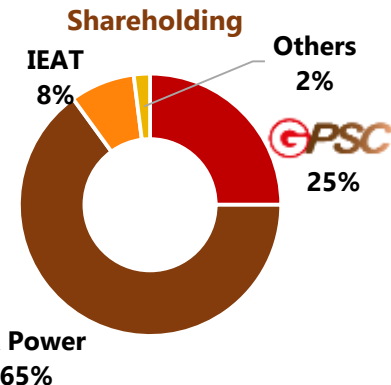
% Progress

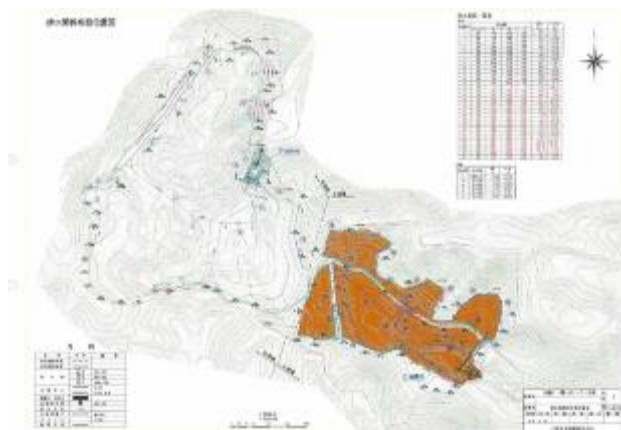


Type	Gas-Fired Power Plant
Capacity	<ul style="list-style-type: none"> Electricity: 117 MW (gross) Steam: 20 T/h
Customer	<ul style="list-style-type: none"> Electricity: EGAT 90 MW (25 years), IUs 27 MW Steam: IUs 20 T/h
SCOD	June, 2017
Total Investment	5,340 THB Million
D/E	3:1

Progress update

- Main construction progress on pipe connection to the main equipment Gas Turbine Generator (GTG), Heat Recovery Steam Generator (HRSG) and Steam Turbine Generator (STG)





ICHINOSEKI SOLAR POWER 1 GK

Ichinoseki Solar Power (ISP1) Ichinoseki City, Japan

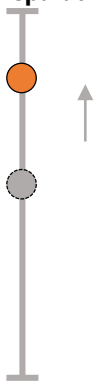
Equity Investment
~2,080 YEN Million



% Progress Site preparation

3Q16
84%

2Q16
57%

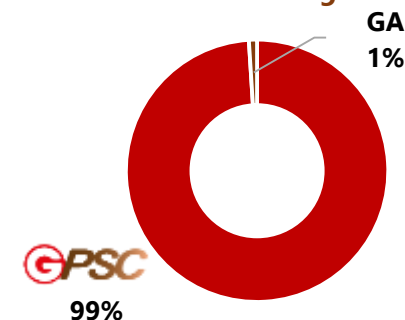


Type	Solar
Capacity	• Electricity: 20.8 MW
Customer	• Tohoku Electric Power (20 years)
SCOD	Q42017
Total Investment	~10,000 JPY million
D/E	4:1

Progress update

- PPA contract with Tohoku Electric Power Company is concluded; secured FiT at 42 JPY/kWh (exclude tax) for 20 years
- Construction phases with EPC contractor is expected to start in Oct 2016 in order to meet SCOD in 2017
- Completed first drawdown of the loan since Aug 25, 2016
- Offshore NTP was noticed since Aug 26, 2016
- GPSC first international project to COD in 2017

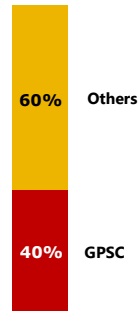
Shareholding



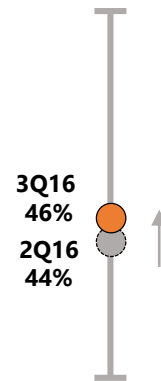


Nam Lik 1 Power Company Limited (NL1PC)
Lao PDR

Equity Investment
~37 USD Million



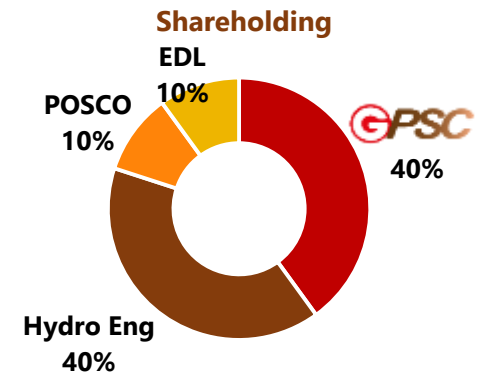
% Progress



Type	Run-of-River Hydropower
Capacity	• Electricity: 65 MW
Customer	• Electricity: EDL 63.8 MW
SCOD	2018
Total Investment	~123 USD Million
D/E	7:3

Progress update

- Main construction progress on diversion of works, powerhouse and 115 kV transmission line
- Started the discussion with high expertise subcontractor to solve the delay issue which should be concluded within Oct 2016





Central Utility Plant Project 4 (CUP-4)

PTT's WEcoZi, Asia Industrial Estate (AIE) Rayong Province



Equity Investment
<4,000 THB Million



Type	Gas-fired Cogeneration Power Plant/Utilities
Capacity	<ul style="list-style-type: none"> Electricity: 390 MW (Phase 1: 45 MW) Steam: 900 T/H (Phase 1: 70 T/H)
Customer	<ul style="list-style-type: none"> Electricity: IUs 30 MW Electricity: Non-firm SPP 10 MW Steam: IUs 70 T/H
SCOD	Q12018

Progress update

- In the process of apply permits and licenses including Non-Firm Power Purchase Agreement (PPA) under SPP scheme with EGAT, the purchase of gas, water and land with PTT.
- Sent out the turbine's price invitation for bidding (GTG-ITB) which is expected to award EPC within Q4 2016
- Plan to start construction in later Q1 2017

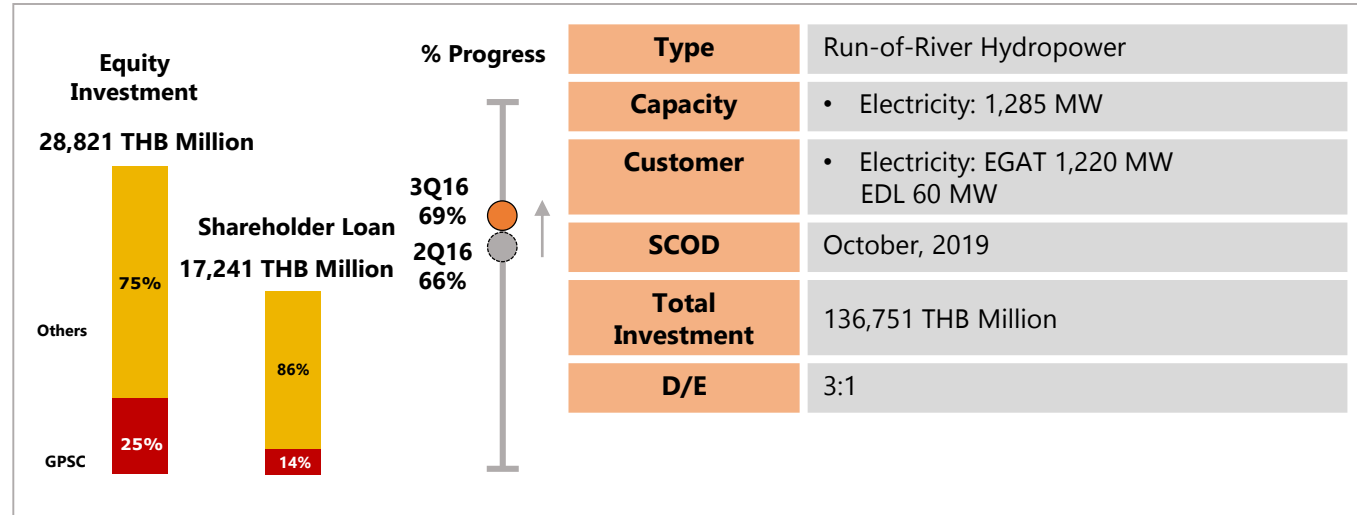
Shareholding





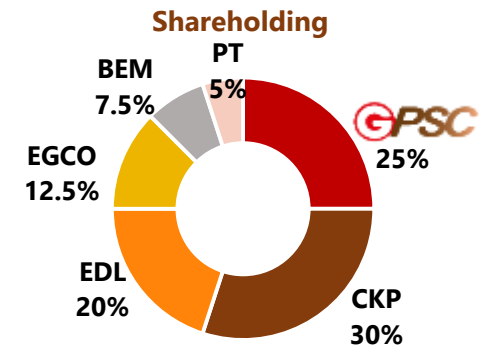
Xayaburi Power Company Limited (XPCL)

Xayaburi, Lao PDR



Progress update

- Construction of powerhouse, fish ladder, spillway and 500kV transmission line tower has progress as planned



Fish passing facilities



Powerhouse concrete work



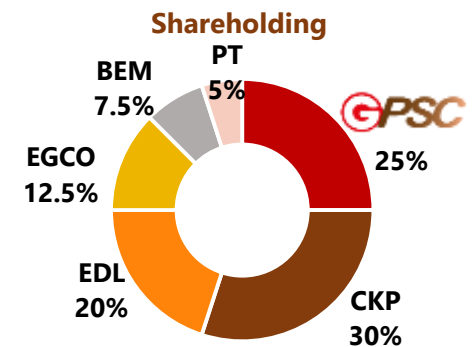
XAYABURI POWER

Xayaburi Power Company Limited (XPCL)

Xayaburi, Lao PDR

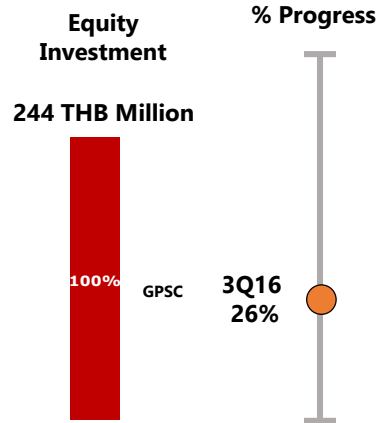
The additional requirements from Lao PDR's Government upon an environmental concerns in constructing XPCL power plant has caused an incremental construction costs. Therefore, the Government granted XPCL the compensations which are:

- ✓ **Decrease of corporate income tax**
- ✓ **Decrease of royalty fee**
- ✓ **Extend concession period for another 2 years** (after COD date);
Total 31 years





CHPP Solar Cooperatives Chanthaburi Province



Type	Solar
Capacity	• Electricity: 5 MW
Customer	• PEA
SCOD	December, 2016
Total Investment	244 THB million
Contract	<ul style="list-style-type: none"> • FiT THB 5.66/unit • 25 years • End 2041

Progress update

- Received building construction permit and already signed Power Purchase Agreement (PPA) with Provincial Electricity Authority (PEA)

Shareholding



24M Technologies, Inc. (24M)

Cambridge, Massachusetts (MA), USA

Business

Lithium-Ion Battery (LFP) technology

Application

• Energy Storage System (ESS)

2010

24M was established

2011

Developed 5x thicker electrodes than previously possible

2012

Developed end to end cell production

2013

Automated line eliminates coating, drying etc.

2014

Invested > \$50 to make 9000th full size cell

2015

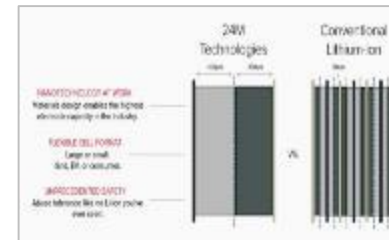
Proven key high volume unit operation

2016

High volume manufacturing production line

Progress update

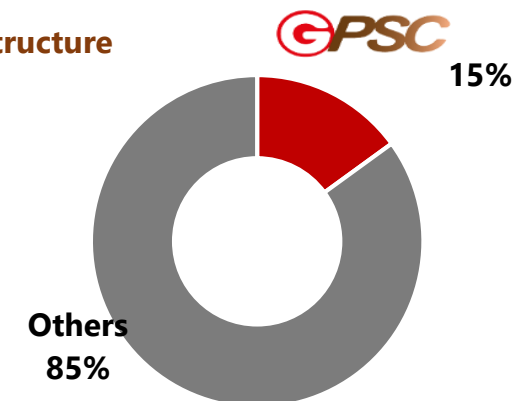
- 24M has signed an MOU with NEC Energy Solutions (NECES) to supply Semisolid Lithium-Ion battery to NECES energy storage system.
- Currently, 24M is working on the **development of High Volume Manufacturing production line.**



Awards & Recognition

- In 2016, 24M has received many awards and recognition from the industry including:
 - **2016 Energy Innovation Pioneers: CERAWEK**, HIS Energy
 - **2016 New Energy Pioneers: Future of Energy Summit**, Bloomberg New Energy
 - Listed in **"50 Smartest Companies 2016"**: MIT Technology Review

Shareholding Structure



Total Investment of GPSC Portion

~22 USD million



Maintenance schedule: Sriracha and Rayong plants

Plant	Tag no.	Description	2016											
			Q1			Q2			Q3			Q4		
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CUP-1	H-13701	Aux. Boiler.11			15 3Y 27									
	N-13901	GTG11	5 HG 18										16 C 20	
	H-13702	HRSG11	5 3Y 18											
	N-13902	GTG12							1/08	FO	30/09		29/11 C 2/12	
	H-13703	HRSG12						26/06 1Y 02/07						
	N-13903	GTG13							4 1Y 10					
	H-13704	HRSG13												
	N-13904	GTG14	31/01 MI 21/02											
CUP-2	H-13705	HRSG14	31/01 3Y 21/02											
	N-13961	GTG15									18/10 MI 8/11			
	H-13761	HRSG15									18/10 3Y 8/11			
	N-13962	GTG16												
	H-13762	HRSG16		22/02 1Y 3/03										
	H-23701	Aux. Boiler.21						21/06 3Y 3/07						
	N-23901	GTG21											27/11 3Y+ 28/12	
	H-23701	HRSG21												
CUP-3	N-23902	GTG22											1 1Y 11	
	H-23702	HRSG22												
	N-23911	Steam Turbine21												
CUP-3	H-33701	Aux. Boiler 31								6 1Y 18				
	H-33711	Aux. Boiler 32										14 3Y 26		
	H-33712	Aux. Boiler 33									23/09 3Y 5/10			
SRC	11MB	GT11												4 CI 12
	1-211-SG-101	HRSG#1												4 1Y 12
	12MB	GT12												4 CI 12
	1-211-SG-201	HRSG#2												4 1Y 12

Notes

MI Major Inspection for Gas Turbine
 HGPI Hot Gas Path Inspection for Gas Turbine
 MO 2nd Major Overhaul for Steam Turbine
 Mi Minor Inspection for Steam Turbine
 1Y One Year Inspection Aux. Boiler
 3Y Three Year Inspection Aux. Boiler
 1Y One Year Inspection HRSG
 3Y Three Year Inspection HRSG
 C Composition Change Day
 FO Forced Outage

Rayong Site

22 days
 14 days
 27 days
 15 days
 11 days
 13 days
 11 days
 14 days
 3 days

Notes

CI
 1Y

Sriracha Site

Combustion Inspection for Gas Turbine
 One Year Inspection HRSG

9 days
 8 days



Maintenance schedule: IRPC-CP

Plant	Unit	2016											
		Q1			Q2			Q3			Q4		
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
IRPC-CP	CTG 2B								22/09	A	30/09		
	HRSG2B								22/09	YI	30/09		
	Aux. Boiler				23/05	YI	27/05						

Notes

A
YI

Level A inspection
Yearly inspection

5 days
5 days

Ratios	Formula
Gross profit margin	$\frac{\text{Gross profit}}{\text{Revenue from sales of goods and service} + \text{Revenue from finance lease}}$
Net profit margin	$\frac{\text{Net profit}}{\text{Total Revenue}}$
Total Debt to Equity	$\frac{\text{Total liabilities}}{\text{Total shareholder's equity}}$
Net debt to Equity ratio	$\frac{\text{Interest bearing debts} - (\text{Cash and cash equivalents} + \text{Restricted cash} + \text{Current investments})}{\text{Total shareholder's equity}}$
DSCR	$\frac{\text{EBITDA for DSCR for the last 12 months}}{\text{Principal and Interest to be paid in the next 12 months}}$
Earning per share (EPS)	$\frac{\text{Net profit for the company}}{\text{Weighted average number of shares}}$
ROE	$\frac{\text{Net profit for the company}}{\text{Average shareholder's equity}}$
ROA	$\frac{\text{Net profit (last 12 months)}}{\text{Average assets}}$
Book value per share (BVPS)	$\frac{\text{Shareholder's equity for the company}}{\text{Average shareholder's equity for the company}}$

THANK YOU

Global Power Synergy Public Company Limited

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