

Thailand Focus 2017

Anantara Siam Bangkok Hotel

29 August 2017



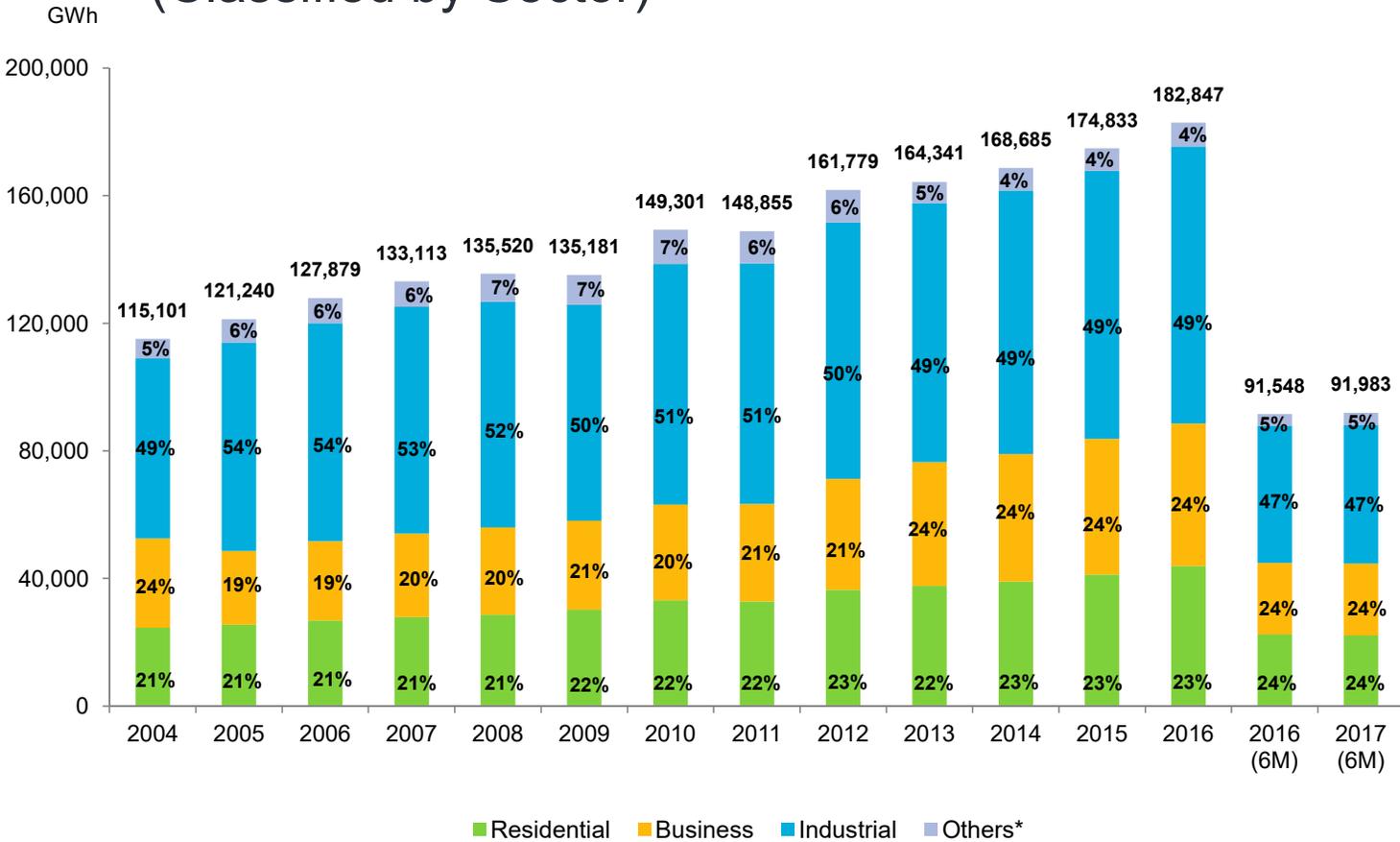
Agenda

- Industry Overview
- Company Overview
- Financial Performance
- Annexure

Industry Overview

Electricity Consumption

Electricity Consumption for the Whole Country (Classified by Sector)



Total Installed Capacity is 41,903.23 MW (as of July 2017)

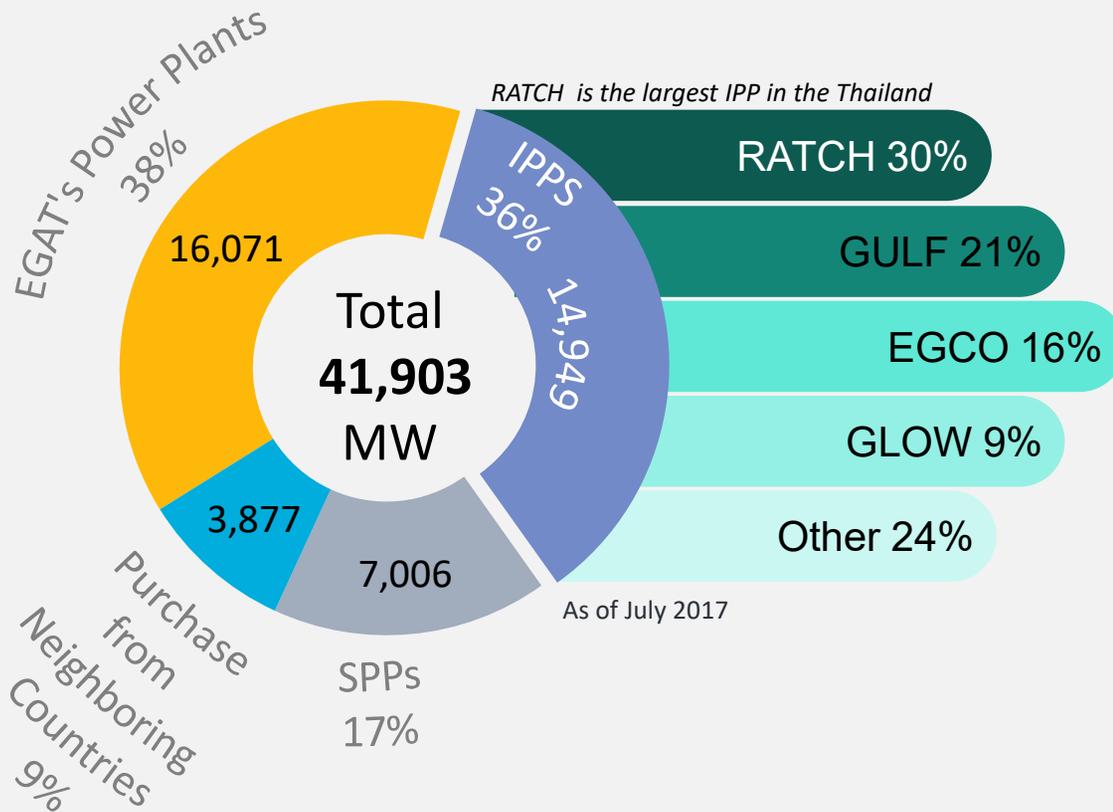
The peak demand of 2017 was at 30,303.40 MW.

CAGR 2004-2016 ≈ 4%

Industry Overview

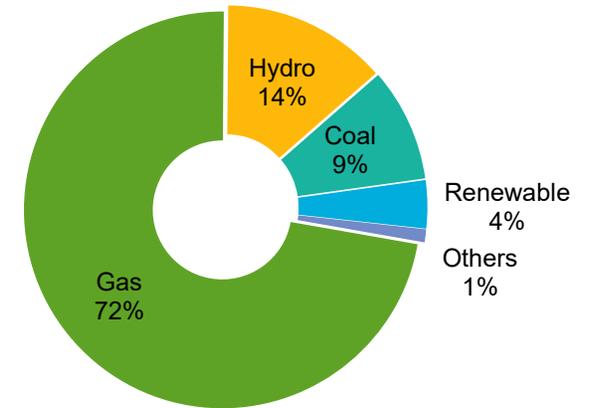
Thailand : Power Generation

Total Installed Capacity "41,903.23 MW."



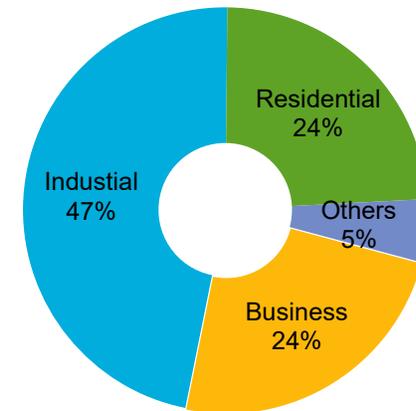
Breakdown by Fuel

As of July 2017



Breakdown by Consumer Type

As of June 2017
Total: 76,099 GWh



Thailand's Electricity Structure

EGAT Overview

- Thailand's state-owned power utility under the Ministry of Energy
- Responsible for electric power generation and transmission for the whole country as well as bulk electric energy sales
- EGAT is the single buyer that purchases bulk electricity from private power producers and neighboring countries
- Sells electricity to **Provincial Electricity Authority ("PEA")**, **Metropolitan Electricity Authority ("MEA")**, neighboring countries and others
- Owns and operates a high voltage transmission network which covers all parts of Thailand

Key Customers



Provincial Electricity Authority "PEA"

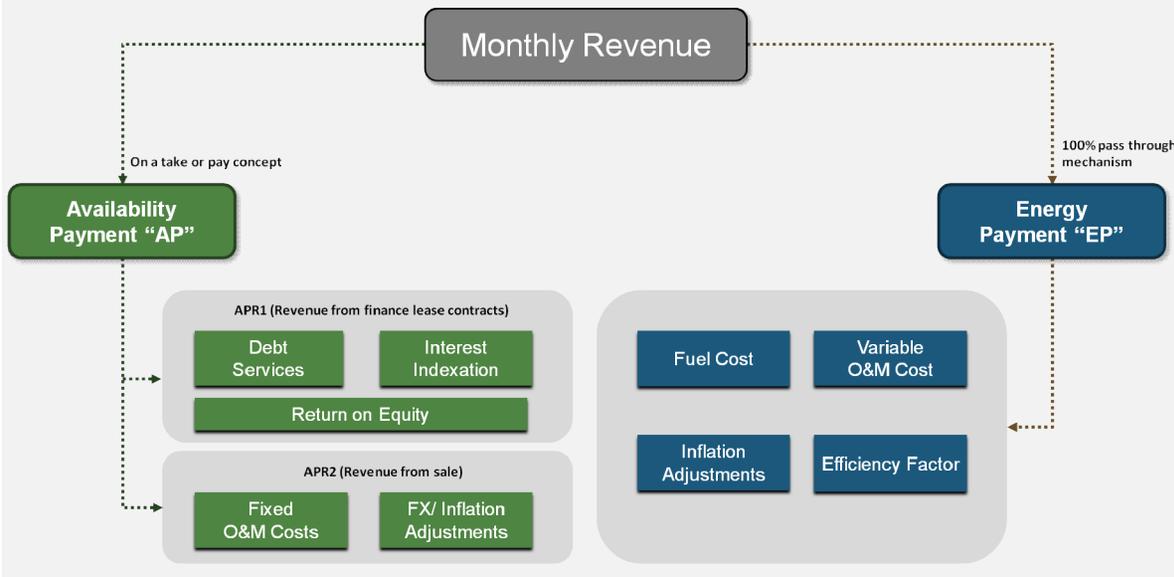
- ✓ Thai government enterprise
- ✓ Generation, procurement, distribution and sale of electricity
- ✓ Covers approximately 99.4% of Thailand, with the exception of Bangkok, Nonthaburi and Samut Prakarn provinces



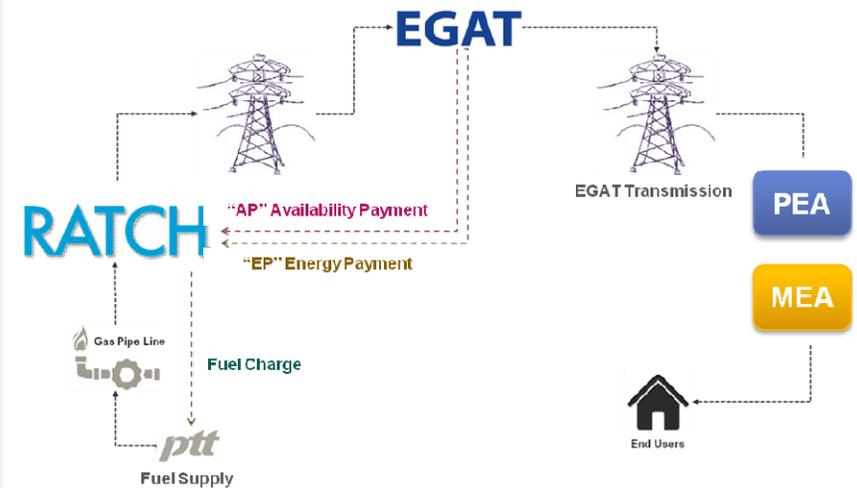
Metropolitan Electricity Authority "MEA"

- ✓ Thai state enterprise under the Ministry of Interior
- ✓ Distribution of electricity in Bangkok, Nonthaburi, and Samut-Prakarn Provinces

PPA Tariff Structure



Thailand's Electricity Structure



Company Overview

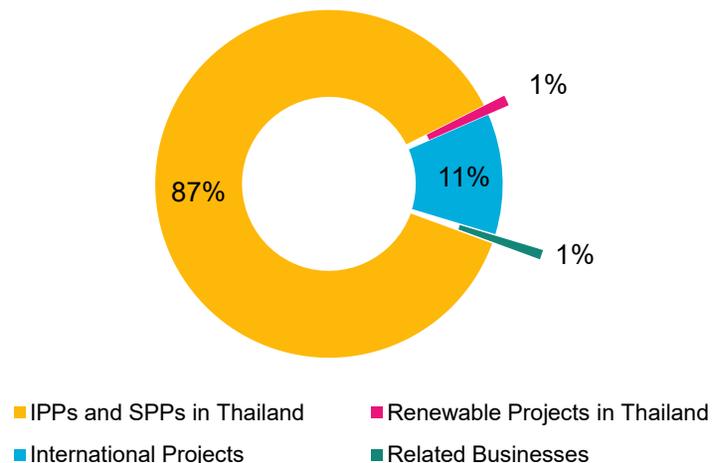
Company Overview

Overview

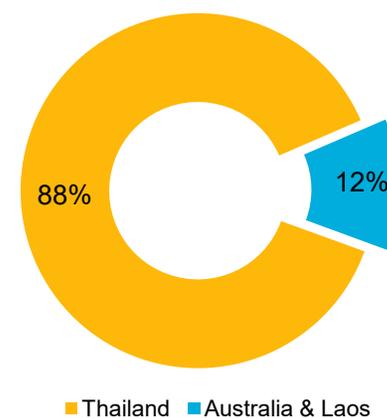
- Investment company in the electricity generation business based in Thailand
- Largest independent power producer (“IPP”) based in Thailand by total capacity
- Primarily involved in the construction, development and operation of power plants in Thailand, Laos, Australia and China
- 4 core businesses: (1) IPPs and SPPs in Thailand (2) Renewable Projects in Thailand (3) International Projects (4) Related businesses
- Listed on the Stock Exchange of Thailand since 2 November 2000
- Market cap of USD 2,414 million* (THB 80,475 million) as at 25 August 2017
- **Total current capacity (domestic and overseas): 6,495.51 Megawatts (“MW”) from 19 projects**
- **Projects under construction (for completion between 2017 – 2021): 877.34 MW from 7 projects**

Note: *Foreign Exchange Rate as at 25 August 2017= 33.340 Baht/USD

Revenue breakdown By Business Segments as of June 2017



Revenue breakdown By Geography as of June 2017



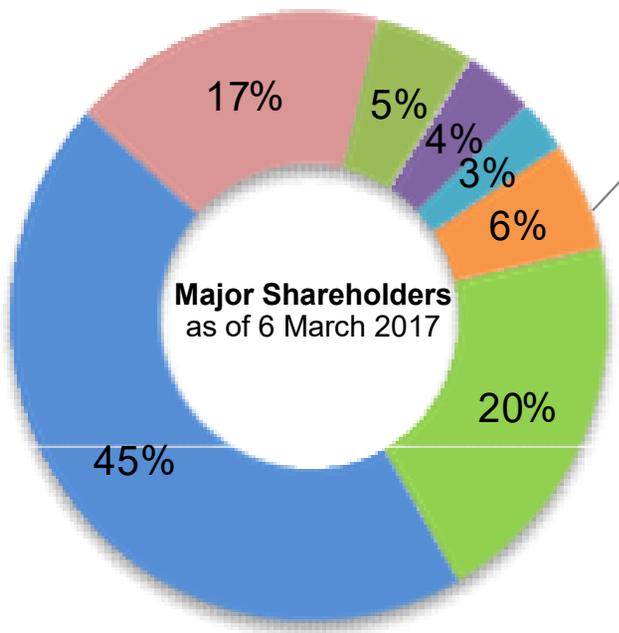
STANDARD & POOR'S MOODY'S

Credit Rating

On par with Kingdom of Thailand's rating

RATCH	Thailand	Philippines	Indonesia	Vietnam	Cambodia
S&P:BBB+ Moody's:Baa1	S&P:BBB+ Moody's:Baa1				
		S&P: BBB Moody's: Baa2			
			S&P: BB+ Moody's: Baa3		
				S&P: BB- Moody's: B1	
					S&P: B Moody's: B2

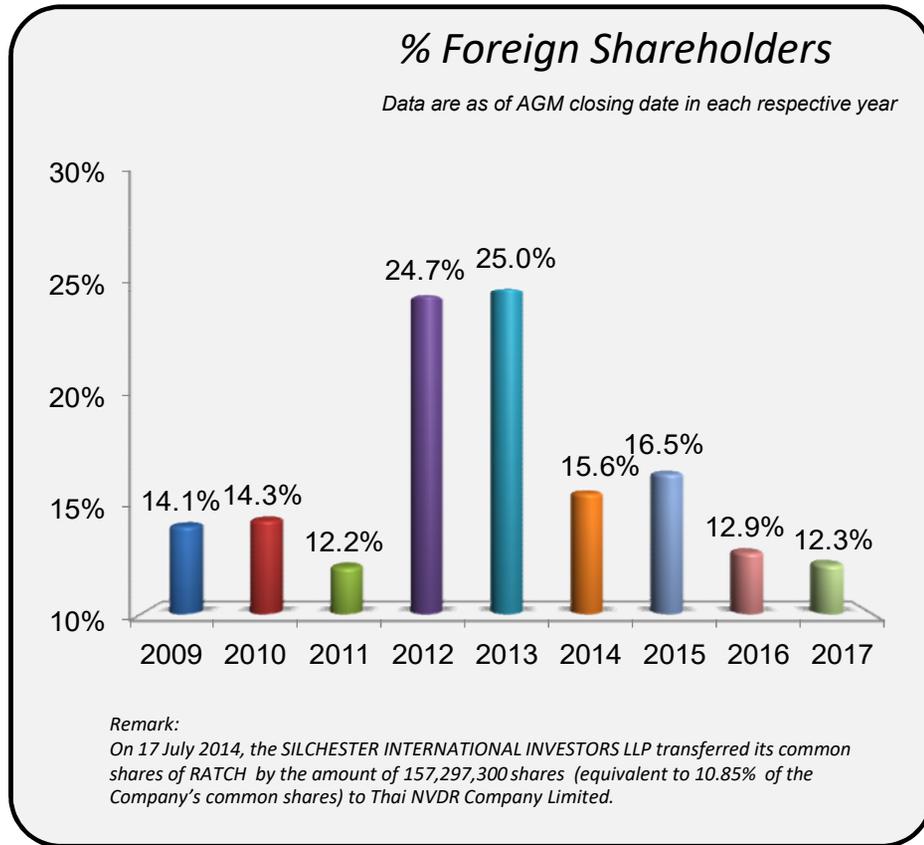
Shareholder Information



- EGAT
- LITTLEDOWN NOMINEES LIMITED
- EGAT Saving and Credit Cooperative Limited
- Minor Shareholders
- Thai NVDR Company Limited
- Social Security Office
- Other Major Shareholders

Other Major Shareholders consisted of

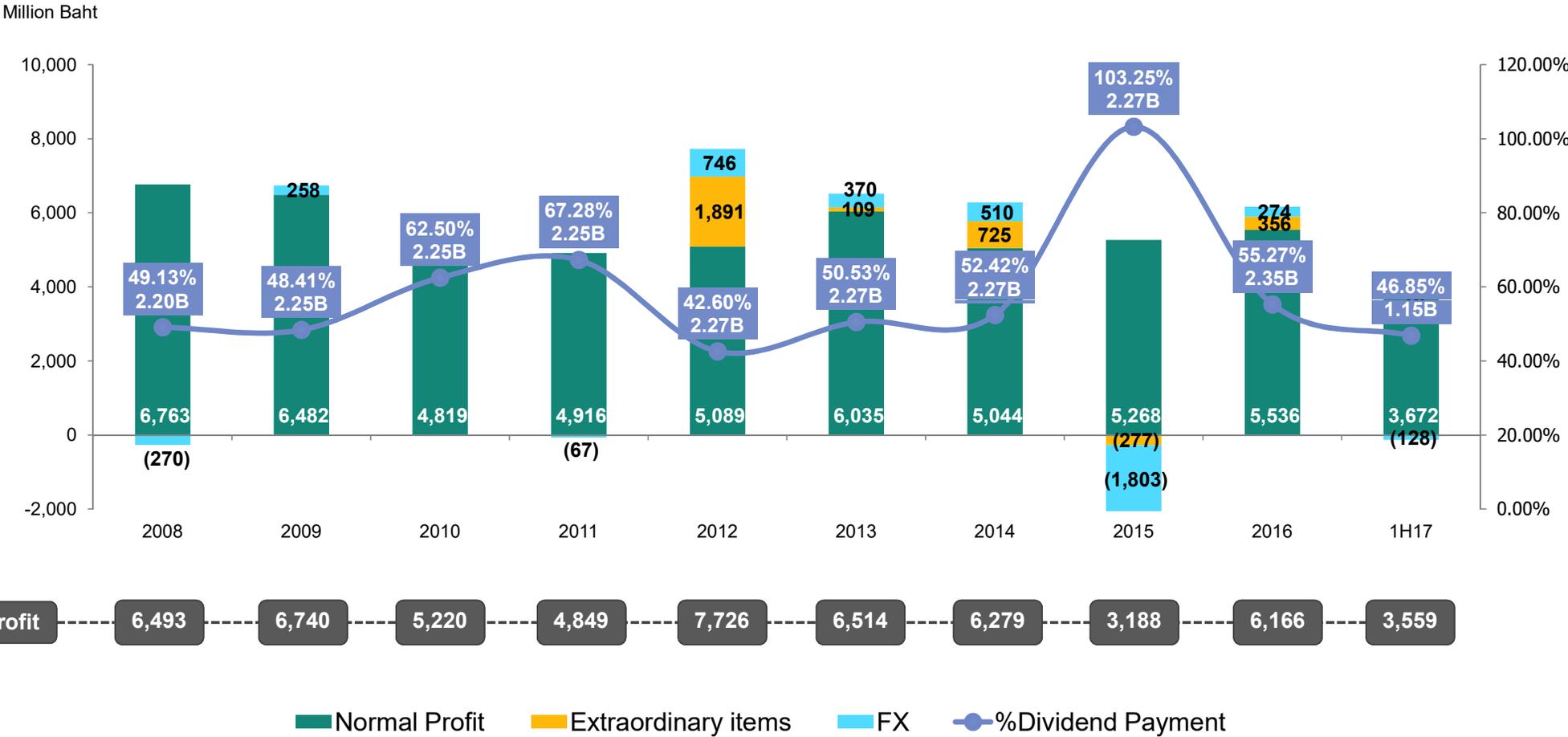
- AIA TH-EQ3-P 2.27%
- STATE STREET BANK EUROPE LIMITED 1.26%
- Mr. Min Tieworn 0.97%
- CHASE NOMINEES LIMITED 0.68%
- Krungsri Dividend Stock LTF 0.58%



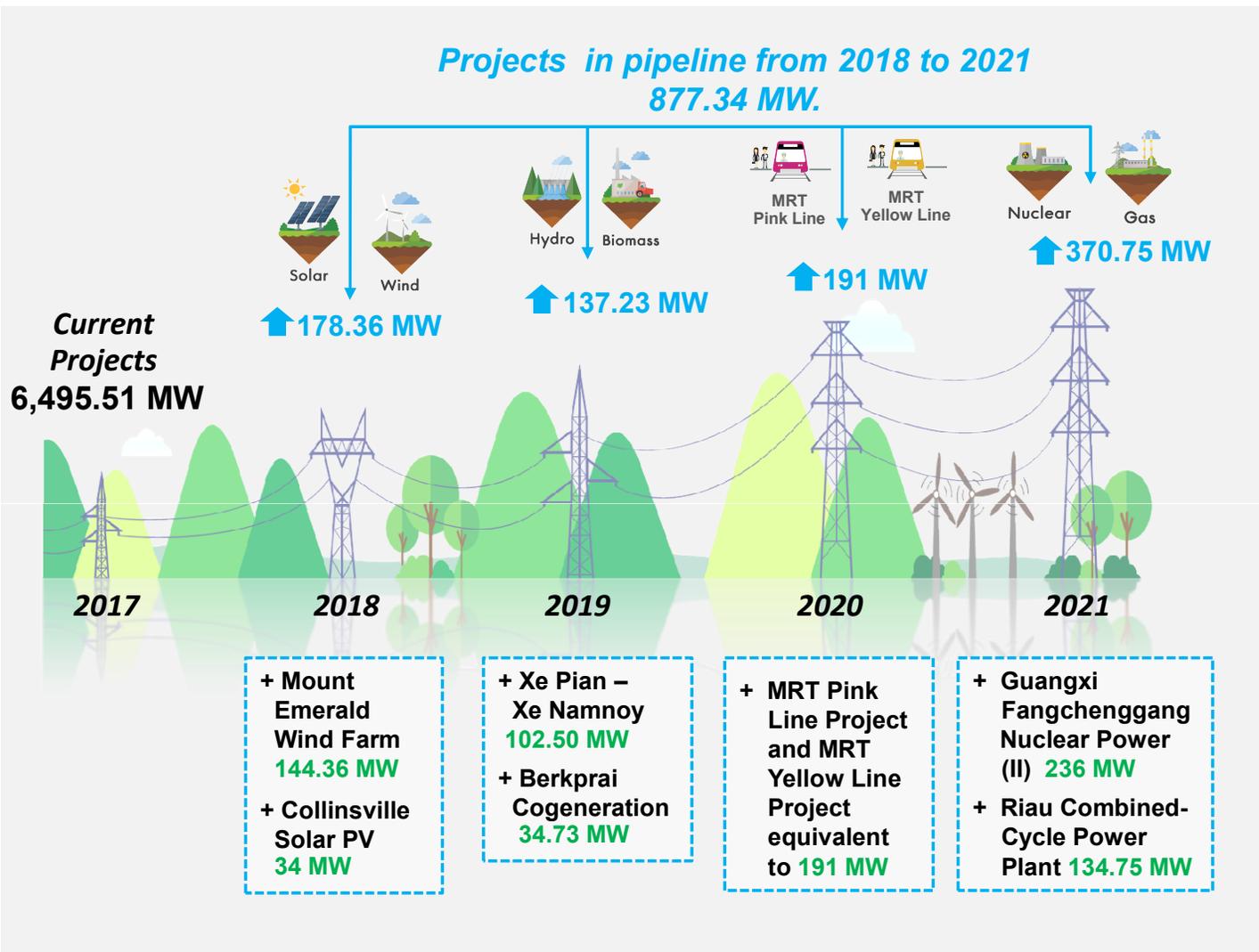
Dividend Policy

RATCH has a dividend payout policy of no less than 40% of the net profit

Avg. %Dividend Payment (2008-2016) = 59.04%

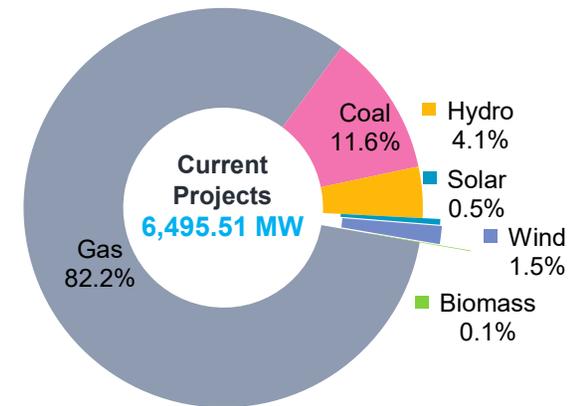


Overview of RATCH projects



In Operation

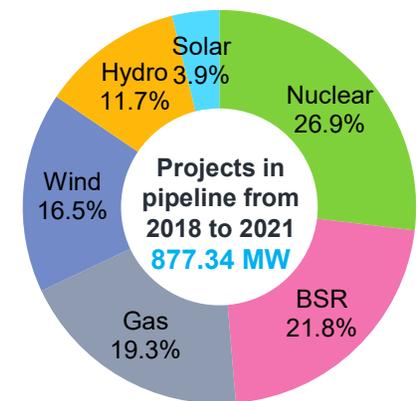
As of July 2017



Project in pipeline

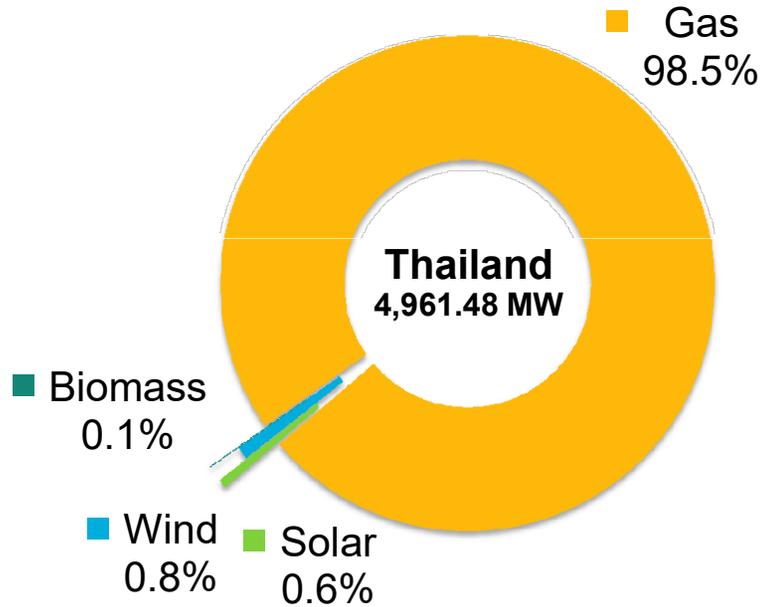
(under Construction & Development)

As of July 2017



Portfolio by Types of Fuels and Locations

Current Projects As of August 2017



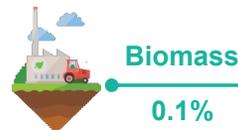
Power Plant	Installed Capacity Contributed (MW)
RATCHGEN	3,645.00 (100%)
TECO	720.00 (100%)
RPCL	372.50 (25%)
RW Cogen	93.60 (40%)
Nava Nakhon	55.65 (40%)
Total	4,886.75



Power Plant	Installed Capacity Contributed (MW)
Solar Power	8.64 (40%)
Solarta Power	20.73 (49%)
Total	29.37



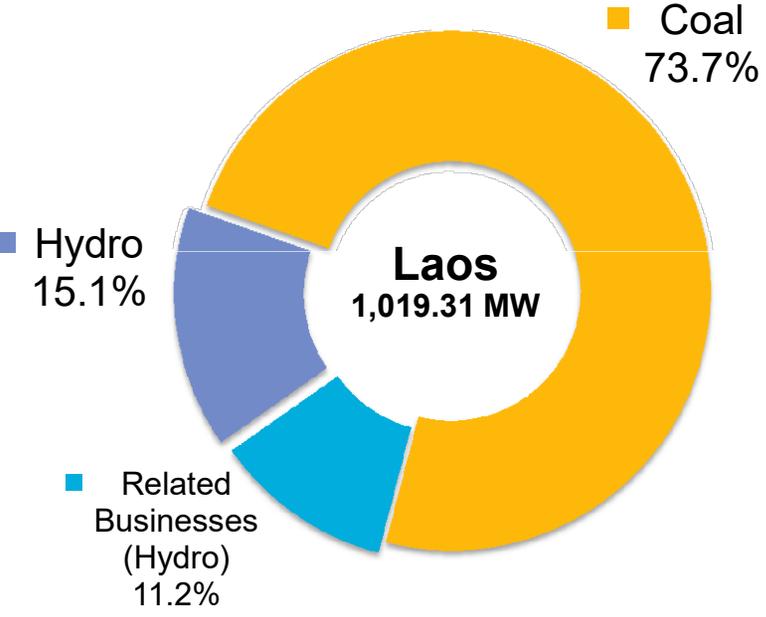
Power Plant	Installed Capacity Contributed (MW)
Huay Bong 2	20.70 (20%)
Huay Bong 3	20.70 (20%)
Total	41.40



Power Plant	Installed Capacity Contributed (MW)
Songkhla Biomass	3.96 (40%)
Total	3.96

Portfolio by Types of Fuels and Locations

Current Projects
As of August 2017



Power Plant	Installed Capacity Contributed (MW)
Hongsa Power Plant unit 1-3	751.20 (40%)
Total	751.20

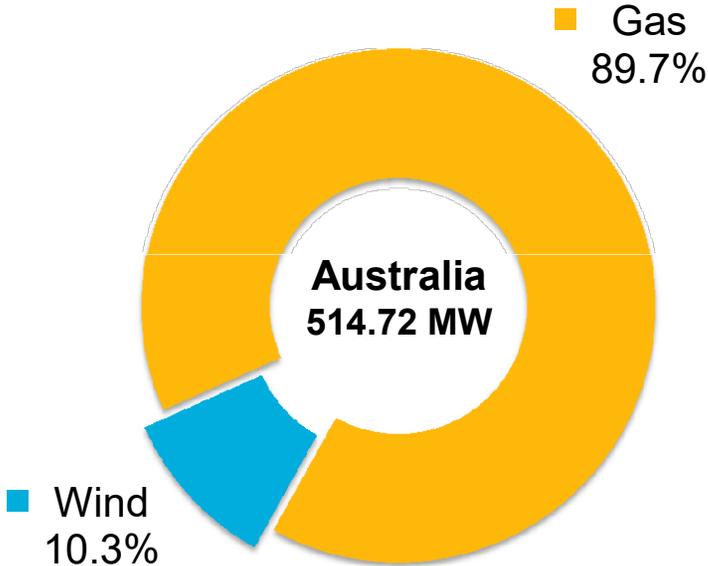
Power Plant	Installed Capacity Contributed (MW)
Num Ngum 2	153.75 (25%)
Total	153.75

**Related Businesses*

Power Plant	Installed Capacity Contributed (MW)
Shares Purchase of EDL-Gen	114.36 (10.11%)
Total	114.36

Portfolio by Types of Fuels and Locations

Current Projects As of August 2017



Power Plant	Installed Capacity Contributed (MW)
Townsville	187.20 (80%)
Kemerton	246.40 (80%)
BP Kwinana	28.32 (80%)
Total	461.92



Power Plant	Installed Capacity Contributed (MW)
Starfish Hill	26.40 (80%)
Toora	16.80 (80%)
Windy Hill	9.60 (80%)
Total	52.80

Portfolio by Types of Fuels and Locations

Projects in pipeline from 2018 to 2021

As of August 2017



Gas
Power Plant
Berkprai Cogeneration
Installed Capacity Contributed (MW)
34.73 (35%)
Status
Under Development COD: In 2019

Gas
Power Plant
Riau Combined-Cycle Power Plant
Installed Capacity Contributed (MW)
134.75 (49%)
Status
Under Development COD: In 2021

Wind
Power Plant
Mount Emerald
Installed Capacity Contributed (MW)
144.36 (80%)
Status
Under Construction COD: In 2018

Solar
Power Plant
Collinsville Solar Power Project
Installed Capacity Contributed (MW)
34 (80%)
Status
Under Construction COD: In 2018



Hydro
Power Plant
Xe Pian-Xe Namnoy
Installed Capacity Contributed (MW)
102.50 (25%)
Status
Under Construction COD: In 2019

Nuclear
Power Plant
Guangxi Fangchenggang Nuclear Power (II)
Installed Capacity Contributed (MW)
236 (10%)
Status
Under Construction COD: In 2021

Portfolio by Types of Fuels and Locations

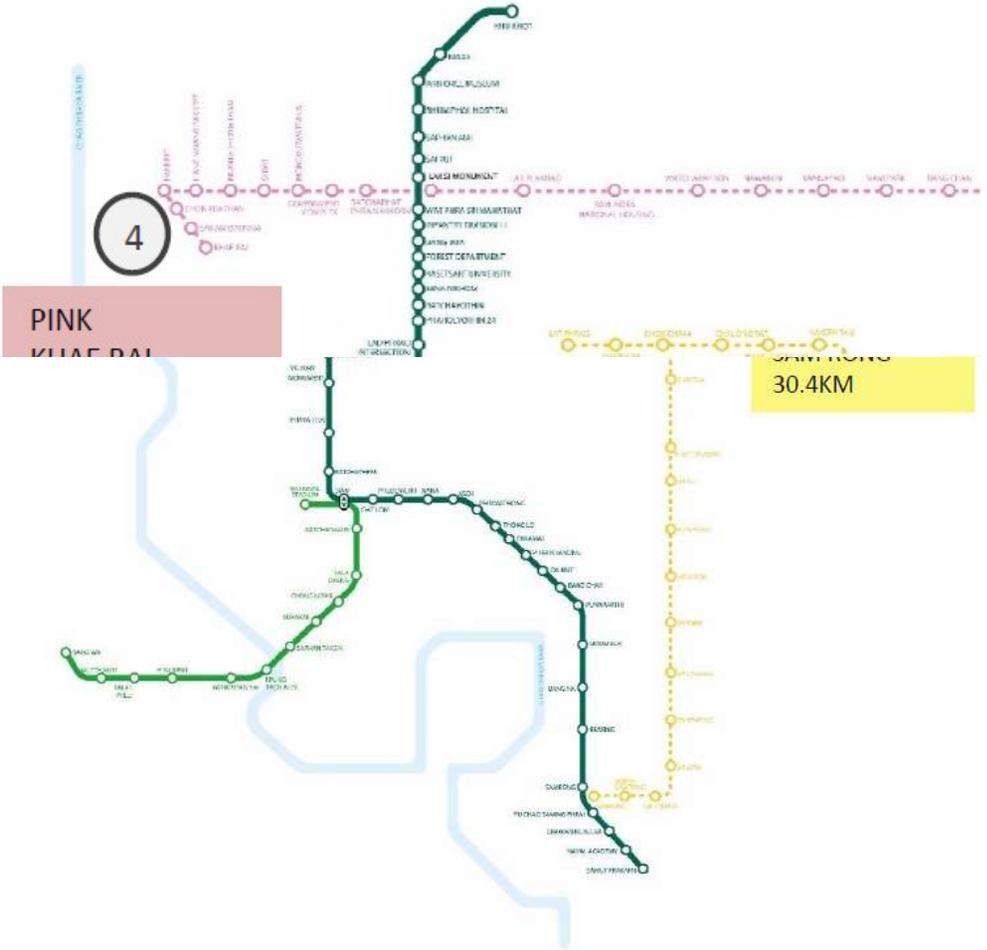
Projects in pipeline from 2018 to 2021
As of August 2017



Sky Train
Project
MRT Pink Line Project
Route
Khae Rai - Min Buri
Distance
34.5 KM (30 stations)
Status
Under Development COD: In 2020



Sky Train
Project
MRT Yellow Line Project
Route
Lad Prao - Sam Rong
Distance
30.4 KM (23 stations)
Status
Under Development COD: In 2020



Portfolio by Core Business

IPPs and SPPs in Thailand

Name of Power Plant/Project	Location	Technology	Total Installed Capacity (MW)	Installed Capacity contributed to the RATCH's Group (MW)	Terms of the PPA		
					PPA Party	Tenure/ Expiry Year	Renewal/ Option to Extend
In Operation							
Ratchaburi Power Plant	Ratchaburi Province	Thermal	1,470	1,470 (100%)	EGAT	25 years/ 2025	N/A
		Combined Cycle	2,175	2,175 (100%)	EGAT	25 years/ 2027	N/A
Tri Energy Power Plant	Ratchaburi Province	Combined Cycle	720	720 (100%)	EGAT	20 years/ 2020	N/A
Ratchaburi Power Power Plant	Ratchaburi Province	Combined Cycle	1,490	372.50 (25%)	EGAT	25 years/ 2033	N/A
Ratchaburi World Cogeneration Project	Ratchaburi Industrial Estate, Ratchaburi Province	Cogeneration	234	93.60 (40%)	EGAT	Block 1: 25 years/ 2039 Block 2: 25 years/ 2040	N/A
Nava Nakorn Electricity Generating Project	Nava Nakorn Industrial Promotion Zone, Pathumthani Province	Cogeneration	139.13	55.65(40%)	EGAT	25 years/ 2041	N/A
Total			6,228.13	4,886.75			
Under Development							
Berkprai Cogeneration	Ratchaburi Province	Cogeneration	99.23	34.73 (35%)	EGAT	25 years/2044 (Expected COD: 2019)	N/A
Total			99.23	34.73			
Grand Total			6,327.36	4,921.48			

Portfolio by Core Business

Renewable Projects in Thailand

Name of Power Plant/Project	Location	Technology	Total Installed Capacity (MW)	Installed Capacity contributed to the RATCH's Group (MW)	Terms of the PPA		
					PPA Party	Tenure/ Expiry Year	Renewal/ Option to Extend
In Operation							
Huay Bong 2 Wind-Turbine Power Plant	Nakorn Ratchasima Province	Wind-Turbine	103.50	20.70 (20%)	EGAT	5 years/ 2018	Automatic renewal for a further 5 years every 5 years
Huay Bong 3 Wind-Turbine Power Plant	Nakorn Ratchasima Province	Wind-Turbine	103.50	20.70 (20%)	EGAT	5 years/ 2017	Automatic renewal for a further 5 years every 5 years
Solar Power Projects (Korat 3, Korat 4, Korat 7)	Nakorn Ratchasima Province	Solar Power	21.60	8.64 (40%)	PEA	5 years/ 2022	Automatic renewal for a further 5 years every 5 years
Solarta Power Projects	Ayutthaya, Nakhon Pathom, and Suphanburi Provinces	Solar Power	42.30	20.73 (49%)	PEA	Ayutthaya Province : 5 years / 2021 Suphanburi and Nakhon Pathom Provinces : 5 years / 2017	Automatic renewal for a further 5 years every 5 years
Songkhla Biomass Power Project	Songkhla Province	Thermal	9.90	3.96 (40%)	PEA	20 years/2035	N/A
Total			280.80	74.73			
Grand Total			280.80	74.73			

Portfolio by Core Business

International Projects in Australia

Name of Power Plant/Project	Location	Technology	Total Installed Capacity (MW)	Installed Capacity contributed to the RATCH's Group (MW)	Terms of the PPA		
					PPA Party	Tenure/ Expiry Year	Renewal/ Option to Extend
In Operation							
Townsville Power Plant	North Queensland, Australia	Combined Cycle Gas Turbine	234	187.20 (80%)	AGL/Arrow	February 2025	N/A
Kemerton Power Plant	Western Australia, Australia	Open Cycle Gas/Diesel Turbine	308	246.40 (80%)	Synergy	October 2030	N/A
BP Kwinana Power Plant (30 % owned by RAC)	Western Australia, Australia	Cogeneration	35.40	28.32 (80%)	Verve Energy/BP	December 2021	N/A
Starfish Hill Wind-Turbine Power Plant	South Australia, Australia	Wind-Turbine	33.00	26.40 (80%)	ALINTA Energy	In 2020	N/A
Toora Wind-Turbine Power Plant	Victoria, Australia	Wind-Turbine	21	16.80 (80%)	Merchant	N/A	N/A
Windy Hill Wind-Turbine Power Plant	Queensland, Australia	Wind-Turbine	12	9.60 (80%)	Ergon Energy Queensland (EEQ)	December 2018	N/A
Total			643.40	514.72			

Portfolio by Core Business

International Projects in Australia

Name of Power Plant/Project	Location	Technology	Total Installed Capacity (MW)	Installed Capacity contributed to the RATCH's Group (MW)	Terms of the PPA		
					PPA Party	Tenure/ Expiry Year	Renewal/ Option to Extend
Under Construction							
Mount Emerald Wind Farm	Queensland, Australia	Wind-Turbine	180.45	144.36 (80%)	Ergon Energy Queensland (EEQ)	12.5 year (Expected COD: 2018)	N/A
Collinsville Solar Power Project	Queensland, Australia	Solar Power	42.50	34 (80%)	Braemar Power Project	12.5 year (Expected COD: 2018)	N/A
Total			222.95	178.36			
Grand Total			866.35	693.08			

Portfolio by Core Business

International Projects in Laos

Name of Power Plant/Project	Location	Technology	Total Installed Capacity (MW)	Installed Capacity contributed to the RATCH's Group (MW)	Terms of the PPA		
					PPA Party	Tenure/ Expiry Year	Renewal/ Option to Extend
In Operation							
Nam Ngum 2 Hydroelectric Power Plant	Laos	Hydro Power Plant	615	153.75 (25%)	EGAT	27 years/ 2038	N/A
Hongsa Power Plant	Sainyaburi Province, Laos	Lignite-Fired Power Plant	1,878	751.20 (40%)	EGAT & EDL	25 years/ 2040	N/A
Total			2,493	904.95			
Under Construction							
Xe Pian - Xe Namnoy Project	Attapue and Champasak provinces, Laos	Hydro Power Plant	410	102.50 (25%)	EGAT	27 years/ 2046 (Expected COD: 2019)	N/A
Total			410	102.50			
Grand Total			2,903	1,007.45			

Portfolio by Core Business

International Projects in China & Republic of Indonesia

Name of Power Plant/Project	Location	Technology	Total Installed Capacity (MW)	Installed Capacity contributed to the RATCH's Group (MW)	Terms of the PPA		
					PPA Party	Tenure/ Expiry Year	Renewal/ Option to Extend
Under Construction							
Guangxi Fangchenggang Nuclear Power (II)	Fangchenggang , China	Nuclear Power	2,360	236 (10%)	N/A	30 year (Expected COD: 2021)	N/A
Total			2,360	236			
Under Development							
Riau Combined-Cycle Power Plant	Republic of Indonesia	Combined Cycle	275	134.75 (49%)	PT PLN (PERSERO)	20 year (Expected COD: 2021)	N/A
Total			275	134.75			
Grand Total			2,635	370.75			

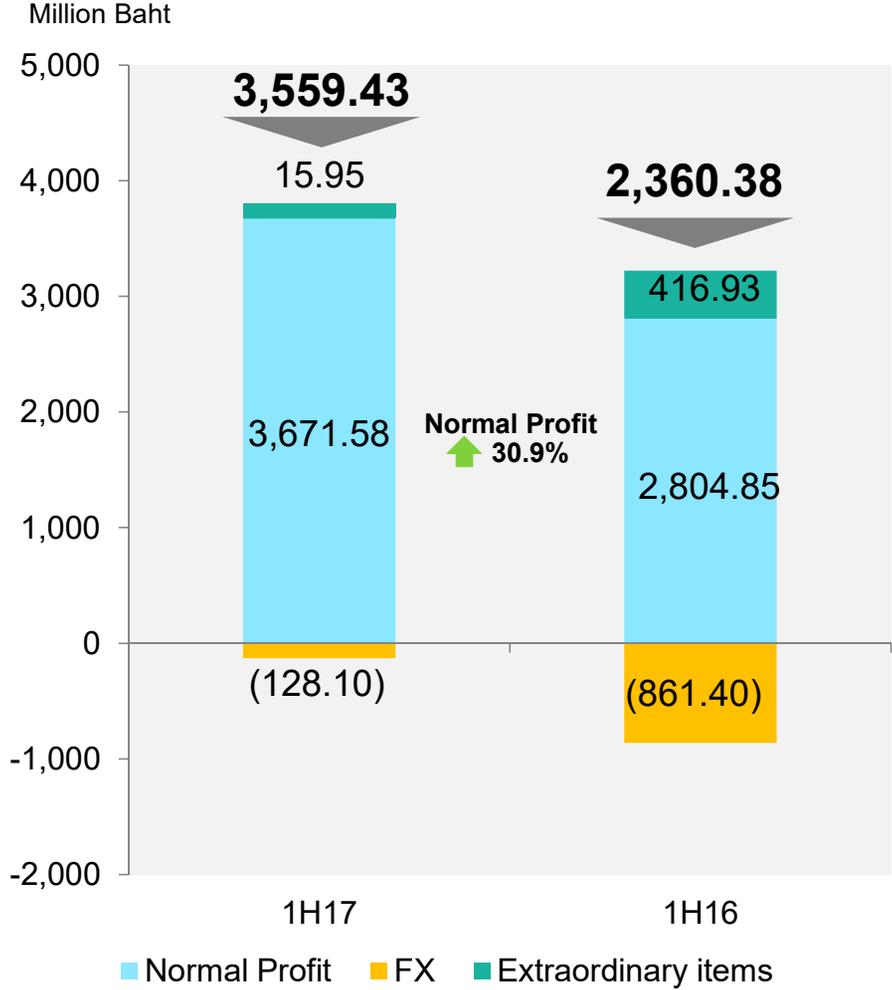
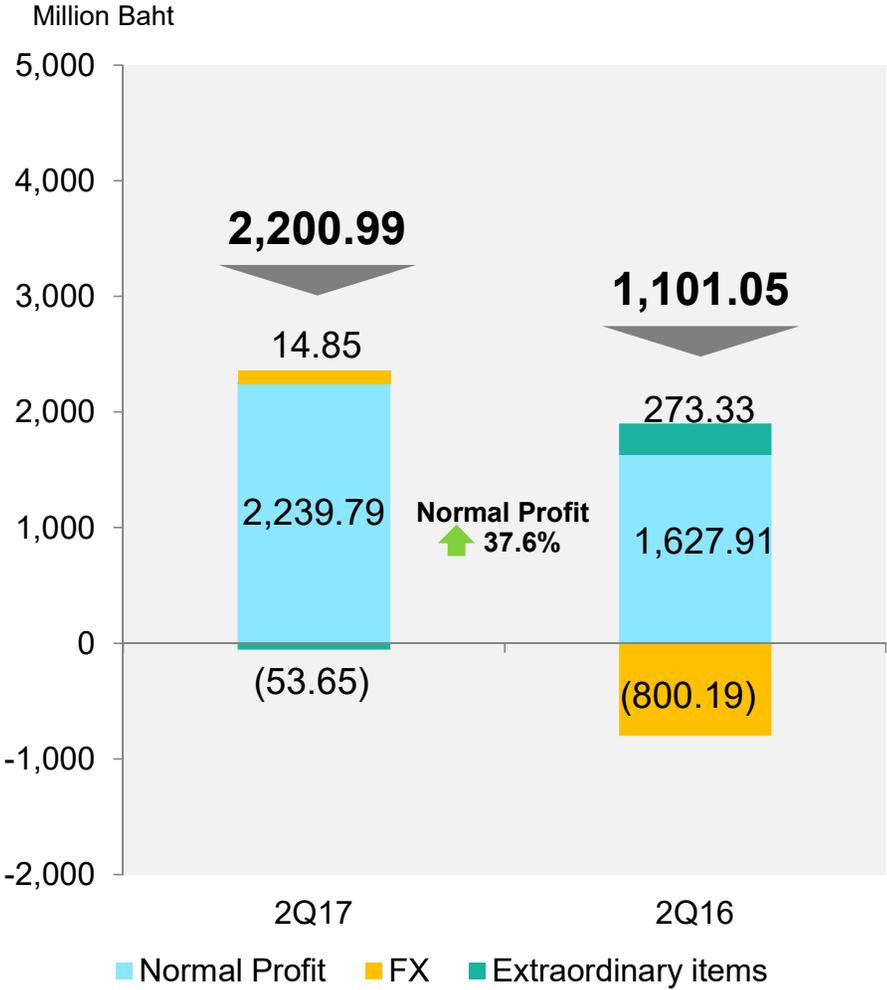
Portfolio by Core Business

Related Businesses

Name of Power Plant/Project	Location	Technology	Total Installed Capacity (MW)	Installed Capacity contributed to the RATCH's Group (MW)	Terms of the PPA		
					PPA Party	Tenure/ Expiry Year	Renewal/ Option to Extend
In Operation							
EDL-Generation	Laos	Hydro Power Plant	1,131.15	114.36 (10.11%)	N/A	N/A	N/A
Total			1,131.15	114.36			
Under Development							
MRT Pink Line Project and MRT Yellow Line Project	Nonthaburi and Bangkok Province	Elevated Straddle Monorail	~1,910 MW	~191.00 MW (10%)	N/A	30 years/2051 (Expected COD: 2020)	N/A
Total			1,910	191.00			
Grand Total			3,041.15	305.36			

Financial Performance

Profit for the period: Equity holders of the Company



Income Statement

Unit : in Million Baht	2Q17	1Q17	4Q16	3Q16	2Q16
Revenues	11,150.26	9,978.02	10,860.57	11,349.65	12,589.67
Cost & Expenses	(9,412.26)	(8,477.49)	(9,437.12)	(9,892.70)	(10,961.40)
EBITDA before Share of Profit and FX	1,738.00	1,500.53	1,423.45	1,456.95	1,628.27
Share of profit of jointly-controlled entities and associates excluding gain (loss) on exchange rate	1,425.15	902.65	908.38	654.72	897.59
EBITDA included share profit of JV before FX	3,163.15	2,403.18	2,331.83	2,111.67	2,525.86
Gain (Loss) on exchange rate of subsidiaries	48.02	233.00	1,169.73	(256.33)	(762.23)
Gain (Loss) on exchange rate of JV	(33.17)	(375.95)	340.32	(118.26)	(37.96)
EBITDA included share profit of JV and FX	3,178.00	2,260.23	3,841.88	1,737.08	1,725.67
<i>Development cost - Nam Bak</i>	-	-	(126.00)	-	-
<i>O&M Compensation – NN2</i>	-	-	-	-	134.71
<i>Gain on selling assets (Pratu Tao-A & Sao Thian-A)</i>	-	-	-	-	-
<i>Insurance claim</i>	-	85.61	-	-	-
<i>Diesel price movement (RG & RPCL)</i>	(53.65)	(16.01)	98.25	(33.40)	138.62
<i>Depreciation & Amortization</i>	(356.57)	(354.27)	(356.13)	(343.01)	(350.99)
EBIT	2,767.78	1,975.56	3,458.00	1,360.67	1,648.01
Finance costs	(369.63)	(400.37)	(361.41)	(361.62)	(352.58)
Income tax expense	(233.25)	(247.06)	(155.59)	(180.84)	(217.75)
Profit for the period	2,164.90	1,328.13	2,941.00	818.21	1,077.68
Non-controlling interests	36.09	30.31	22.83	23.30	23.37
Equity holders of the Company	2,200.99	1,358.44	2,963.83	841.51	1,101.05

Income Statement

Unit : in Million Baht	1H17	1H16
Revenues	21,128.28	25,974.19
Cost & Expenses	(17,889.75)	(22,626.52)
EBITDA before Share of Profit and FX	3,238.53	3,347.67
Share of profit of jointly-controlled entities and associates excluding gain (loss) on exchange rate	2,327.80	1,315.27
EBITDA included share profit of JV before FX	5,566.33	4,662.94
Gain (Loss) on exchange rate of subsidiaries	281.02	(755.74)
Gain (Loss) on exchange rate of JV	(409.12)	(105.66)
EBITDA included share profit of JV and FX	5,438.23	3,801.54
<i>O&M Compensation – NN2</i>	-	134.71
<i>Insurance claim</i>	85.61	53.56
<i>Diesel price movement (RG & RPCL)</i>	(69.66)	228.66
<i>Depreciation & Amortization</i>	(710.84)	(698.91)
EBIT	4,743.34	3,519.56
Finance costs	(770.00)	(679.41)
Income tax expense	(480.31)	(526.81)
Profit for the period	3,493.03	2,313.34
Non-controlling interests	66.40	47.04
Equity holders of the Company	3,559.43	2,360.38

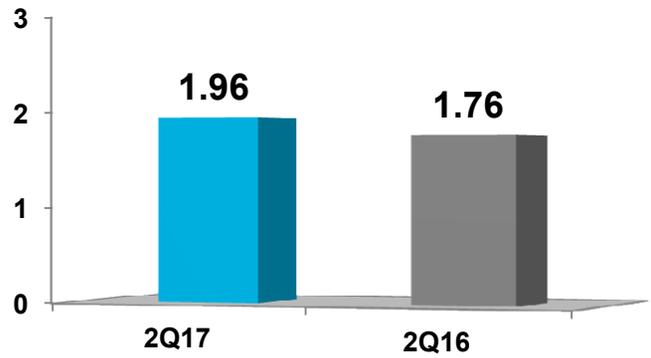
Statements of Financial Position

As of 30 June 2017

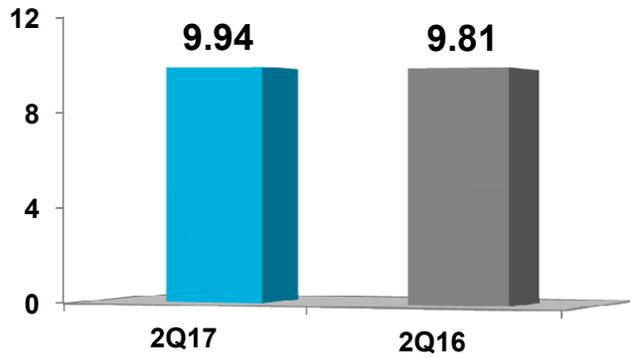
Total Assets	Million Baht	Total Liabilities & Equity	Million Baht
<u>Assets</u>		<u>Liabilities</u>	
Cash and cash equivalents	9,104.04	Loans from Related party, Financial Institutions & Debentures	23,056.28
Current investments	1,538.92	Other liabilities	10,673.35
Current Assets	11,915.18	Total Liabilities	33,729.63
Investment in Jointly-controlled entities/Associates/Others	30,934.75	<u>Equity</u>	
Financial lease receivables	23,041.00	Issued and paid-up share capital	16,031.78
Property, plant & equipments	15,136.42	Other components of equity	(3,289.63)
Other assets	5,443.40	Retained earnings	50,572.08
		Total equity attributable to owners of the Company	63,314.23
		Non-controlling interests	69.85
Total Assets	97,113.71	Total Liabilities & Equity	97,113.71

Financial Ratios*

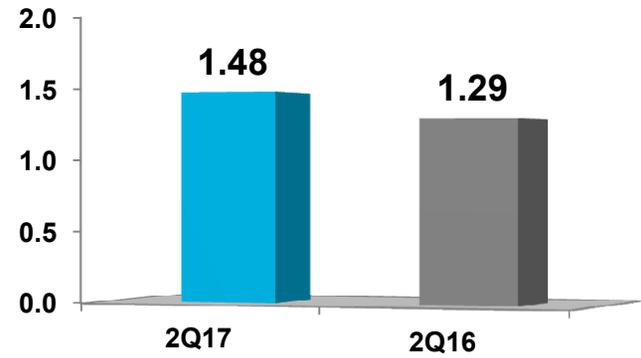
Current ratios (times)



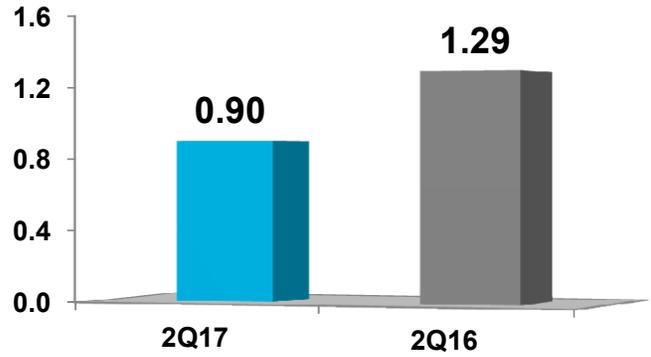
ROE (%)



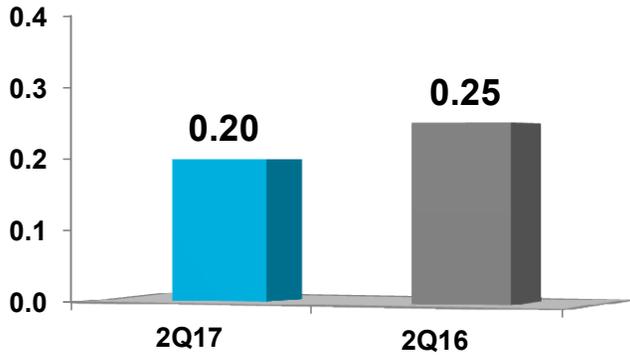
EPS (Baht per share)



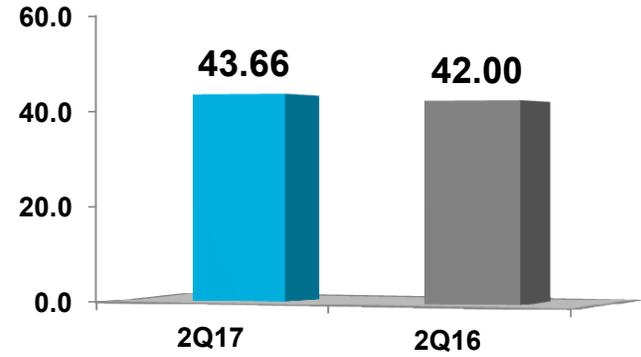
Net debt to EBITDA** (times)



Net debt/Equity (times)



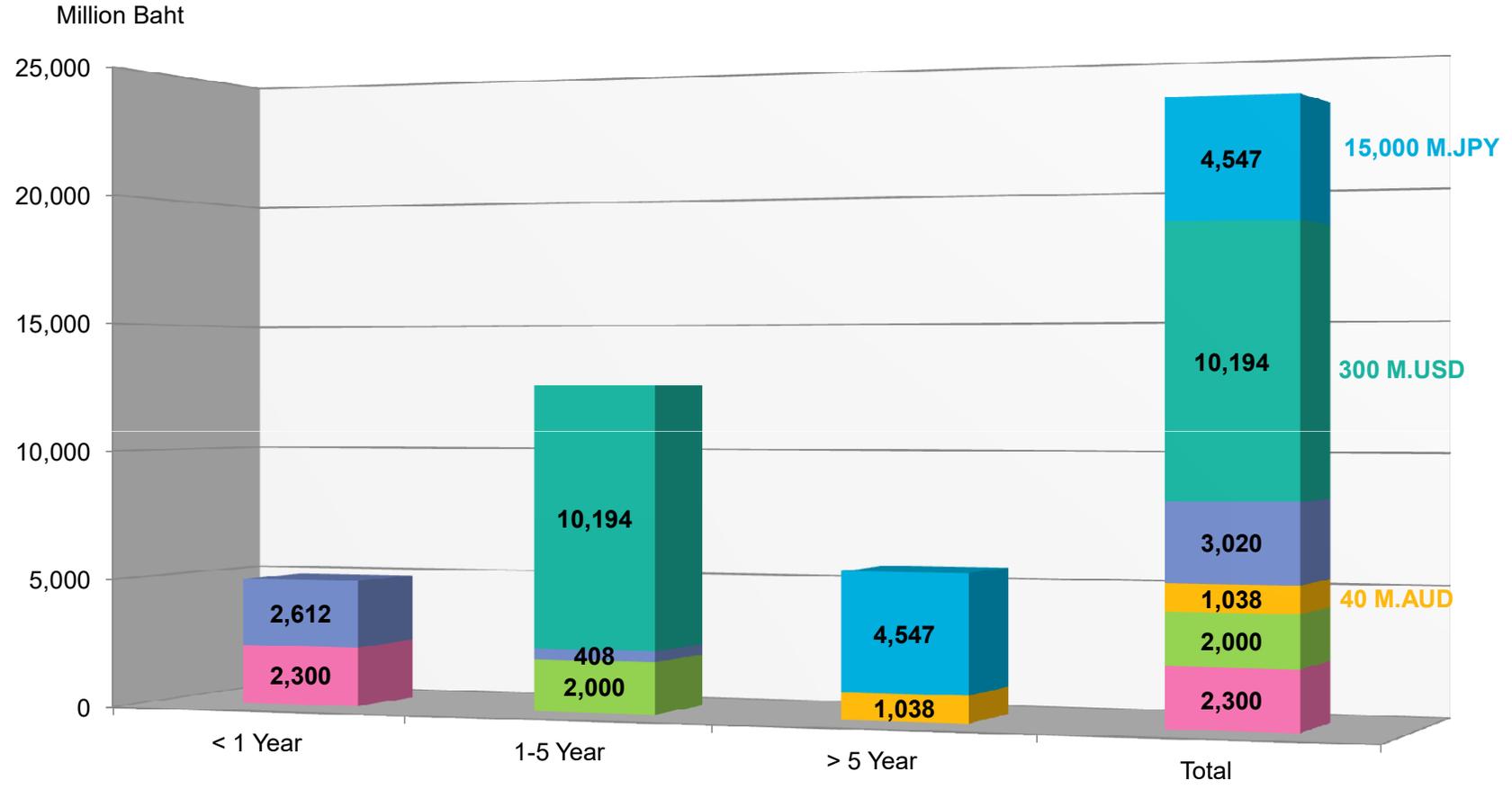
Book Value per share (Baht)



* Not included the effect of foreign exchange rate
 ** Included the change in lease receivable

Debt Profile

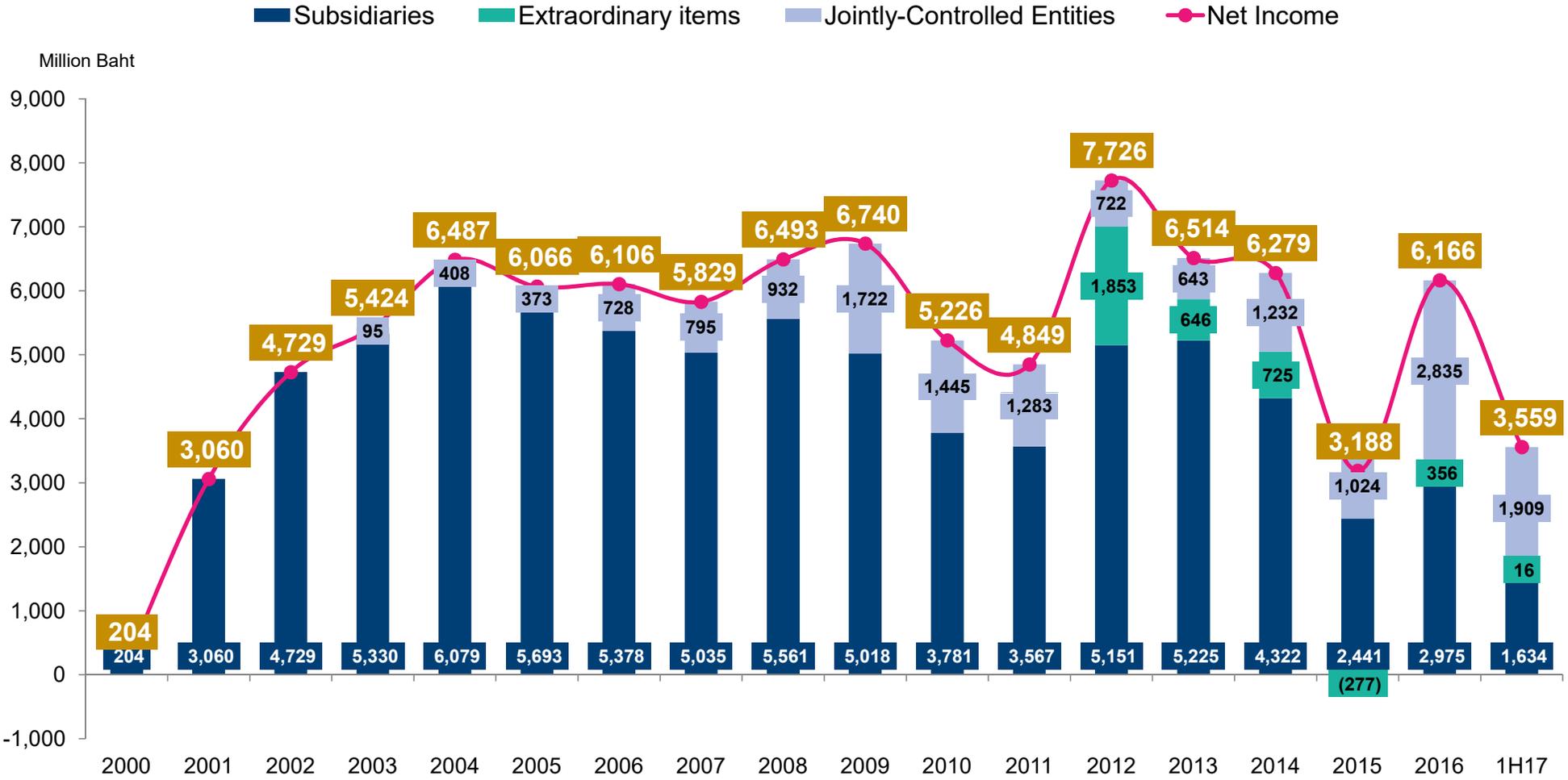
As of June 2017



- RH: Loans from financial institution
- RAC: Loans from financial institution
- RG: Bond
- RHIS: Bond 300 M.USD
- RAC: Loans from related party
- RHIS: Bond 15,000 M.JPY

Annexure: Financial Performance

Net Income Breakdown



Revenues: 2Q17 & 2Q16

Unit : in Million Baht		2Q17	2Q16	Diff	%
Sales		9,853.38	11,211.18	(1,357.80)	(12.11)
AP	- RG/TECO	1,087.07	840.43	246.64	29.35
	- RAC	378.90	385.12	(6.22)	(1.62)
EP (Fuel)	- RG/TECO	8,246.53	9,762.67	(1,516.14)	(15.53)
	- RAC	140.88	222.96	(82.08)	(36.81)
Revenue from financial leases - RG/TECO		1,021.65	1,141.01	(119.36)	(10.46)
Revenue from Rendering of services		12.99	12.60	0.39	3.10
Management service income		62.94	63.90	(0.96)	(1.50)
Dividend Income		114.15	109.86	4.29	3.90
Interest Income		44.76	35.86	8.90	24.82
Other Incomes (exc. Extraordinary items)		40.39	15.26	25.13	164.68
Total Revenues		11,150.26	12,589.67	(1,439.41)	(11.43)

Revenues: 1H17 & 1H16

Unit : in Million Baht		1H17	1H16	Diff	%
Sales		18,638.86	23,221.54	(4,582.68)	(19.73)
AP	- RG/TECO	2,091.54	1,682.44	409.10	24.32
	- RAC	817.93	808.12	9.81	1.21
EP (Fuel)	- RG/TECO	15,414.16	20,331.06	(4,916.90)	(24.18)
	- RAC	315.23	399.92	(84.69)	(21.18)
Revenue from financial leases - RG/TECO		2,077.87	2,309.24	(231.37)	(10.02)
Revenue from Rendering of services		25.56	78.59	(53.03)	(67.48)
Management service income		123.74	131.98	(8.24)	(6.24)
Dividend Income		114.15	109.86	4.29	3.90
Interest Income		91.96	83.92	8.04	9.58
Other Incomes (exc. Extraordinary items)		56.14	39.06	17.08	43.73
Total Revenues		21,128.28	25,974.19	(4,845.91)	(18.66)

Share of profit from jointly-controlled entities : 2Q17 & 2Q16

Unit : in Million Baht	2Q17	2Q16	Diff	%
RPCL	124.58	145.07	(20.49)	(14.12)
SEAN	19.41	57.51	(38.10)	(66.25)
HPC	1,024.14	424.66	599.48	141.17
CRESCO	1.00	7.39	(6.39)	(86.47)
SOLARTA	49.38	43.76	5.62	12.84
KORAT 3,4,7	20.34	19.95	0.39	1.95
FKW	8.68	17.54	(8.86)	(50.51)
KR2	3.52	16.83	(13.31)	(79.08)
KWINANA	20.17	14.33	5.84	40.75
PNPC	(27.67)	14.57	(42.24)	(289.91)
RW COGEN	65.18	60.61	4.57	7.54
NNEG	36.90	1.03	35.87	n.a.
Songkhla Biomass	5.97	13.24	(7.27)	(54.91)
Others	40.38	23.14	17.24	74.50
Total Share of profit from jointly-controlled entities	1,391.98	859.63	532.35	61.93

Share of profit from jointly-controlled entities : 2Q17 & 2Q16

EXCL.FX	Unit : in Million Baht	2Q17	2Q16	Diff	%
	RPCL	116.75	143.23	(26.48)	(18.49)
	SEAN	2.17	55.67	(53.50)	(96.10)
	HPC	1,062.37	489.79	572.58	116.90
	CRESCO	0.10	6.13	(6.03)	(98.37)
	SOLARTA	49.38	43.75	5.63	12.87
	KORAT 3,4,7	20.34	19.95	0.39	1.95
	FKW	8.68	17.54	(8.86)	(50.51)
	KR2	3.52	16.83	(13.31)	(79.08)
	KWINANA	20.17	14.33	5.84	40.75
	PNPC	(4.08)	(4.01)	(0.07)	(1.75)
	RW COGEN	65.16	60.54	4.62	7.63
	NNEG	36.91	(3.74)	40.65	n.a.
	Songkhla Biomass	5.97	13.24	(7.27)	(54.91)
	Others	37.71	24.34	13.37	54.93
	Total Share of profit from jointly-controlled entities	1,425.15	897.59	527.56	58.78

Share of profit from jointly-controlled entities : 1H17 & 1H16

Unit : in Million Baht	1H17	1H16	Diff	%
RPCL	220.19	278.43	(58.24)	(20.92)
SEAN	75.31	134.28	(58.97)	(43.92)
HPC	1,150.84	333.24	817.60	245.35
CRESCO	15.61	24.30	(8.69)	(35.76)
SOLARTA	102.31	88.90	13.41	15.08
KORAT 3,4,7	42.68	42.08	0.60	1.43
FKW	42.88	49.99	(7.11)	(14.22)
KR2	32.76	44.77	(12.01)	(26.83)
KWINANA	28.63	35.86	(7.23)	(20.16)
PNPC	(77.88)	9.56	(87.44)	(914.64)
RW COGEN	123.07	119.58	3.49	2.92
NNEG	71.82	(5.46)	77.28	n.a.
Songkhla Biomass	7.75	28.60	(20.85)	(72.90)
Others	82.71	25.48	57.23	224.61
Total Share of profit from jointly-controlled entities	1,918.68	1,209.61	709.07	58.62

Share of profit from jointly-controlled entities : 1H17 & 1H16

EXCL.FX	Unit : in Million Baht	1H17	1H16	Diff	%
	RPCL	181.73	251.23	(69.50)	(27.66)
	SEAN	12.51	96.70	(84.19)	(87.06)
	HPC	1,599.41	527.02	1,072.39	203.48
	CRESCO	13.13	21.81	(8.68)	(39.80)
	SOLARTA	102.31	88.89	13.42	15.10
	KORAT 3,4,7	42.68	42.08	0.60	1.43
	FKW	42.88	49.99	(7.11)	(14.22)
	KR2	32.76	44.77	(12.01)	(26.83)
	KWINANA	28.63	35.86	(7.23)	(20.16)
	PNPC	(8.06)	(6.05)	(2.01)	(33.22)
	RW COGEN	122.95	119.40	3.55	2.97
	NNEG	71.82	(12.66)	84.48	667.30
	Songkhla Biomass	7.75	28.60	(20.85)	(72.90)
	Others	77.30	27.63	49.67	179.77
	Total Share of profit from jointly-controlled entities	2,327.80	1,315.27	1,012.53	76.98

Cost and Expenses: 2Q17 & 2Q16

Unit : in Million Baht	2Q17	2Q16	Diff	%
Cost of Sale and rendering of services	9,056.26	10,656.06	(1,599.80)	(15.01)
– Fuel Cost : RG/ TECO	8,090.95	9,607.32	(1,516.37)	(15.78)
– Operation & Maintenance	371.29	367.99	3.30	0.90
– Repairing Expense (CSA)	287.37	264.85	22.52	8.50
– Spare parts	57.00	84.28	(27.28)	(32.37)
– Insurance Premium	111.96	120.94	(8.98)	(7.43)
– Standby Charge	60.02	52.44	7.58	14.45
– Others	77.67	158.24	(80.57)	(50.92)
Selling and Admin- Expenses	356.00	305.34	50.66	16.59
Total Cost and Expenses*	9,412.26	10,961.40	(1,549.14)	(14.13)

*excluding depreciation & amortization

Cost and Expenses: 1H17 & 1H16

Unit : in Million Baht	1H17	1H16	Diff	%
Cost of Sale and rendering of services	17,133.13	21,984.05	(4,850.92)	(22.07)
– Fuel Cost : RG/ TECO	15,163.25	20,007.09	(4,843.84)	(24.21)
– Fuel Cost : RAC	1.85	6.03	(4.18)	(69.32)
– Operation & Maintenance	728.80	746.84	(18.04)	(2.42)
– Repairing Expense (CSA)	572.10	528.67	43.43	8.21
– Spare parts	169.78	147.82	21.96	14.86
– Insurance Premium	230.82	240.36	(9.54)	(3.97)
– Standby Charge	121.41	107.75	13.66	12.68
– Others	145.12	199.49	(54.37)	(27.25)
Selling and Admin- Expenses	756.62	642.47	114.15	17.77
Total Cost and Expenses*	17,889.75	22,626.52	(4,736.77)	(20.93)

*excluding depreciation & amortization

Gain (Loss) From Foreign Exchange Rate

Unit : in Million Baht	2Q17	2Q16	1H17	1H16
Gain (Loss) from Foreign Exchange Rate	14.85	(800.19)	(128.10)	(861.40)
The Company and Subsidiaries	48.02	(762.23)	281.02	(755.74)
- RH	(20.83)	(9.84)	(74.34)	(77.35)
- RH Inter	42.71	(759.09)	263.34	(739.25)
- RG / RE / RL	26.14	6.70	92.02	60.86
Jointly-controlled entities and Associates	(33.17)	(37.96)	(409.12)	(105.66)
- SEAN (33.33%)	17.24	1.84	62.80	37.58
- RPCL (25%)	7.83	1.84	38.46	27.20
- HPC (40%)	(38.23)	(65.13)	(448.57)	(193.78)
- PNPC (25%)	(23.59)	18.58	(69.82)	15.61
- Others (CRESCO, RW Cogen, FKW, KR2, NNEG, Solarta, RIC1)	3.58	4.91	8.01	7.73

Foreign Exchange Rate as at 30 June 2017 = 33.984 Baht/USD and as at 30 June 2016 = 35.195 Baht/USD

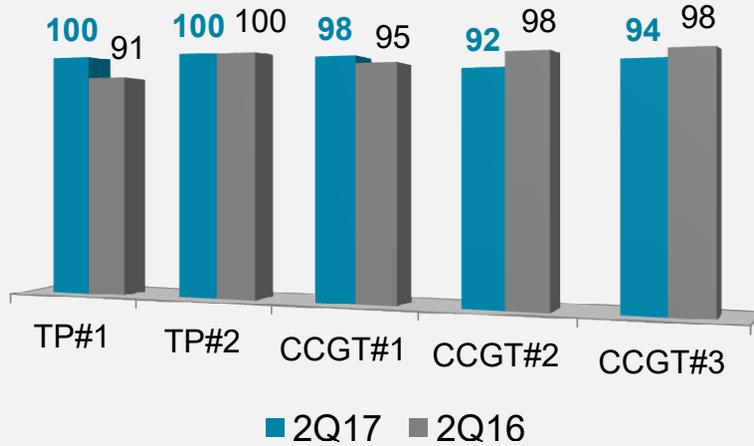
Foreign Exchange Rate as at 31 March 2017 = 34.450 Baht/USD and as at 31 March 2016 = 35.230 Baht/USD

Foreign Exchange Rate as at 30 December 2016 = 35.820 Baht/USD and as at 31 December 2015 = 36.077 Baht/USD

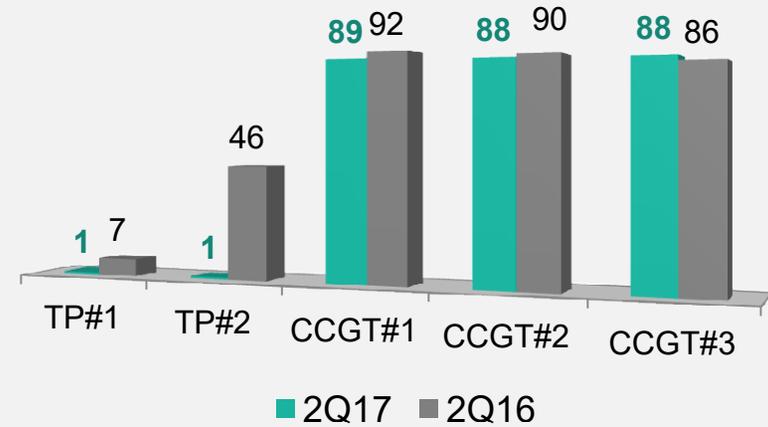
Annexure: Operating Performance

Operation Performance : RATCHGEN

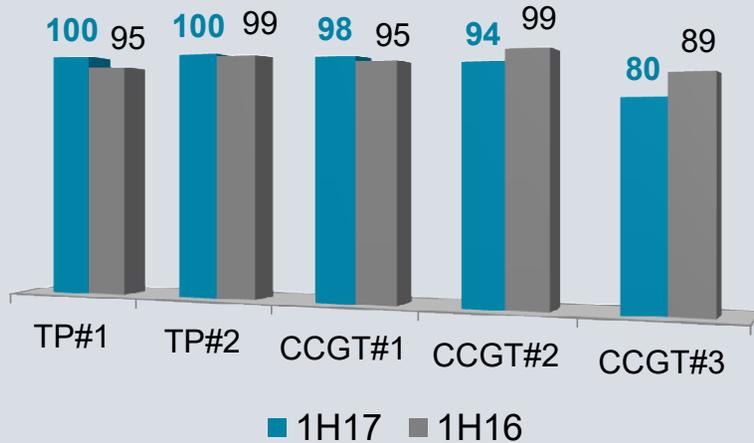
%Equivalent Availability Factor



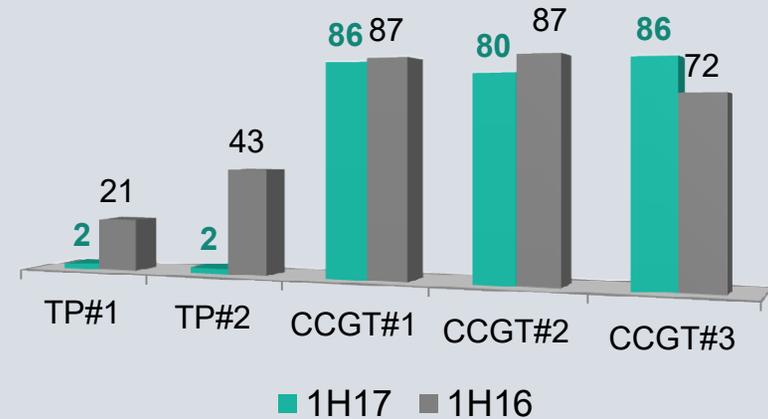
%Dispatch Factor



%Equivalent Availability Factor

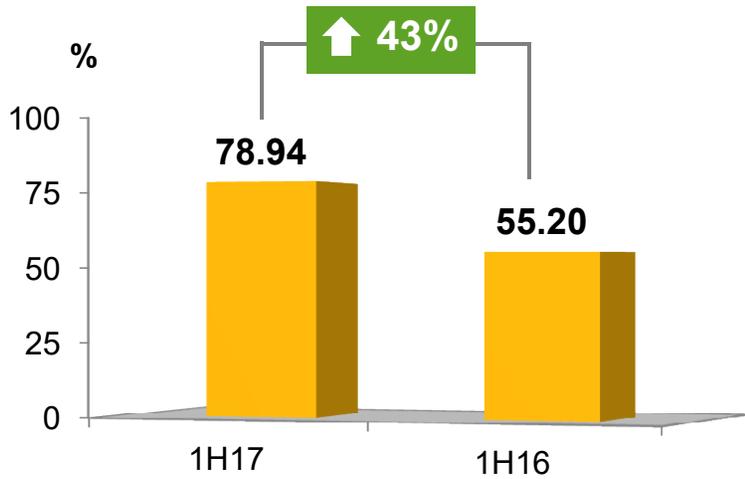
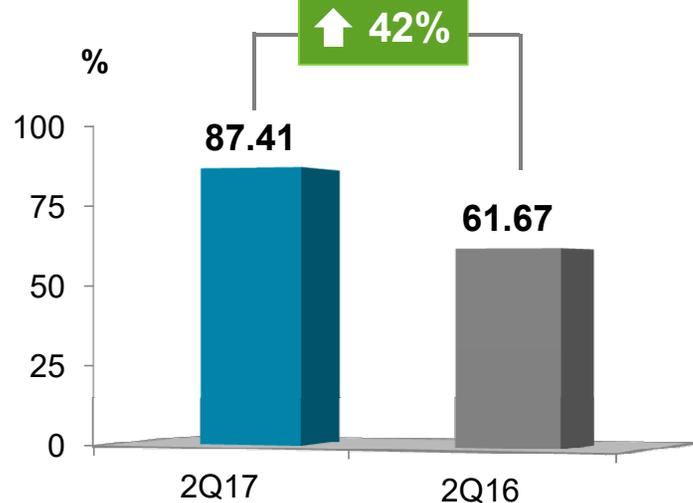
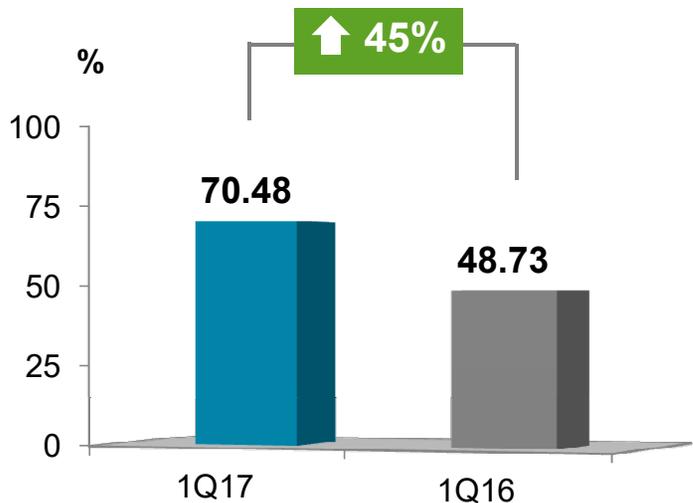


%Dispatch Factor



Operation Performance : Hongsa

%Equivalent Availability Factor (3 Units)

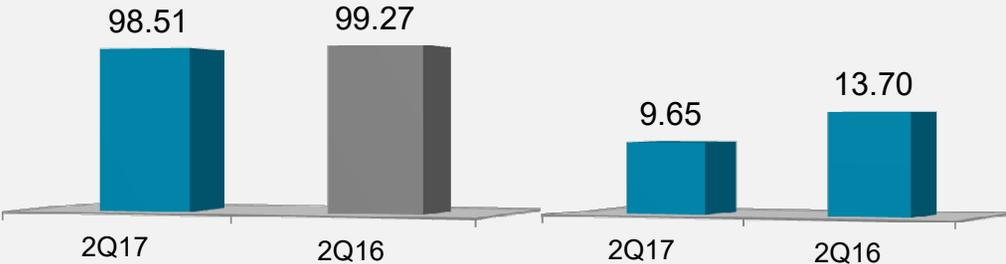


Operation Performance : Huay bong

Huay bong 2 (KR2)

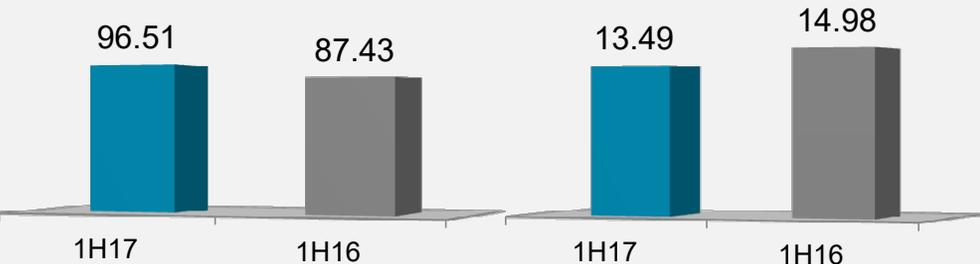
Avg. Commercial Availability (%)

Capacity Factor (%)



Avg. Commercial Availability (%)

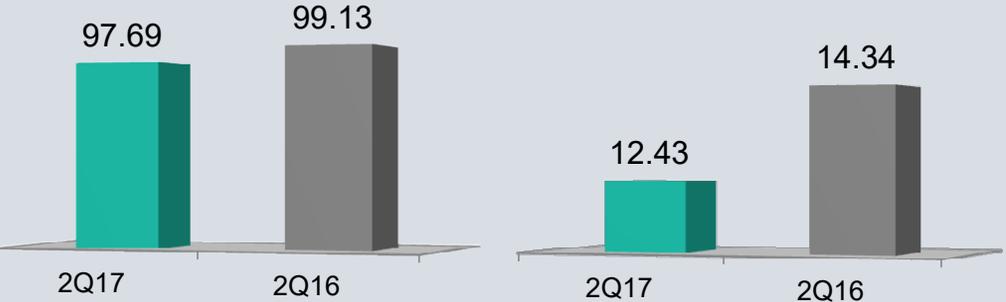
Capacity Factor (%)



Huay bong 3 (FKW)

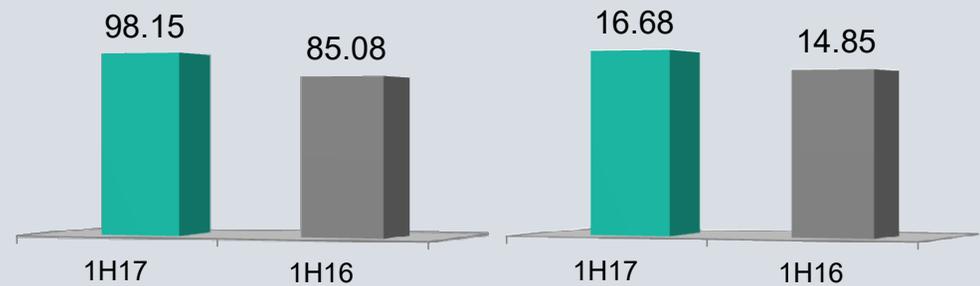
Avg. Commercial Availability (%)

Capacity Factor (%)



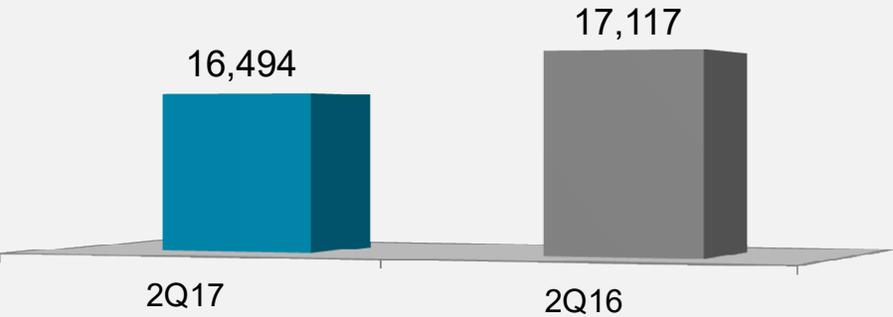
Avg. Commercial Availability (%)

Capacity Factor (%)

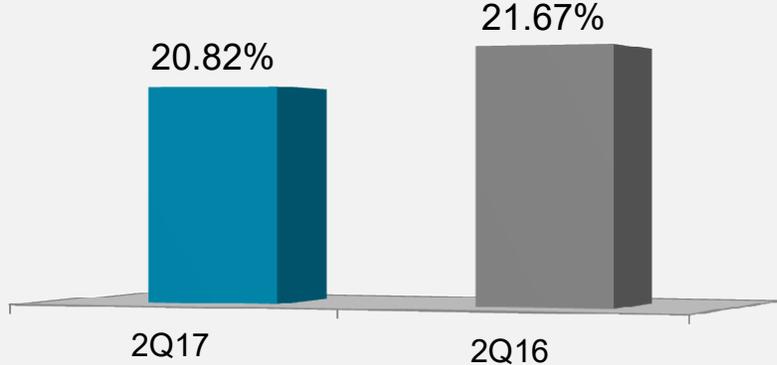


Operation Performance : Solarta

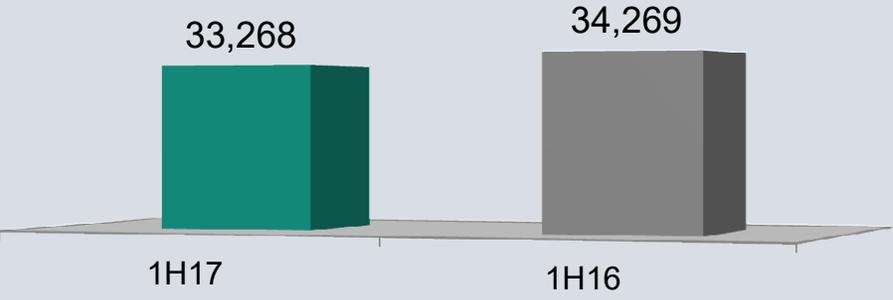
Total Net Energy (MWh /Quarter)



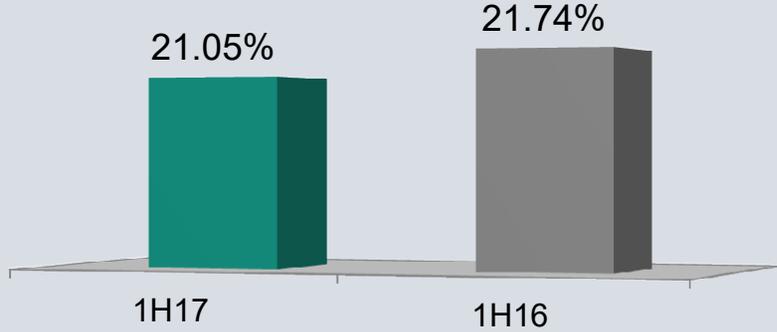
% Avg. Capacity Factor



Total Net Energy (MWh /Quarter)

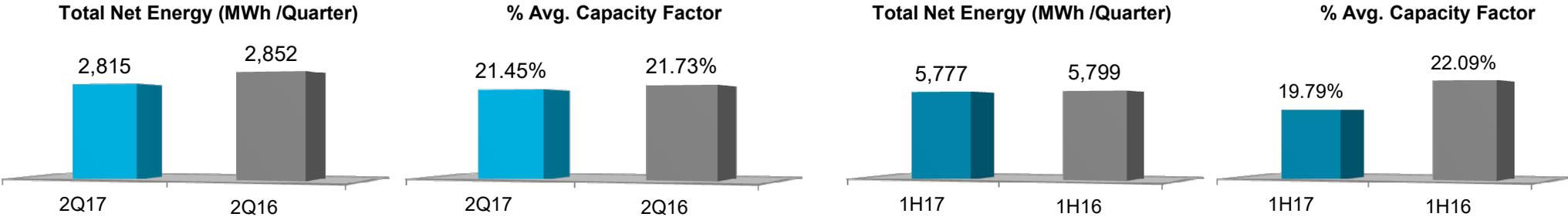


% Avg. Capacity Factor

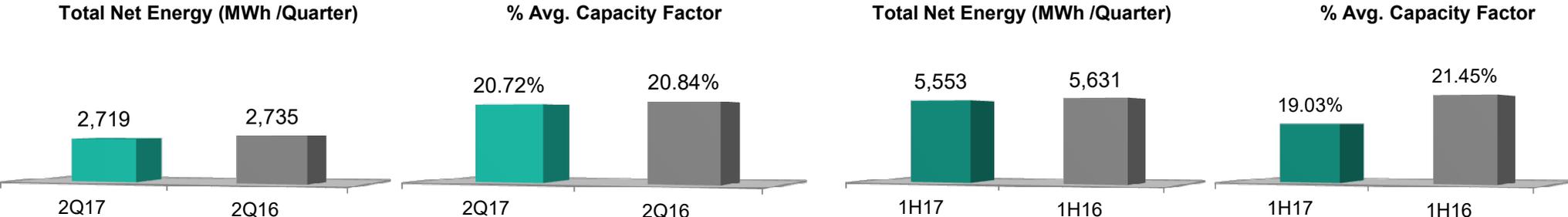


Operation Performance : Solar Power

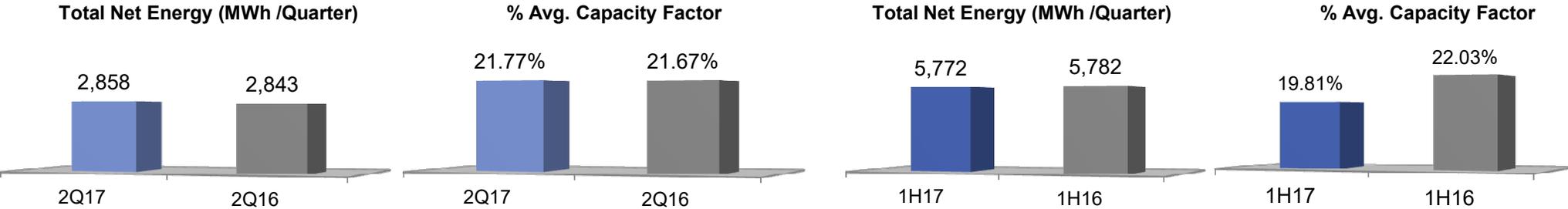
Korat 3



Korat 4



Korat 7



Actual Outage

Planned Outage at Ratchaburi Power Plant in 2016

Plant		Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
RG	CCST-10												
	CCGT-11									CI (15D) 17 - 27			
	CCGT-12									CI (15D) 17 - 27			
RG	CCST-20												
	CCGT-21						2	MI (30D) 31					
	CCGT-22						2	MI (30D) 31					
RG	CCST-30												
	CCGT-31	1	CI (12D) 12										
	CCGT-32	1	CI (12D) 12										
RG	Thermal-1												
RG	Thermal-1												
RG	CCST-10 - CCTE												
	CCGT-11 - CCTE												
	CCGT-12 - CCTE												
RPCL	CCST-10												
	CCGT-11												4
	CCGT-12												4
RPCL	CCST-20	3	MO(24D) 24										
	CCGT-21	3	MO(24D) 24										
	CCGT-22	3	MO(24D) 24										

Thermal Plant	Minor Inspection (MI)		40 Days	Major Overhaul (MO)		57 Days		
Gas Turbine	Warranty Inspection (WI)			Combustion Inspection		Minor Inspection	Major Overhaul	
	Normal (WI)	Gen.Rotor Removed (WI*)		(CI)		(MI)	(MO)	
	26 Days	32 Days		15 Days		30 Days	52 Days	
Steam Turbine	Warranty Inspection (WI)			Minor Inspection		Major Overhaul		
	Normal (WI**)	Gen.Rotor Removed (WI*)		(MI)		(MO)		
	26 Days	30 Days		26 Days		49 Days		

■ Actual Outage
■ Planned Outage

Planned Outage at Ratchaburi Power Plant in 2017

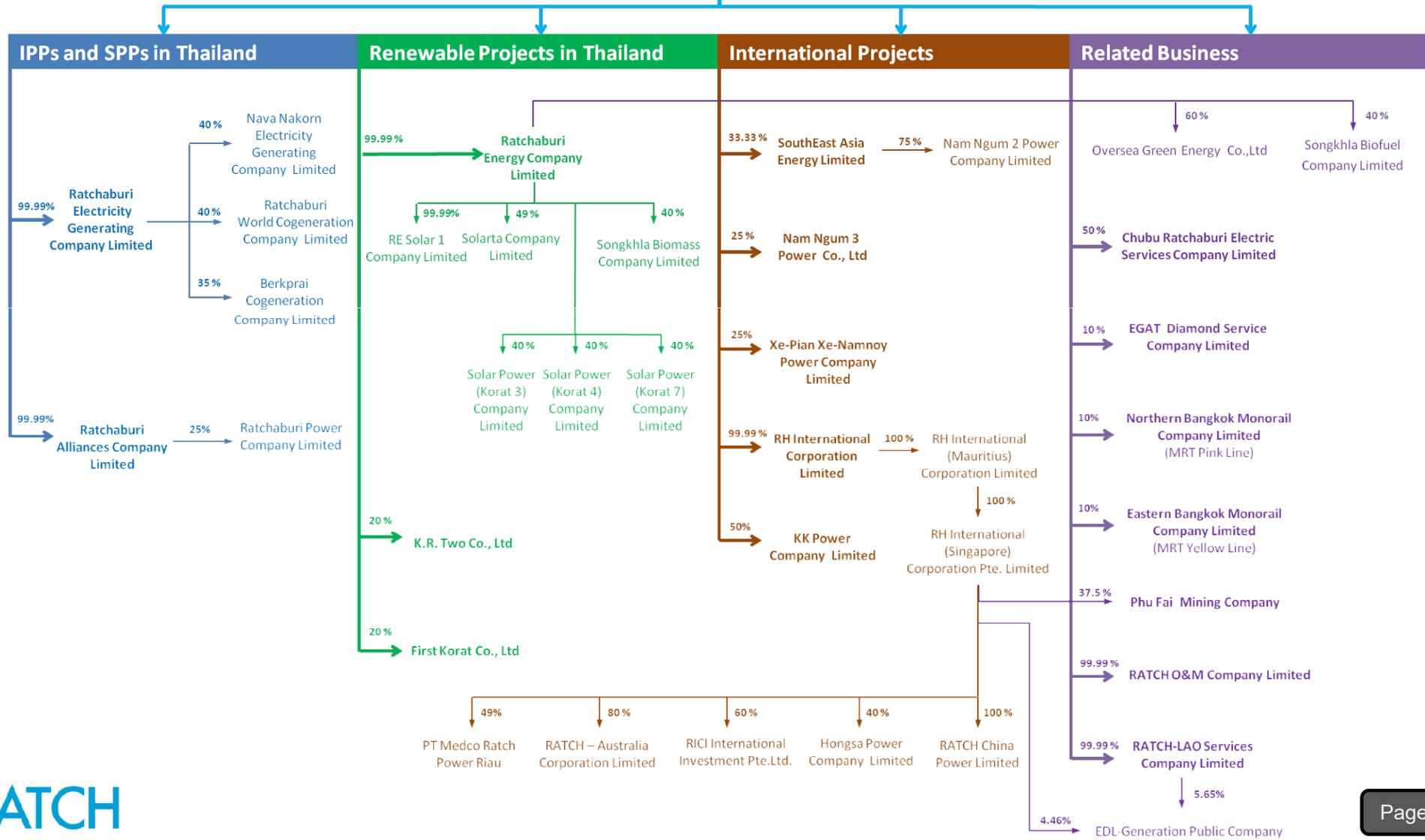
Plant		Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
RG	CCST-10											12	MI(26D) 7
	CCGT-11											23	CI (15D) 7
	CCGT-12											23	CI (15D) 7
RG	CCST-20								3	MI (26D) 28			
	CCGT-21								14	MI (15D) 28			
	CCGT-22								14	MI (15D) 28			
RG	CCST-30		1										
	CCGT-31		28										
	CCGT-32		28										
RG	Thermal-1							6	MI (40D) 14				
RG	Thermal-1											19	MI (40D) 28
RG	CCST-10 - CCTE												
	CCGT-11 - CCTE								5	CI (19d) 14			
	CCGT-12 - CCTE				8	8							
RPCL	CCST-10												
	CCGT-11										14	MI (3 D) 14	
	CCGT-12										14	MI (3 D) 14	
RPCL	CCST-20	3											
	CCGT-21	3											
	CCGT-22	3											

Thermal Plant	Minor Inspection (MI)		40 Days	Major Overhaul (MO)		57 Days		
Gas Turbine	Warranty Inspection (WI)			Combustion Inspection		Minor Inspection	Major Overhaul	
	Normal (WI)		Gen.Rotor Removed (WI*)		(CI)	(MI)	(MO)	
	26 Days		32 Days		15 Days	30 Days	52 Days	
Steam Turbine	Warranty Inspection (WI)			Minor Inspection		Major Overhaul		
	Normal (WI**)		Gen.Rotor Removed (WI*)		(MI)	(MO)		
	26 Days		30 Days		26 Days	49 Days		

Annexure: RATCH Projects

Company Structure

As of July 2017



IPPs and SPPs in Thailand



Ratchaburi Power Plant (RATCHGEN)	
	
Location	Ratchaburi Province
Technology	Thermal & Combined Cycle
Total Installed Capacity	3,645 MW (holds 100%)
PPA	25-Year
COD	TH#1-2 : 31 Oct 2000 CCGT #1-2 : 18 Apr 2002 CCGT#3 : 1 Nov 2002
Partner	Ratchaburi Electricity Generating Company Limited holds 100%

Tri Energy Power Plant (TECO)	
	
Location	Ratchaburi Province
Technology	Combined Cycle
Total Installed Capacity	720 MW (holds 100%)
PPA	20-Year
COD	1 July 2000
Partner	Ratchaburi Electricity Generating Company Limited holds 100%

Project Cost (100%)	404.75 Million USD
Debt to Equity	3 : 1
Project Cost (RATCH Portion)	<ul style="list-style-type: none"> In 2005, RATCH holds 50% of the total share, at the amount 202.50 Million USD In 2014, RATCH has purchased 50% of the total share, at the amount 21.32 Million USD

Project Cost (100%)	60,775 Million Baht
Debt to Equity	2.3 : 1
Project Cost (RATCH Portion)	60,775 Million Baht

IPPs and SPPs in Thailand



Project Cost (100%) 840 Million USD
Debt to Equity 2.5 : 1
Project Cost (RATCH Portion 25%) 210 Million USD

Ratchaburi Power Plant (RPCL)	
	
Location	Ratchaburi Province
Technology	Combined Cycle
Total Installed Capacity	1,490 MW (372.5 MW holds 25 %)
PPA	25-Year
COD	Block 1: 1 March 2008 Block 2: 1 June 2008
Partner	<ul style="list-style-type: none"> • Ratchaburi Alliances Company Limited holds 25% • Power Assets holds 25% • Chubu Electric Power Company International B.V. holds 15% • PTT PCL holds 15% • Union Energy Company Limited holds 10% • Toyota Tsusho Corporation holds 10%

Ratchaburi World Cogeneration (RW Cogen)	
	
Location	Ratchaburi Province
Technology	Cogeneration
Total Installed Capacity	234 MW (93.60 MW holds 40%)
PPA	25-Year
COD	Unit 1: November 2014 Unit 2: March 2015
Partner	<ul style="list-style-type: none"> • Ratchaburi Electricity Generating Company Limited holds 40% • Major Shareholder Group of Thai Agri Food PCL holds 60%

Project Cost (100%) 10,620 Million Baht
Debt to Equity 75 : 25
Project Cost (RATCH Portion 40%) 4,248 Million Baht

IPPs and SPPs in Thailand



In Operation

Project Cost (100%)

6,000 Million Baht

Debt to Equity

75 : 25

Project Cost (RATCH Portion 40%)

2,400 Million Baht

Nava Nakhon Electricity Generating (NNEG)



Location

Pathum Thani Province

Technology

Cogeneration

Total Installed Capacity

139.13 MW (55.65 MW holds 40%)

PPA

25-Year

COD

3 June 2016

Partner

- Ratchaburi Electricity Generating Company Limited holds 40%
- Global Power Synergy Public Company Limited holds 30%
- Nava Nakhon holds 30%

Berkprai Cogeneration (Former name: Ratchaburi Cogeneration)

Location

Ratchaburi Province

Technology

Cogeneration

Total Installed Capacity

99.23 MW (34.73 MW holds 35%)
Steam Generation 15 ton/hour

PPA

25-Year

Expected COD

In 2019

Partner

- Ratchaburi Electricity Generating Company Limited holds 35%
- Rajburi Sugar Company Limited 65%

Project Cost (100%)

5,331 Million Baht

Debt to Equity

3 : 1

Project Cost (RATCH Portion 35%)

1,866 Million Baht



Under Development

About Berkprai Cogeneration

On 15th September 2014, Ratchaburi Electricity Generating Company Limited has entered into Shareholders Agreement with Rajburi Sugar Company Limited

On 30th October 2014, Ratchaburi Electricity Generating Company Limited purchased 35 % of Ratchaburi Cogeneration Company Limited's total shares from Rajburi Sugar Company Limited

On 27th January 2015, Ratchaburi Cogeneration Company Limited changed its name to Berkprai Cogeneration Company Limited (the project).

On 28th September 2016, the project increased its registered capital from 100 Million Baht to 1,331 Million Baht

On 6th June 2017, the project has signed Facilities Agreement with Bangkok Bank. The loan amount is 4,000 Million Baht for the period of 20 years from the agreement signed date.

Renewable Projects in Thailand



Huay Bong 2 Wind-Turbine Power Project



Location

Nakorn Ratchasima Province

Technology

Wind-Turbine

Total Installed Capacity

103.5 MW (20.7 MW holds 20%)

PPA

5 years with automatic renewal for a further 5 years every 5 years

COD

8 February 2013

Partner

- RATCH holds 20%
- Aeolus Power holds 60%
- Chubu Electric Power Korat, BV holds 20%

Huay Bong 3 Wind-Turbine Power Project



Location

Nakorn Ratchasima Province

Technology

Wind-Turbine

Total Installed Capacity

103.5 MW (20.7 MW holds 20%)

PPA

5 years with automatic renewal for a further 5 years every 5 years

COD

14 November 2012

Partner

- RATCH holds 20%
- Aeolus Power holds 60%
- Chubu Electric Power Korat, BV holds 20%

Project Cost (100%)

6,500 Million Baht

Debt to Equity

70 : 30

Project Cost (RATCH Portion 20%)

1,300 Million Baht

Project Cost (100%)

6,100 Million Baht

Debt to Equity

70 : 30

Project Cost (RATCH Portion 20%)

1,220 Million Baht

Renewable Projects in Thailand



Solar Power Projects (Korat 3, Korat 4, Korat 7)



Project Cost (100%) 1,950 Million Baht
Debt to Equity 75 : 25
Project Cost (RATCH Portion 40%) 780 Million Baht

Location Nakorn Ratchasima Province
Technology Solar Power
Total Installed Capacity 21.60 MW (8.64 MW holds 40%)
PPA 5 years with automatic renewal for a further 5 years every 5 years
COD Korat 3 : 9 March 2012 Korat 4 : 14 May 2012 Korat 7 : 30 May 2012
Partner <ul style="list-style-type: none"> Ratchaburi Energy Company Limited holds 40% Solar Power holds 60%

Solarta Power Projects



Location Ayutthaya Province Suphan Buri Province Nakon Pathom Province
Technology Solar Power
Total Installed Capacity 42.30 MW (20.73 MW holds 49%)
PPA 5 years with automatic renewal for a further 5 years every 5 years
COD Ayutthaya Province : 7 April 2011 Suphan Buri Province : In 2012 Nakon Pathom Province : In 2012
Partner <ul style="list-style-type: none"> Ratchaburi Energy Company Limited holds 49% Yanhee Power holds 51%

Project Cost (100%) 4,400 Million Baht
Debt to Equity 75 : 25
Project Cost (RATCH Portion 49%) 2,156 Million Baht

Renewable Projects in Thailand

BIOMASS



In Operation

Songkhla Biomass Power Project
Location Songkhla Province
Technology Thermal Power Plant
Total Installed Capacity 9.9 MW (3.96 MW holds 40%)
VSPP 20-Year
COD 9 November 2015
Partner <ul style="list-style-type: none"> • Ratchaburi Energy Company Limited holds 40% • Precise Power Producer holds 40% • Assiddeek Saving Cooperative holds 20%
Project Cost (100%) 846 Million Baht
Debt to Equity 75 : 25
Project Cost (RATCH Portion 40%) 338.40 Million Baht

ESP



Boiler & Economizer



Fuel Storage Silo



International Projects



HYDRO



In Operation

Project Cost (100%)
30,832 Million Baht

Debt to Equity
2.5 : 1

Project Cost (RATCH Portion 25%)
7,708 Million Baht

Num Ngum 2 Hydroelectric Power Plant



Location
Lao PDR

Technology
Hydro Power Plant

Total Installed Capacity
615 MW (153.75 MW holds 25%)

PPA
27-Year

IOD/COD
In 2011 / In 2013

Partner

- SEAN* holds 75%
- GOL holds 25%

* Remark: SEAN's shareholder consist of

- RATCH holds 33.33%
- CK Power PCL holds 55.99%
- Other holds 10.68%

EDL-Generation Public Company (EDL-Gen)



Location
Lao PDR

Technology
Hydro Power Plant

Total Installed Capacity
1,131.15 MW
(114.36 MW holds 10.11%*)

Shareholders

- RATCH-Lao holds 5.65%
- RH International (Singapore) Corporation Pte. Limited holds 4.46%
- EDL holds 75%
- Others holds 14.89%

*Remark:

- EDL-Gen has been traded on Lao Securities Exchange since 2010.
- In 2016, RATCH acquired 169.78 million shares, or equivalent to 3,254 Million Baht

International Projects



HYDRO



HYDRO

Under Construction

Xe-Pian – Xe Namnoy Project

Location

Lao PDR

Technology

Hydro Power Plant

Total Installed Capacity

410 MW (102.5 MW holds 25%)

PPA

27-Year

Expected COD

In 2019

Progress

77.20% as of June 2017

Partner

- RATCH holds 25%
- SK Engineering holds 26%
- Korea Western Power holds 25%
- Lao PDR holds 24%

Project Cost (100%)

1,020 Million USD

Debt to Equity

70 : 30

Project Cost (RATCH Portion 25%)

255 Million USD



International Projects



In Operation

Hongsa Power Plant Unit 1-3

Location

Lao PDR

Technology

Lignite-Fired

Total Installed Capacity

1,878 MW (751.2 MW holds 40%)

PPA

25-Year

COD

Unit 1 : 2 June 2015

Unit 2 : 2 November 2015

Unit 3 : 2 March 2016

Partner (Power Plant)

- RHIS holds 40%
- Banpu Power holds 40%
- Lao PDR holds 20%

Partner (Phu Fai Mining)

- RHIS holds 37.5%
- Banpu Power holds 37.5%
- Lao PDR holds 25%

Project Cost (100%)

3,710 Million USD

Debt to Equity

75 : 25

Project Cost (RATCH Portion 25%)

1,484 Million USD



International Projects



In Operation

Townsville Power Plant



Location	North Queensland, Australia
Technology	Combined Cycle Gas Turbine
Total Installed Capacity	234 MW (187.20 MW holds 80%)
COD	In 1999
Contract end date	February 2025
Contract counterparty	AGL / Arrow

Kemerton Power Plant



Location	Western Australia
Technology	Open Cycle Gas / Diesel Turbine
Total Installed Capacity	308 MW (246.40 MW holds 80%)
COD	In 2005
Contract end date	October 2030
Contract counterparty	Synergy

BP Kwinana Power Plant



Location	Western Australia
Technology	Co-generation
Total Installed Capacity	35.40 MW (28.32 MW holds 80%)
COD	In 1996
Contract end date	December 2021
Contract counterparty	Verve Energy / BP

International Projects



Toora

Location Victoria, Australia
Technology Wind Farm
Total Installed Capacity 21 MW (16.80 MW holds 80%)
COD In 2002
Contract end date n.a.
Contract counterparty Merchant

Starfish Hill

Location South Australia
Technology Wind Farm
Total Installed Capacity 33 MW (26.40 MW holds 80%)
COD In 2003
Contract end date In 2020
Contract counterparty ALINTA

Windy Hill

Location Queensland, Australia
Technology Wind Farm
Total Installed Capacity 12 MW (9.60 MW holds 80%)
COD In 2000
Contract end date December 2018
Contract counterparty Ergon Energy Queensland

International Projects



Under Construction

Mount Emerald Wind Farm	About Mount Emerald Wind Farm
<p>Location Queensland, Australia</p>	<p>On 27th November 2016, Mount Emerald Wind Farm Pty has entered into PPA with Ergon Energy Queensland (“EEQ”) a power state enterprise of Queensland. The agreement will expire on 31st December 2030 or totaling the agreement period of approximately 12.5 years.</p>
<p>Technology Wind Farm</p>	<p>On 28th June 2016, RAC has entered into share purchase agreement of Mount Emerald Wind Farm Pty with Port Bajool Pty Ltd. who had jointly invested in the Project with RAC in the proportion of 50 : 50. After the purchase was complete, RAC would hold 100 % stake in Mount Emerald Wind Farm Pty.</p>
<p>Total Installed Capacity 180.45 MW (144.36 MW holds 80%)</p>	<p>On 1st November 2016, Mount Emerald Wind Farm Pty the developer of Mount Emerald Wind Farm Project, has successfully sourced loan for the development of the Project by entering into Financial Agreement with 4 financial institutes namely Australia and New Zealand Bank, National Australia Bank, The Bank of Tokyo Mitsubishi, and Societe Generale.</p>
<p>Expected COD In 2018</p>	
<p>Contract end date December 2030</p>	
<p>Contract counterparty Ergon Energy Queensland*</p>	
<p>Project Cost (100%) 400 Million AUD (Approximately 10,840 Million Baht)</p>	
<p>* State Enterprise of Queensland, Australia</p>	



International Projects



SOLAR
2024

Under Construction

Collinsville Solar Power Project
Location Queensland, Australia
Technology Solar Power
Total Installed Capacity 42.50 MW (34 MW holds 80%)
Expected COD In 2018
Contract end date December 2030
Contract counterparty Braemar Power Projects
Project Cost (100%) 95 Million AUD*
* Loan from financial institute at approximately 60 percent, grant fund from ARENA at 10 percent and equity investment at approximately 30 percent.



Collinsville Solar PV - Visualization

Remark

The Project has Power Purchase Agreement with the Braemar Power Projects, a subsidiary of Alinta Energy, for 70 percent. Such Power Purchase Agreement will be expired on 31st December 2030. The other 30 percent of the generated electricity will be sold in Australia's National Electricity Market (NEM).

International Projects



NUCLEAR



Under Construction

Guangxi Fangchenggang Nuclear Power (II)

Location

Fangchenggang , China

Technology

HPR1000 (Hualong-1)

Total Installed Capacity

2,360 MW (236 MW holds 10%)
(2 unit x 1,180 MW)

PPA

30-Year

Expected COD

In 2021

Partner

- China General Nuclear Power Corporation (CGN) holds 51%
- Guangxi investment Group Co./ Ltd (GIG) holds 39%
- RATCH China Power Limited holds 10%

Project Cost (100%)

200,000 Million Baht

Debt to Equity

62.5 : 37.5

Equity Investment

(RATCH Portion 10%)

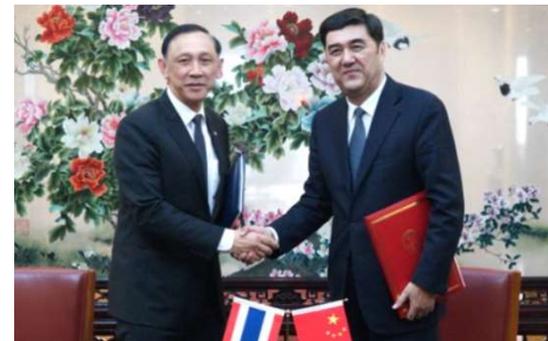
7,500 Million Baht



The signing of the equity joint venture contract (Image: CGN)

On 25th January 2016, RATCH has agreed to take a stake in the two Hualong One reactors being built as Phase II of the Fangchenggang nuclear power plant in China's Guangxi province.

source: world nuclear news



Kanchanarat (left) and Bekri shake on the agreement (Image: NEA)

On 29th March 2017, China and Thailand have signed an agreement to cooperate in the peaceful use of nuclear energy. The agreement was signed in Beijing by Nur Bekri, director of China's National Energy Administration (NEA), and Thai energy minister Anantaporn Kanchanarat.

source: world nuclear news

International Projects



Under Development



Riau Combined-Cycle Power Plant

Location

Republic of Indonesia

Technology

Combined-Cycle

Total Installed Capacity

275 MW (134.75 MW holds 49%)

PPA

20-Year

Purchaser

PT PLN (PERSERO)

Expected COD

In 2021

Partner

- RH International (Singapore) Corporation Pte. Limited holds 49%
- PT Medco Power Sentral Sumatera holds 51%

Project Cost (100%)

300 Million USD

Debt to Equity

75:25

Equity Investment (RATCH Portion 49%)

36.75 Million USD

Related Business



MRT Pink Line Project and the MRT Yellow Line Project

MRT Pink Line Project (Khae Rai-Min Buri)	Stations	Line length
	30	34.5 KM

MRT Yellow Project (Lat Phrao - Samrong)	Stations	Line length
	23	30.4 KM

Overview

- On 7th November 2016, the Company, BTS Group Holding Public Company Limited (BTS) and Sino-Thai Engineering & Construction Public Company Limited (STEC) have jointly submitted the proposals under the name of "BSR Joint Venture" for the biddings of the MRT Pink Line and the MRT Yellow Line Project.
- On 14th December 2016, MRTA has issued letters No. MRTA 004/3227 and MRTA 004/3228, notifying that BSR Joint Venture was the bidder who proposed the best offer for the MRT Pink Line Project and the MRT Yellow Line Project.
- On 12th June 2017, the Company, BTS and STEC jointed established companies namely "Northern Bangkok Monorail Company Limited" and "Eastern Bangkok Monorail Company Limited".
- On 16th June 2017, Northern Bangkok Monorail Company Limited and Eastern Bangkok Monorail Company Limited have entered into the Concession Contracts including of the obligation for extensions of the MRT Pink Line Project and MRT Yellow Line Project with Mass Rapid Transit Authority Of Thailand (MRTA).

Partners

- BTS Group Public Company Limited holds 75%
- Sino-Thai Engineering and Construction Public Company Limited holds 15%
- Ratchaburi Electricity Generating Holding Public Company Limited holds 10%

Concession Period

33 Years and 3 months divided in to 2 phases as follows

- Phase 1: Design and construction of civil works, procurement, installation, testing and trial run of the train system with the implementation of no more than 3 years and 3 months.
- Phase 2: Provision of train operation and maintenance service with the implementation of 30 years

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Disclaimer

The information contained in our presentation is intended solely for your personal reference only. In addition, such information contains projections and forward-looking statements that reflect the Company's current views with respect to future events and financial performance. These views are based on assumptions subject to various risks. No assurance is given that future events will occur, that projections will be achieved, or that the Company's assumptions are correct. Actual results may differ materially from those projected. Investors are, however, required to use their own discretion regarding the use of information contained in this presentation for any purpose.

RATCH



RATCHABURI
ELECTRICITY GENERATING
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