

## GLOBAL POWER SYNERGY

(GPSC TB/ GPSC.BK)

### Quarterly earnings to pick up yoy up to 2021

**GPSC should post record 3Q profit at Bt2.4bn (Bt0.85 EPS), +27% qoq and +170% yoy. IPP and SPP operations should soften qoq, but more than offset by solid hydro power plants. We turn positive as quarterly earnings should pick up yoy from 4Q20 up to 2021. Upgrade to BUY, with lower DCF-based TP at Bt72/sh (from Bt78/sh)**

#### Weaker IPP/SPP, but offset by solid hydro power plants

GPSC should post record 3Q earnings at Bt2.4bn (Bt0.87 EPS), +27% qoq and +170% yoy. Revenue from IPP would drop by 10% qoq due to 9-day shutdown at Gheco-One (65%, 660MW) while revenue from SPP would also decline by 6% qoq due to shutdown at GLOW Phase 5 (100%, 328MW). 76% of its IUs is in petrochemical & refinery, and 2% in the automotive sector. Gas cost should drop by 10% qoq to Bt245/mmbtu in 3Q (sensitivity Bt1/mmbtu = Bt35m/year to earnings), supporting GPM for SPP at 29%, flat qoq. Blended GPM should soften to 30% vs 31% in 2Q. We expect XPCL (25% stake, 1,285MW) to contribute Bt450m profit vs. Bt59m loss in 2Q due to heavy rainfall in Laos, with capacity factor at 83%, vs 48% in 2Q. The water level was average 4,199cum/sec in 3Q vs 1,958 in 2Q. There would not be any major FX gain/loss in 3Q. GPSC consolidated GLOW at 99.83% vs. 95.25% in 3Q19.

#### Softer 4Q operations for IPPs/hydro plants, but stronger for SPPs

We expect weak IPP operations in 4Q as sales volume has reached Contracted Availability Hours for the year. XPCL should book smaller earnings due to less water. But could return to profit in 1H21 given higher probability of La Nina from Feb to Apr (vs. Bt294m loss in 1H20). SPP should recover along with resuming operations of petrochemical and refinery businesses and ramp-up in automotive segment. GLOW Phase 5, one of the most efficient SPPs, has also resumed normal operations since 18 Oct and should boost SPP performance in 4Q.

#### BUY, lower DCF-based TP to Bt72/sh; strong momentum up to 2021

YTD, GPSC's share price has fallen 38% on concerns over weak IU demand. We believe earnings momentum should pick up yoy from 4Q20 through 2021. Our TP implies 24.3X FY21F PE.

#### Financial Summary

Year to 31 Dec	Unit	2018	2019	2020F	2021F	2022F
Revenue	(Btm)	24,777	66,562	79,585	80,235	81,247
Revenue growth	(%)	24.4	168.6	19.6	0.8	1.3
EBITDA	(Btm)	5,441	16,394	19,419	19,176	19,824
EBITDA growth	(%)	34.6	201.3	18.5	(1.2)	3.4
Profit, core	(Btm)	3,374	3,743	7,995	8,370	8,825
Profit growth, core	(%)	6.2	11.0	113.6	4.7	5.4
Profit, reported	(Btm)	3,359	4,061	7,995	8,370	8,825
Profit growth, reported	(%)	5.8	20.9	96.9	4.7	5.4
EPS, core	(Bt)	2.25	1.33	2.84	2.97	3.13
EPS growth, core	(%)	6.2	(41.0)	113.6	4.7	5.4
DPS	(Bt)	1.3	1.7	1.4	1.5	1.6
P/E, core	(x)	23.6	25.6	18.8	17.9	17.0
P/BV, core	(x)	2.0	1.5	1.2	1.2	1.2
ROE	(%)	8.6	5.3	7.2	6.8	6.9
Dividend yield	(%)	2.3	3.1	2.7	2.8	2.9

**BUY** (from HOLD)

Target price Bt72.00 (+35.2%) Price Bt53.25



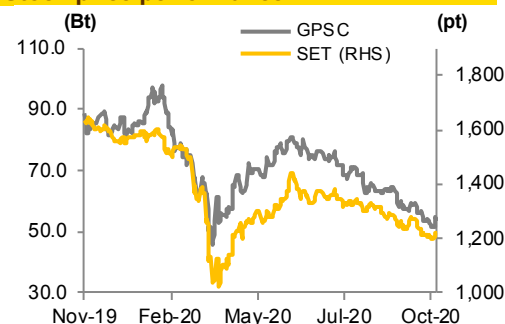
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Key data	Unit	
12M high/ low	(Bt)	98.3/ 42.8
Market cap	(Btm/ USDm)	150,151/ 4,822
3M avg. daily turnover	(Btm/ USDm)	485.6/ 15.4
Free float	(%)	23.1
Issued shares	(m shares)	2,820
<b>Major shareholders:</b>		<b>%</b>
1) Ptt Pcl		22.8
2) Ptt Global Chemical		22.7
3) Thai Oil Power Compa		20.8

#### Stock price performance



	Unit	ytd	1M	3M	12M
Total return	(%)	(36.7)	(7.0)	(22.2)	(38.5)
Total return vs SET	(%)	(13.9)	(5.7)	(14.1)	(13.7)

#### Krungsri vs Bloomberg consensus

	Unit	(+)	(=)	(-)
Bloomberg consensus	(Cnt.)	14	3	1
Target price	(Bt)	72.00	83.71	(14.0)
2020F net profit	(Btm)	7,995	6,955	15.0
2021F net profit	(Btm)	8,370	8,455	(1.0)

#### Earnings revision

Bloomberg	Unit	2020F	2021F
1M	(%)	(2.19)	(3.21)
3M	(%)	(1.35)	(0.94)
ytd	(%)	(16.48)	(10.02)
<b>Krungsri</b>			
From last report	(%)	24.20	4.11

Source: Bloomberg, Krungsri Securities

**GPSC: 3Q20F preview**

P&L (Btm)	3Q19	4Q19	1Q20	2Q20	3Q20F	qoq chg	yoy chg
Sales	19,226	18,279	18,308	18,138	17,111	-6%	-11%
COGS (inc dep'n)	(15,848)	(15,748)	(14,995)	(14,566)	(13,577)	7%	14%
<b>Gross Profit</b>	<b>3,378</b>	<b>2,531</b>	<b>3,313</b>	<b>3,572</b>	<b>3,533</b>	<b>-1%</b>	<b>5%</b>
SG&A	(439)	(646)	(443)	(486)	(490)	-1%	-12%
<b>Operating Profit</b>	<b>2,939</b>	<b>1,886</b>	<b>2,870</b>	<b>3,087</b>	<b>3,043</b>	<b>-1%</b>	<b>4%</b>
Net other income	295	200	181	372	250	-33%	-15%
Net interest	(1,960)	(1,197)	(1,041)	(991)	(1,047)	-6%	47%
<b>Pretax profit</b>	<b>1,274</b>	<b>889</b>	<b>2,009</b>	<b>2,467</b>	<b>2,246</b>	<b>-9%</b>	<b>76%</b>
Income Tax	(129)	(43)	(254)	(284)	(50)	82%	61%
Associates	138	463	(68)	110	550	401%	299%
<b>Profit after tax (pre-</b>	<b>1,283</b>	<b>1,309</b>	<b>1,688</b>	<b>2,293</b>	<b>2,746</b>	<b>20%</b>	<b>114%</b>
Extraordinaries, GW &	17	111	(30)	(5)	0	NA	-100%
Minority interest	(407)	(275)	(78)	(392)	(340)	13%	16%
<b>Reported net profit</b>	<b>893</b>	<b>1,145</b>	<b>1,580</b>	<b>1,896</b>	<b>2,406</b>	<b>27%</b>	<b>170%</b>
Shares out (end Q, m)	1,498	1,802	2,820	2,821	2,820	0%	88%
Adjusted shares (m)	1,498	1,802	2,820	2,821	2,820	0%	88%
<b>Pre-ex EPS</b>	<b>0.86</b>	<b>0.73</b>	<b>0.60</b>	<b>0.81</b>	<b>0.97</b>	<b>20%</b>	<b>14%</b>
<b>EPS</b>	<b>0.60</b>	<b>0.64</b>	<b>0.56</b>	<b>0.67</b>	<b>0.85</b>	<b>27%</b>	<b>43%</b>

Source: Company data, Krungsri Securities

### Upgrade to BUY, with lower DCF-based TP to Bt72/sh

We revised down assumptions on installed capacity for SPP replacement scheme. GLOW reduced those capacity to 584MW from 914MW for GLOW Energy Phase 2, Glow SPP2, SPP3 and SPP11. GPSC has already signed PPA with EGAT for GLOW Energy Phase2, GLOW SPP2 and SPP3 for total 120MW (4 contracts). GPSC is still waiting to sign PPA for GLOW SPP11.

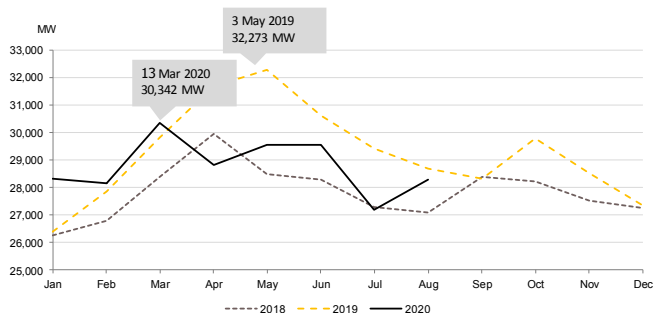
With our revised installed capacity, we rolled over and derived DCF-based TP at Bt72/sh, implying 24.3X FY21F PE.

#### Seven PPAs under SPP replacement scheme

Plant	Installed Capacity (previous)		Installed Capacity (New)		No. of PPAs	Qualifications	Scheduled COD
	Power (MW)	Steam (TPH)	Power (MW)	Steam (TPH)			
Glow Energy Phase2	281	300	192	300	2	Extension & Replacement	2022
Glow SPP2	213	140	192	300	2	Replacement	2024
Glow SPP3 (coal)	300	50	120	168	2	Replacement	2024, 2025
Glow SPP11#1	120	-	80	-	1	Replacement	2025
<b>Total</b>	<b>914</b>	<b>490</b>	<b>584</b>	<b>768</b>	<b>7</b>		

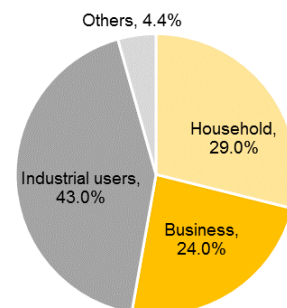
Source: Company data

**Electricity consumption grew 3.2% in 2M20**



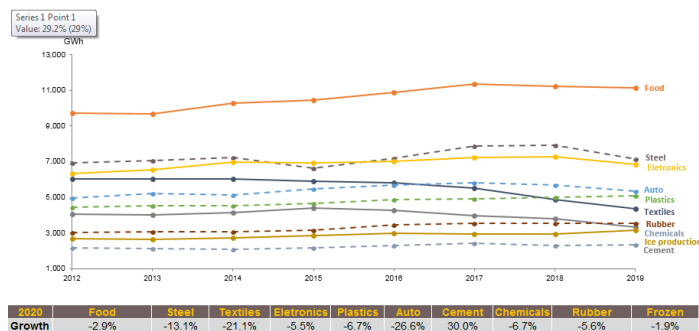
Source: Energy Planning and Policy Office (EPPO), Krungsri Securities

**Electricity consumption breakdown by group**



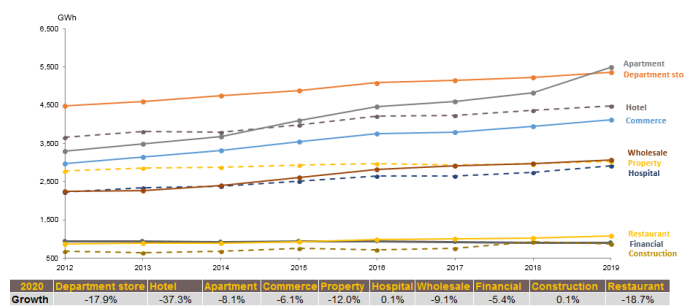
Source: Energy Planning and Policy Office (EPPO), Krungsri Securities

**Electricity consumption in major industries**



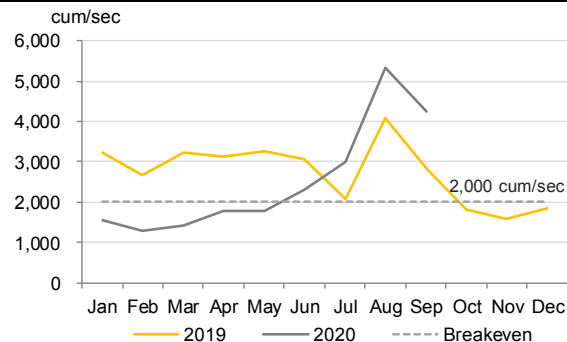
Source: Energy Planning and Policy Office (EPPO), Krungsri Securities

**Electricity consumption in major businesses**



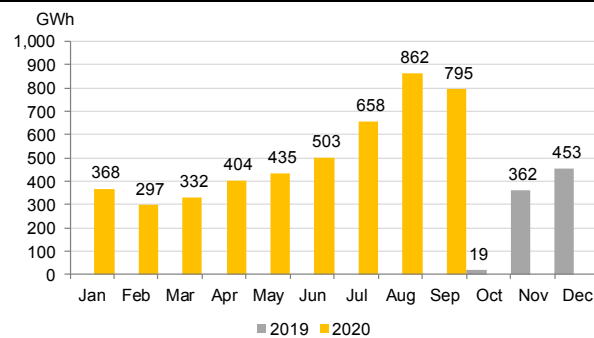
Source: Energy Planning and Policy Office (EPPO), Krungsri Securities

**XPCL: Water inflow**



Source: Company data, Krungsri Securities

**XPCL: Electricity sales volume since COD in Oct 2019**






Source: Company data, Krungsri Securities

**Xayaburi Project**



**PROJECT SUMMARY**

<b>TYPE</b>	<b>ELECTRICITY (MW)</b>
 <p>Run-of-River Hydropower Plant</p>	<b>1,285</b>
<b>LOCATION</b>	<b>CUSTOMER</b>
Lao PDR	 EGAT (1,220 MW)  Electricite Du Laos (EDL) (60 MW)
<b>GPSC holds</b>	

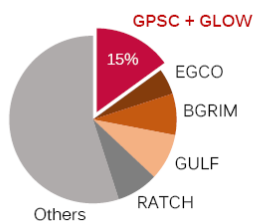
**25%**  
Of total share

Source: Company data

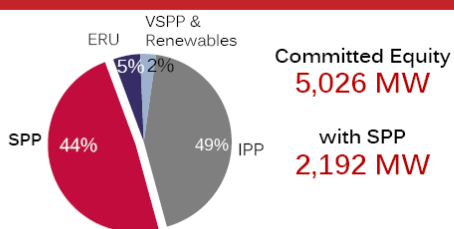
**SPP replacement projects**

**SPP Market Share by Installed Equity MW/<sup>1</sup>**

**Thailand's largest SPP player**  
with strong resources and network reliability



**GPSC's Committed Portfolio/<sup>2</sup>**



Note: 1. Data source from companies' website and ERC as of July 2019  
2. Based on 100% in GLOW

**SPP Replacement Project: Stage 1 and 2 Projects (Tentative only)**

Plant	Power (MW)	Steam (TPH)	Max. EGAT PPA	Notice to proceed	SCOD
<b>Stage 1</b>					
GEN Phase 2	192	300	30 x 2	2020	2022
<b>Stage 2</b>					
GSPP2	192	300	30 x 2	2022	2024
GSPP3 (Coal)	120	168	30 x 2	2022	2024, 25
GSPP11#1	80	-	30 x 1	2023	2025
<b>Total</b>	<b>584</b>	<b>768</b>			

Source: Glow Analyst Meeting Q1/2019

Source: Company data

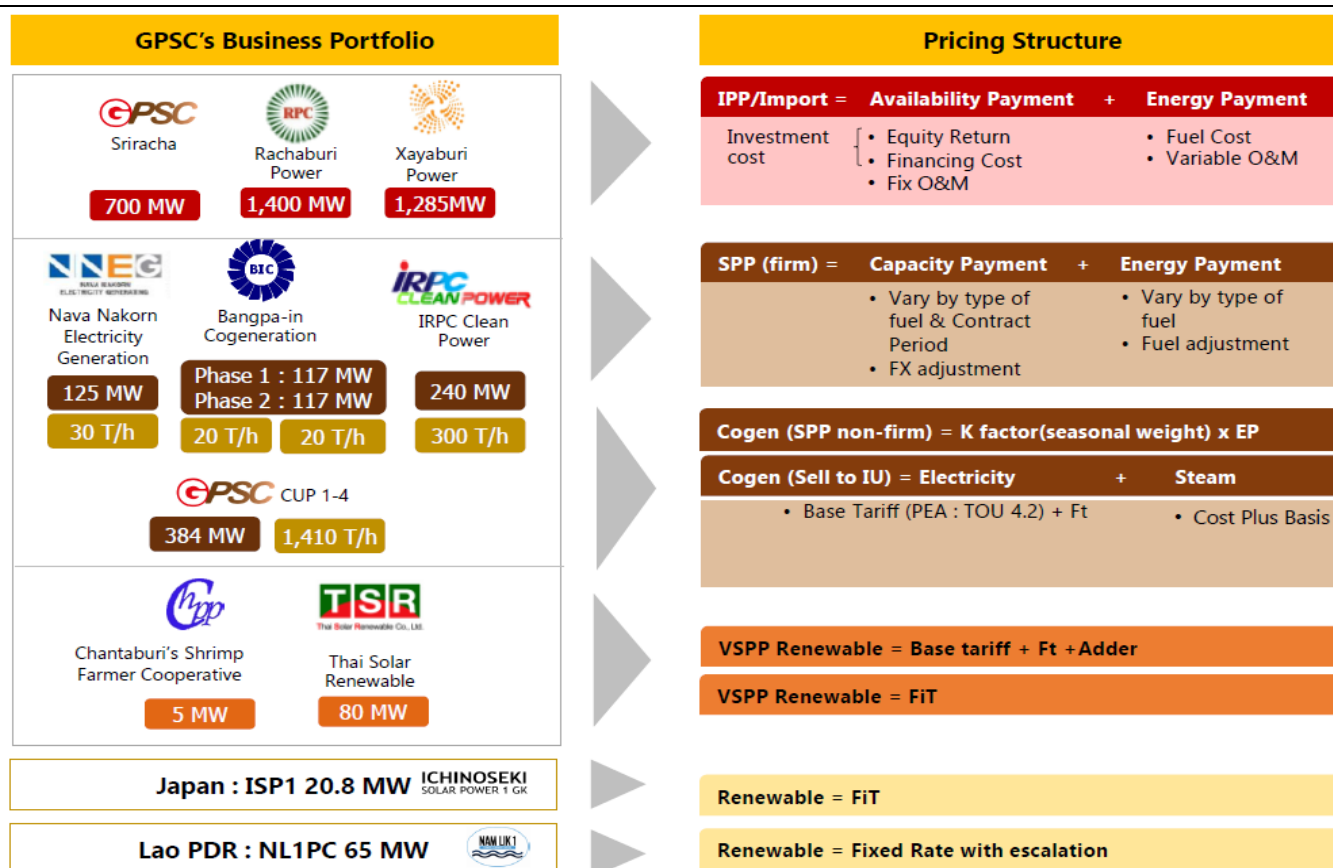
**Power plant projects**

Project	Location	Fuel type	Technology	Owner ship (%)	Capacity (MW)	Steam (ton/hr)	Effective capacity (MW)	COD	Expired	Tenor (years)
<b>Operating</b>										
<b>IPP</b>										
<b>GPSC</b>										
Sriracha	Chonburi	Gas	Combined	100%	700		700	2000	2025	25
RPCL	Rachaburi	Gas	Combined cycle	15%	1,400		210	2008	2033	25
<b>GLOW</b>										
Glow IPP	Chonburi	Gas	Combined cycle	95%	713		677	2003	2028	25
Huay Ho	Laos	hydro-power	Run-of-river	67%	152		102	1999	2029	30
GHECO-One	Rayong	coal-fired	Combined cycle	65%	660		429	2012	2027	15
<b>Total IPP</b>							<b>2,118</b>			
<b>SPP</b>										
<b>GPSC</b>										
CUP-1	Rayong	Gas	Cogen	100%	226	890	226	2006	2021++	15
CUP-2,3	Rayong	Gas	Cogen	100%	113	450	113	2008	2022++	15
IRPCCP-1	Rayong	Gas	Cogen	51%	45	87	23	2015	2040	25
NNEG	Pathumthani	Gas	Cogen	30%	125	9	38	2016	2041	25
BIC-1	Ayutthaya	Gas	Cogen	25%	117	5	29	2013	2038	25
BIC-2	Ayutthaya	Gas	Cogen	25%	117	5	29	2017	2042	25
IRPCCP-2	Rayong	Gas	Cogen	51%	195	66	99	2017	2042	25
NNEG Expansion	Pathumthani	Gas	Cogen	30%	60	3	18	2020	2041	25
Rayong Expansion (CUP-3)	Rayong	Gas	Cogen	100%	15		15	2019	N/A	N/A
Rayong Expansion (CUP-4)	Rayong	Gas	Cogen	100%	45	70	45	2019	2043	25
<b>GLOW</b>										
Glow Energy-1	Rayong	Gas	Combined	100%	250	250		1994		
Glow Energy-2	Rayong	Gas	Combined	100%	192	300	192	1996	1999	3
Glow Energy-4	Rayong	Gas	Cogen	100%	77	137	77	2005	2030	25
Glow Energy-5	Rayong	Gas	Combined	100%	328	160	328	2011		
Glow SPP 2/ Glow SPP 3	Rayong	Gas	Cogen	100%	312	190	312	1999	2024	25
Glow SPP 11 -1	Rayong	Gas	Cogen	100%	80		80	2000	2025	25
Glow SPP 11 -2	Rayong	Gas	Cogen	100%	110		110	2015	2040	25
Glow SPP 11 -3	Rayong	Gas	Combined	100%	42		42	2006		
Glow Energy CFB 3	Rayong	Gas	Combined	100%	85	79	85	2010		
<b>Total SPP</b>							<b>1,861</b>			
<b>VSPP and Others</b>										
<b>GPSC</b>										
CHPP	Rayong	Gas	Combined	100%	5		5	2008	2038	30
CHPP (solar)	Chantaburi	Solar	Solar	100%	5		5	2016	2041	25
TSR	Karnchanaburi	Solar	Solar	40%	80		32	2013	2023	10
Solar project				100%	39.5		40	2014-15	2039-40	15
Rayong WTE				100%	9.8		10	2021	2039	18
<b>GLOW</b>										
Glow Energy Solar Plant	Rayong, Saraburi	Solar	Photovoltaic	100%	1.55		2	2012	2032-37	20-25
Glow Energy Solar PV Rooftop	Rayong	Solar	Solar	100%	0.87		1	2019	2034	15
Glow Energy Solar PV Rooftop	Saraburi	Solar	Solar	100%	1		1	2019	2034	15
CCE				33%	8.6		3	2019	2039	20

Project	Location	Fuel type	Technology	Ownership (%)	Capacity (MW)	Steam (ton/hr)	Effective capacity (MW)	COD	Expired	Tenor (years)
<b>GPSC</b>										
ISP1	Japan	Solar	Solar	99%	20.8		21	2017	2037	20
NL1PC				40%	65		26	2019	2044	27
ERU				100%	250	175	250	2023	2048	25
<b>Total VSPP and Others</b>							<b>394</b>			
<b>Total</b>							<b>4,374</b>			
XPCL	Laos	Hydro	Run-of-river	25%	1,285		321	2019	2048	29
<b>Under construction</b>										
NNEG expansion	Pathumthani	Natural gas	Cogeneration	30%	60	10	21	2020		
<b>Total capacity (operating and under construction)</b>							<b>4,715</b>			

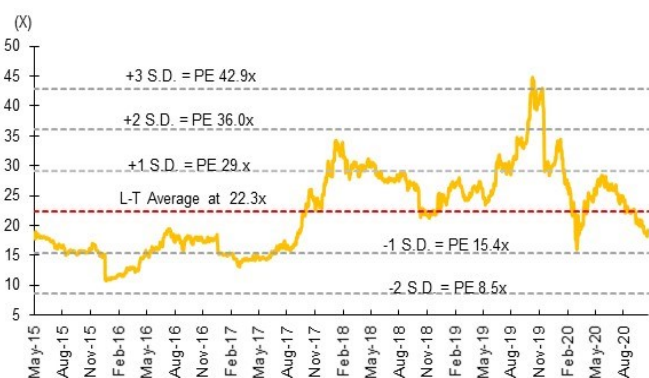
Source: Company data, Krungsri Securities

**GPSC: Revenue structure**



Source: Company data

**P/E Band**



Source: Bloomberg, Krungsri Securities

**P/BV Band**



Source: Bloomberg, Krungsri Securities

**Peer Comparison**

BB Ticker	Name	Market	PE		P/BV		EPS		Div Yld	ROE		Share Price Performance		
		Cap	(x)	(x)	(x)	(x)	G%	(%)	(%)	(%)	1M	3M	6M	YTD
		US\$	20F	21F	20F	21F	20F	21F	20F	20F	1M	3M	6M	YTD
<b>GPSC TB</b>	<b>GLOBAL POWER</b>	<b>4,823</b>	<b>18.8</b>	<b>17.9</b>	<b>1.2</b>	<b>1.2</b>	<b>113.6</b>	<b>4.7</b>	<b>2.7</b>	<b>7.2</b>	<b>(7.0)</b>	<b>(22.8)</b>	<b>(24.5)</b>	<b>(37.9)</b>
BCPG TB	BCPG PCL	834	11.7	14.0	1.1	1.4	17.5	(16.9)	5.2	9.2	5.6	(18.9)	(22.4)	(22.4)
BPP TB	BANPU POWER PCL	1,302	9.1	7.7	1.0	0.9	39.0	18.7	4.8	11.1	1.5	(13)	(14.7)	(25)
BGRIM TB	B GRIMM POWER	3,517	46.3	35.2	3.7	3.4	7.8	31.6	1.0	8.1	0.6	(14.3)	(6.1)	(20.0)
CKP TB	CK POWER PCL	1,285	41.3	26.5	1.7	1.6	26.3	55.7	1.5	2.8	(10.5)	(12.9)	29.5	(0.8)
EGCO TB	ELECTRICITY	1,285	52.9	21.2	1.6	1.4	(7.0)	149.5	1.0	2.8	(10.5)	(12.9)	29.5	(0.8)
RATCH	RATCH GROUP PCL	2,867	8.8	8.1	0.8	0.8	(22.1)	8.4	3.9	9.2	(10.8)	(27.9)	(40.7)	(48.3)
GULF TB	GULF ENERGY	2,224	11.8	9.5	1.1	1.0	(1.2)	23.8	5.4	9.6	(5.9)	(19.4)	(28.2)	(30.5)
<b>Average (simple)</b>			<b>25.1</b>	<b>17.5</b>	<b>1.5</b>	<b>1.5</b>	<b>21.7</b>	<b>34.4</b>	<b>3.2</b>	<b>7.5</b>				

Source: Bloomberg, Krungsri Securities

## Financial statement

### Profit and Loss Statement

FY December 31	Unit	2015	2016	2017	2018	2019	2020F	2021F	2022F
Total revenue	(Btm)	22,444	20,675	19,917	24,777	66,562	79,585	80,235	81,247
Cost of goods sold	(Btm)	(20,177)	(17,365)	(16,376)	(20,201)	(55,063)	(65,847)	(66,827)	(67,326)
Gross profit	(Btm)	2,267	3,310	3,541	4,576	11,499	13,738	13,407	13,921
SG&A	(Btm)	(670)	(900)	(850)	(937)	(2,184)	(2,069)	(2,086)	(2,112)
Other income	(Btm)	484	670	753	426	918	964	1,012	1,063
Interest expense	(Btm)	(394)	(418)	(361)	(514)	(5,140)	(4,124)	(3,246)	(3,189)
Pre-tax profit	(Btm)	1,686	2,662	3,083	3,552	5,094	8,509	9,088	9,683
Corporate tax	(Btm)	(90)	(140)	(257)	(243)	(247)	(499)	(623)	(761)
Equity a/c profits	(Btm)	339	346	517	595	837	1,304	1,317	1,343
Minority interests	(Btm)	17	(172)	(166)	(530)	(1,940)	(1,320)	(1,412)	(1,440)
Core profit	(Btm)	1,952	2,696	3,178	3,374	3,743	7,995	8,370	8,825
Extra-ordinary items	(Btm)	(46)	4	(3)	(15)	317	0	0	0
Net profit	(Btm)	1,906	2,700	3,175	3,359	4,061	7,995	8,370	8,825
EBITDA	(Btm)	2,678	3,676	4,042	5,441	16,394	19,419	19,176	19,824
Core EPS	(Bt)	1.3	1.8	2.1	2.3	1.3	2.8	3.0	3.1
Net EPS	(Bt)	1.3	1.8	2.1	2.3	1.3	2.8	3.0	3.1
DPS	(Bt)	0.6	0.7	0.8	0.8	0.8	0.7	0.7	0.8

### Balance Sheet

FY December 31	Unit	2015	2016	2017	2018	2019	2020F	2021F	2022F
Total current assets	(Btm)	16,316	11,665	9,918	12,164	38,919	31,857	41,915	51,187
Total long-term assets	(Btm)	39,667	46,363	50,050	52,275	213,097	207,288	202,341	198,388
Total assets	(Btm)	55,983	58,028	59,968	64,439	252,017	239,145	244,256	249,575
Total current liabilities	(Btm)	4,553	4,195	4,088	4,727	36,748	22,973	23,200	23,373
Total long-term liabilities	(Btm)	14,302	15,079	15,507	17,363	105,093	85,362	85,262	85,162
Total liabilities	(Btm)	18,855	19,274	19,594	22,090	141,841	108,335	108,462	108,535
Paid-up capital	(Btm)	14,983	14,983	14,983	14,983	28,197	28,197	28,197	28,197
Total equity	(Btm)	36,006	37,149	38,547	39,992	100,893	120,867	125,146	129,672
Minority interest	(Btm)	1,122	1,604	1,827	2,357	9,283	9,943	10,649	11,369
BVPS	(Bt)	24.0	24.8	25.7	26.7	35.8	42.9	44.4	46.0

### Cash Flow Statement

FY December 31	Unit	2015	2016	2017	2018	2019	2020F	2021F	2022F
Core profit	(Btm)	1,952	2,696	3,178	3,374	3,743	7,995	8,370	8,825
Depreciation and amortization	(Btm)	(1,082)	(1,266)	(1,351)	(1,802)	(7,079)	(7,750)	(7,855)	(8,016)
Operating cash flow	(Btm)	1,467	3,777	2,683	5,129	13,147	19,257	17,669	18,216
Investing cash flow	(Btm)	(4,415)	(3,693)	(2,299)	(3,017)	(79,723)	(5,122)	(5,873)	(6,820)
Financing cash flow	(Btm)	10,877	1,901	1,726	1,877	65,726	11,319	(4,797)	(5,019)
Net change in cash	(Btm)	5,537	(4,802)	(3,199)	72	(79,510)	28,017	10,021	9,309

### Key Financial Ratios

FY December 31	Unit	2015	2016	2017	2018	2019	2020F	2021F	2022F
Gross margin	(%)	10.1	16.0	17.8	18.5	17.3	17.3	16.7	17.1
EBITDA margin	(%)	11.9	17.8	20.3	22.0	24.6	24.4	23.9	24.4
EBIT margin	(%)	7.1	11.7	13.5	14.7	14.0	14.7	14.1	14.5
Net profit margin	(%)	8.5	13.1	15.9	13.6	6.1	10.0	10.4	10.9
ROE	(%)	6.4	7.4	8.4	8.6	5.3	7.2	6.8	6.9
ROA	(%)	3.9	4.7	5.4	5.4	2.4	3.3	3.5	3.6
Net D/E	(x)	0.1	0.2	0.3	0.3	0.9	0.5	0.4	0.3
Interest coverage	(x)	4.1	5.8	7.5	7.1	1.8	2.8	3.5	3.7
Payout ratio	(%)	74.7	63.8	59.0	55.8	74.0	50.0	50.0	50.0

### Main Assumptions

FY December 31	Unit	2015	2016	2017	2018	2019	2020F	2021F	2022F
<b>IPP:</b>									
Power sales	(Gwh)				1,150	5,772	5,945	6,124	6,307
Avg availability rate					85	97	95	95	96
Avg selling price for power	(Bt/kwh)				3.3	2.7	2.9	2.9	3.0
<b>SPP:</b>									
Power sales	(Gwh)				4,231	11,760	11,878	11,996	12,116
Avg selling price for power	(Bt/kwh)				3.0	3.0	3.1	3.2	3.2
Steam sales	(k tons)				6,572	13,821	14,500	14,680	14,700
Avg selling price for steam	(Bt/ton)				1,110	1,079	1,160	1,165	1,170



## CG Rating 2019 Companies with CG Rating



AAV	ADVANC	AIRA	AKP	AKR	AMA	AMATA	AMATAV	ANAN	AOT	AP	ARROW	BAFS	BANPU
BAY	BCP	BCPG	BOL	BRR	BTS	BTW	BWG	CFRESH	CHEWA	CHO	CK	CKP	CM
CNT	COL	COMAN	CPALL	CPF	CPI	CPN	CSS	DELTA	DEMCO	DRT	DTAC	DTC	EA
EASTW	ECF	EGCO	GBX	GC	GCAP	GEL	GFPT	GGC	GPSC	GRAMMY	GUNKUL	HANA	HARN
HMPRO	ICC	ICHI	III	ILINK	INTUCH	IRPC	IVL	JKN	JSP	K	KBANK	KCE	KKP
KSL	KTB	KTC	KTIS	LH	LHFG	LIT	LPN	MAKRO	MALEE	MBK	MBKET	MC	MCOT
MFEC	MINT	MONO	MTC	NCH	NCL	NKI	NSI	NVD	NYT	OISHI	OTO	PAP	PCSGH
PDJ	PG	PHOL	PJW	PLANB	PLANET	PORT	PPS	PR9	PREB	PRG	PRM	PSH	PSL
PTG	PTT	PTTEP	PTTGC	PYLON	Q-CON	QH	QTC	RATCH	RS	S	S & J	SABINA	SAMART
SAMTEL	SAT	SC	SCB	SCC	SCCC	SCN	SDC	SEAFCO	SEAOIL	SE-ED	SELIC	SENA	SIS
SITHAI	SNC	SORKON	SPALI	SPI	SPRC	SSSC	STA	STEC	SVI	SYNTEC	TASCO	TCAP	THAI
THANA	THANI	THCOM	THIP	THREL	TIP	TISCO	TK	TKT	TMB	TMILL	TNDT	TOA	TOP
TRC	TRU	TRUE	TSC	TSR	TSTH	TTA	TTCL	TTW	TU	TVD	TVO	U	UAC
UV	VGI	VIH	WACOAL	WAVE	WHA	WHAUP	WICE	WINNER					



2S	ABM	ADB	AF	AGE	AH	AHC	AIT	ALLA	ALT	AMANAH	AMARIN	APCO	APCS
AQUA	ARIP	ASAP	ASIA	ASIAN	ASIMAR	ASK	ASN	ASP	ATP30	AUCT	AYUD	B	BA
BBL	BDMS	BEC	BEM	BFIT	BGC	BGRIM	BIZ	BJC	BJCHI	BLA	BPP	BROOK	CBG
CEN	CENTEL	CGH	CHG	CHOTI	CHOW	CI	CIMBT	COLOR	COM7	COTTO	CRD	CSC	CSP
DCC	DCON	DDD	DOD	EASON	ECL	EE	EPG	ERW	ESTAR	ETE	FLOYD	FN	FNS
FORTH	FPI	FPT	FSMART	FSS	FVC	GENCO	GJS	GL	GLOBAL	GULF	HPT	HTC	HYDRO
ICN	IFS	INET	INSURE	IRC	IRCP	IT	ITD	ITEL	J	JCK	JCKH	JMART	JMT
JWD	KBS	KCAR	KGI	KIAT	KOOL	KWC	KWM	L&E	LALIN	LANNA	LDC	LHK	LOXLEY
LRH	LST	M	MACO	MAJOR	MBAX	MEGA	METCO	MFC	MK	MODERN	MOONG	MPG	MSC
MTI	NEP	NETBAY	NEX	NINE	NOBLE	NOK	NTV	NWR	OCC	OGC	ORI	OSP	PATO
PB	PDG	PDI	PL	PLAT	PM	PPP	PRECHA	PRIN	PRINC	PSTC	PT	QLT	RCL
RICHY	RML	RWI	S11	SAAM	SALEE	SAMCO	SANKO	SAPPE	SAWAD	SCG	SCI	SCP	SE
SFP	SIAM	SINGER	SIRI	SKE	SKR	SKY	SMIT	SMK	SMPC	SMT	SNP	SONIC	SPA
SPC	SPCG	SPVI	SR	SRICHA	SSC	SSF	SST	STANLY	STPI	SUC	SUN	SUSCO	SUTHA
SWC	SYMC	SYNEX	T	TACC	TAE	TAKUNI	TBSP	TCC	TCMC	TEAM	TEAMG	TFG	TFMAMA
THG	THRE	TIPCO	TITLE	TIW	TKN	TKS	TM	TMC	TMD	TMI	TMT	TNITY	TNL
TNP	TNR	TOG	TPA	TPAC	TPBI	TPCORP	TPOLY	TRITN	TRT	TSE	TSTE	TVI	TVT
TWP	TWPC	UBIS	UEC	UMI	UOBKH	UP	UPF	UPOIC	UT	UWC	VNT	WIIK	XO
YUASA	ZEN	ZMICO											



A	ABICO	ACAP	AEC	AEONTS	AJ	ALUCON	AMC	APURE	AS	ASEFA	AU	B52	BCH
BEAUTY	BGT	BH	BIG	BLAND	BM	BR	BROCK	BSBM	BSM	BTNC	CCET	CCP	CGD
CHARAN	CHAYO	CITY	CMAN	CMC	CMO	CMR	CPL	CPT	CSR	CTW	CWT	D	DIMET
EKH	EMC	EP	ESSO	FE	FTE	GIFT	GLAND	GLOCON	GPI	GREEN	GTB	GYT	HTECH
HUMAN	IHL	INGRS	INOX	JTS	JUBILE	KASET	KCM	KKC	KWG	KYE	LEE	LPH	MATCH
MATI	M-CHAI	MCS	MDX	META	MGT	MJD	MM	MVP	NC	NDR	NER	NNCL	NPK
NUSA	OCEAN	PAF	PF	PICO	PIMO	PK	PLE	PMTA	POST	PPM	PROUD	PTL	RCI
RJH	ROJNA	RPC	RPH	SF	SGF	SGP	SKN	SLP	SMART	SOLAR	SPG	SQ	SSP
STI	SUPER	SVOA	TCCC	THE	THMUI	TIGER	TNH	TOPP	TPCH	TPIPP	TPLAS	TQM	TTI

## Disclaimer

The disclosure of the survey result of the Thai Institute of Directors Association ("IOD") regarding corporate governance is made pursuant to the policy of the Office of the Securities and Exchange Commission. The survey of the IOD is based on the information of a company listed on the Stock Exchange of Thailand and the Market for Alternative Investment disclosed to the public and able to be accessed by a general public investor. The result, therefore, is from the perspective of a third party. It is not an assessment of operation and is not based on inside information. The survey result is as of the date appearing in the Corporate Governance Report of Thai Listed Companies. As a result, the survey result may be changed after that date or when there is any change to the relevant information. Nevertheless, Krungsri Securities Public Company Limited does not confirm, verify, or certify the accuracy and completeness of such survey result.

# Anti-corruption Progress Indicator 2019

## Companies that have declared their intention to join CAC

7UP	ABICO	AF	ALT	AMARIN	AMATA	AMATAV	ANAN	APURE	B52	BKD	BM	BROCK	BUI
CHO	CI	COTTO	DDD	EA	EFORL	EP	ERW	ESTAR	ETE	EVER	FSMART	GPI	ILINK
IRC	J	JKN	JMART	JMT	JSP	JTS	KWG	LDC	MAJOR	META	NCL	NOBLE	NOK
PK	PLE	ROJNA	SAAM	SAPPE	SCI	SE	SHANG	SINGER	SKR	SPALI	SSP	STANLY	SUPER
SYNEX	THAI	TKS	TOPP	TRITN	TTA	UPF	UV	WIN	ZIGA				

## Companies certified by CAC

2S	ADVANC	AI	AIE	AIRA	AKP	AMA	AMANAHA	AP	AQUA	ARROW	ASK	ASP	AYUD
B	BAFS	BANPU	BAY	BBL	BCH	BCP	BCPG	BGC	BGRIM	BJCHI	BKI	BLA	BPP
BROOK	BRR	BSBM	BTS	BWG	CEN	CENDEL	CFRESH	CGH	CHEWA	CHOTI	CHOW	CIG	CIMBT
CM	CMC	COL	COM7	CPALL	CPF	CPI	CPN	CSC	DCC	DELTA	DEMCO	DIMET	DRT
DTAC	DTC	EASTW	ECL	EGCO	FE	FNS	FPI	FPT	FSS	FTE	GBX	GC	GCAP
GEL	GFPT	GGC	GJS	GPSC	GSTEEL	GUNKUL	HANA	HARN	HMPRO	HTC	ICC	ICHI	IFS
INET	INSURE	INTUCH	IRPC	ITEL	IVL	K	KASET	KBANK	KBS	KCAR	KCE	KGI	KKP
KSL	KTB	KTC	KWC	L&E	LANNA	LHFG	LHK	LPN	LRH	M	MAKRO	MALEE	MBAX
MBK	MBKET	MC	MCOT	MFC	MFEC	MINT	MONO	MOONG	MPG	MSC	MTC	MTI	NBC
NEP	NINE	NKI	NMG	NNCL	NSI	NWR	OCC	OCEAN	OGC	ORI	PAP	PATO	PB
PCSGH	PDG	PDI	PDJ	PE	PG	PHOL	PL	PLANB	PLANET	PLAT	PM	PPP	PPPM
PPS	PREB	PRG	PRINC	PRM	PSH	PSL	PSTC	PT	PTG	PTT	PTTEP	PTTGC	PYLON
Q-CON	QH	QLT	QTC	RATCH	RML	RWI	S & J	SABINA	SAT	SC	SCB	SCC	SCCC
SCG	SCN	SEAOL	SE-ED	SELIC	SENA	SGP	SIRI	SITHAI	SMIT	SMK	SMPC	SNC	SNP
SPACK	SPC	SPI	SPRC	SRICHA	SSF	SSSC	SST	STA	SUSCO	SVI	SYNTEC	TAE	TAKUNI
SORKON	SPACK	SPC	SPI	SPRC	SRICHA	SSF	SSSC	SST	STA	SUSCO	SVI	SYNTEC	TAE
TAKUNI	TASCO	TBSP	TCAP	TCMC	TFG	TFI	TFMAMA	THANI	THCOM	THIP	THRE	THREL	TIP
TIPCO	TISCO	TKT	TMB	TMD	TMILL	TMT	TNITY	TNL	TNP	TNR	TOG	TOP	TPA
TPCORP	TPP	TRU	TRUE	TSC	TSTH	TTCL	TU	TVD	TVI	TVO	TWPC	U	UBIS
UEC	UKEM	UOBKH	UWC	VGI	VIH	VNT	WACOAL	WHA	WHAUP	WICE	WIJK	XO	ZEN

## N/A

3K-BAT	A	A5	AAV	ABM	ACAP	ACC	ACE	ACG	ADB	AEC	AEONTS	AFC	AGE
AH	AHC	AIT	AJ	AJA	AKR	ALL	ALLA	ALUCON	AMC	AOT	APCO	APCS	APEX
APP	AQ	ARIN	ARIP	AS	ASAP	ASEFA	ASIA	ASIAN	ASIMAR	ASN	ATP30	AU	AUCT
AWC	BA	BAM	BC	BCT	BDMS	BEAUTY	BEC	BEM	BFIT	BGT	BH	BIG	BIZ
BJC	BLAND	BLISS	BOL	BR	BSM	BTNC	BTW	CAZ	CBG	CCET	CCP	CGD	CHARAN
CHAYO	CHG	CITY	CK	CKP	CMAN	CMO	CMR	CNT	COLOR	COMAN	CPH	CPL	CPR
CPT	CPW	CRANE	CRC	CRD	CSP	CSR	CSS	CTW	CWT	D	DCON	DOD	DOHOME
DTCI	DV8	EASON	ECF	EE	EKH	EMC	EPG	ESSO	ETC	F&D	FANCY	FLOYD	FMT
FN	FORTH	FVC	GENCO	GIFT	GL	GLAND	GLOBAL	GLOCON	GRAMMY	GRAND	GREEN	GSC	GTB
GULF	GYT	HFT	HPT	HTECH	HUMAN	HYDRO	ICN	IFEC	IHL	IIG	III	ILM	IMH
INGRS	INOX	INSET	IP	IRCP	IT	ITD	JAS	JCK	JCKH	JCT	JUBILE	JUTHA	JWD
KAMART	KC	KCM	KDH	KIAT	KK	KKC	KOOL	KTIS	KUMWEL	KUN	KWM	KYE	LALIN
LEE	LH	LIT	LOXLEY	LPH	LST	MACO	MANRIN	MATCH	MATI	MAX	M-CHAI	MCS	MDX
MEGA	METCO	MGT	MICRO	MIDA	MILL	MITSIB	MJD	MK	ML	MM	MODERN	MORE	MPIC
MVP	NC	NCH	NDR	NER	NETBAY	NEW	NEWS	NEX	NFC	NPK	NRF	NTV	NUSA
NVD	NYT	OHTL	OISHI	OSP	OTO	PACE	PAE	PAF	PERM	PF	PICO	PIMO	PJW
PMTA	POLAR	POMPUI	PORT	POST	PPM	PR9	PRAKIT	PRECHA	PRIME	PRIN	PRO	PROUD	PTL
RAM	RBF	RCI	RCL	RICHY	RJH	ROCK	ROH	RP	RPC	RPH	RS	RSP	S
S11	SAFARI	SALAE	SAM	SAMART	SAMCO	SAMTEL	SANKO	SAUCE	SAWAD	SAWANG	SCM	SCP	SDC
SEAFCO	SEG	SF	SFLEX	SFP	SGF	SHR	SIAM	SICT	SIMAT	SIS	SISB	SK	SKE
SKN	SKY	SLM	SLP	SMART	SMT	SO	SOLAR	SONIC	SPA	SPCG	SPG	SPVI	SQ
SR	SSC	STAR	STARK	STC	STEC	STGT	STHAI	STI	STPI	SUC	SUN	SUTHA	SVH
SVOA	SWC	SYMC	T	TACC	TAPAC	TC	TCC	TCCC	TCJ	TCOAT	TEAM	TEAMG	TGPRO
TH	THANA	THE	THG	THL	THMUI	TIGER	TITLE	TIW	TK	TKN	TM	TMC	TMI
TMW	TNDT	TNH	TNPC	TOA	TPAC	TPBI	TPCH	TPIPL	TPIPP	TPLAS	TPOLY	TPS	TQM
TR	TRC	TRT	TRUBB	TSE	TSF	TSI	TSR	TSTE	TTI	TTT	TTW	TVT	TWP
TWZ	TYCN	UAC	UMI	UMS	UNIQ	UP	UPA	UPOIC	UREKA	UT	UTP	UVAN	VARO
VCOM	VI	VIBHA	VL	VNG	VPO	VRANDA	W	WAVE	WG	WINNER	WORK	WORLD	WP
WPH	WR	YCI	YGG	YUASA	ZMICO								

## Disclaimer

The disclosure of the Anti-Corruption Progress Indicators of a listed company on the Stock Exchange of Thailand, which is assessed by Thaipat Institute, is made in order to comply with the policy and sustainable development plan for the listed companies of the Office of the Securities and Exchange Commission. Thaipat Institute made this assessment based on the information received from the listed company, as stipulated in the form for the assessment of Anti-corruption which refers to the Annual Registration Statement (Form 56-1), Annual Report (Form 56-2), or other relevant documents or reports of such listed company. The assessment result is therefore made from the perspective of Thaipat Institute that is a third party. It is not an assessment of operation and is not based on any inside information. Since this assessment is only the assessment result as of the date appearing in the assessment result, it may be changed after that date or when there is any change to the relevant information. Nevertheless, Krungsri Securities Public Company Limited does not confirm, verify, or certify the accuracy and completeness of the assessment result."

## Reference

Disclosure: Companies participating in Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) under Thai Institute of Directors (as of June, 24 2019) are categorised into:

- Companies that have declared their intention to join CAC
- Companies certified by CAC.

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### 10 Khon Kaen

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### Definition of Ratings

**BUY:** Stocks with expected capital gain above 10% in the next 12 months

**HOLD:** Stocks with expected capital gain between -10% and +10% in the next 12 months

**SELL:** Stocks with expected capital gain below -10% in the next 12 months