OUTPERFORM

TPC Power Holding

(TPCH TB)

Share Price: Bt15.0 Target Price: Bt20.0 (+33.3%)

Moving out of the doldrums

- Expect 4Q17F profit to reach new high of Bt76m (+14% qoq, +9% yoy) led by full quarter contribution from five power plants
- Solid FY18F/19F earnings growth of 42%/80% supported 34MW of new capacity or 118% capacity growth
- OUTPERFORM, trimmed TP to Bt20 (from Bt23) after reducing long-term gross margin to reflect higher fuel cost given growing demand of raw material from rising number of biomass plants

Expect earnings to continue to grow in 4Q17F

This would be led by full quarter contribution from five power plants. Revenue should grow 5% qoq supported by 90% average utilization. Gross margin fell to 42% from 48% in 4Q16, because MWE renewed its expiring outsourced operation & maintenance contract at a higher price of Bt2.35/kWh vs Bt1.75/kWh since 2Q17. SG&A/Sales should be under control at 7%, down from 9% in previous quarter. TPCH booked Bt30m provision in 3Q17 from its investment in Bill of Exchange (B/E) in one troubled listed company. The anticipated 4Q17 results suggest 11% downside to our full-year forecast with the COD delay of SGP (6th plants) from Nov 2017 to Jan 2018 and loss contribution from Siam Power (SP).

Upside risk from waste power plant and 269MW VSPP Semi-Firm bidding program

TPCH's share price has underperformed SET Index by 36% in the past year due to disappointing earnings: Bt50m one-time expense, failure to secure PPA for hybrid renewable project, and delayed COD for its plants. However, the worst should be over and earnings should surge 42%/80% in FY18/19F supported by four VSPP plants (SGP, TPCH1, TPCH2, and TPCH5), and one SPP plant (PTG#1) with 34MW total equity capacity, implying 118% capacity growth. It has secured all PPAs and may secure more PPAs for 269MW VSPP Semi-Firm projects and 8MW waste plants under the 78MW Quick Win program - qualifying list should be announced by April 2018.

Laggard play with strong growth profile

We maintain an OUTPERFORM rating but trimmed TP to Bt20 (from Bt23) after reducing long-term gross margins for power plants to reflect potentially higher fuel cost given growing demand of woodslab raw material from more biomass plants under Thailand's latest energy policy. We see more chances for TPCH to secure more PPAs for VSPP, including waste power plants. Current share price implies 15.9x FY18F PE, a deep discount to peers' average of 20.5x.

Financial Summary (Btm)

Yearta Dec	2015	2016	2017F	2018F	2019F
Year to Dec					
Sales (Btm)	305	672	1,083	1,596	2,517
Growth (%)	18	121	61	47	58
EBITDA (Btm)	110	320	496	793	1,257
Growth (%)	14	190	55	60	59
Recurring profit (Btm)	47	201	267	380	682
Growth (%)	65	332	33	42	80
Net profit (Btm)	47	201	207	380	682
FDEPS (Bt) (Core)	0.12	0.50	0.67	0.95	1.70
Growth (%)	65	332	33	42	80
PE (x)	129.1	29.9	22.6	15.9	8.8
DPS (Bt)	0.00	0.00	0.20	0.28	0.51
Yield (%)	0.0	0.0	1.3	1.9	3.4
BVPS (Bt)	4.42	4.92	5.24	5.90	7.09
P/BV (x)	3.4	3.0	2.9	2.5	2.1



A member of **MUFG** a global financial group



Karun INTRACHAI
662 - 659 7000 ext 5010
Karan.ntrachai@krungsrisecurities.com

Key Data	
12-mth high/low (Bt)	20 / 14
Market capital (Btm/US\$m)	6,018 / 188.6
3m avg. turnover (Btm/US\$m)	23.4 / 0.7
Free float (%)	54.7
Issued shares (m shares)	401
Major shareholders:	
- THAI POLYCONS PCL	41.3
- STOCK EXCHANGE OF TH	4.9
- SCB ASSET MANAGEMENT	3.3



Krungsri Securities vs Market								
	Positive	Neutral	Negative					
Market								
Recommend	7	0	0					
	Krungsri	Market	% +/-					
Target Price (Bt)	20.0	20.5	12.4					
'17 Net Profit (Btm)	207	294	(29.6)					
'18 Net Profit (Btm)	380	455	(16.4)					

Krungsri's earnings revision						
	2017F	2018F				
Earnings revision (%)	(11)	(15)				
Source: Bloomberg, Krungsr	i Securities					

Disclaimer: This publication constitutes information disclosed to the public and believed to be reliable but its accuracy and completeness are not guaranteed. All opinions, suggestions, or projections are for informational purposes only and shall not be construed as an inducement for the sale or purchase of securities. Amendments to this publication may be made without prior notice. Investors are urged to exercise caution in making a decision to invest in any securities.



4Q17F results preview

Revenue should grow 5% qoq and 33% yoy supported by 90% average utilization rate from five power plants. Gross margin fell to 42% from 48% in 4Q16 because MWE renewed its expiring outsourced operation & maintenance contract at a higher price of Bt2.35/kWh vs Bt1.75/kWh since 2Q17. SG&A to sale should be under control at 7%. Overall, these would result in a record high earnings in 4Q17F at Bt76m (+14% qoq, +9% yoy). The anticipated 4Q17 results suggest 11% downside to our full-year forecast with COD for SGP (6th plants) delayed from Nov 2017 to Jan 2018 and loss contribution from Siam Power (SP).

TPCH: 4Q17F results preview

P&L (Btm)	4Q16	1Q17	2Q17	3Q17	4Q17F	% QoQ	% YoY
Revenue	234	236	240	295	311	5%	33%
Gross profit	112	117	105	135	132	-2%	18%
SG&A	(14)	(18)	(20)	(25)	(23)	-11%	58%
Operating profit	98	99	86	70	69	-1%	-29%
Other income	4	4	4	2	4	55%	-9%
EBIT	102	103	90	112	113	1%	12%
Interest expenses	(14)	(14)	(14)	(18)	(18)	1%	28%
Income tax	2	0	0	0	0	n/a	n/a
Associates	4	0	8	4	10	162%	140%
Minority interest	(23)	(25)	(25)	(31)	(29)	-8%	25%
Profit after tax (pre-ex)	70	64	61	67	76	14%	9%
Extraordinaries, GW & FX	0	0	(19)	(41)	0	n/a	n/a
Net profit	70	64	41	26	76	191%	9%
EBITDA	122	124	111	142	135	-5%	11%
Core EPS	0.17	0.16	0.10	0.07	0.19	191%	9%
EPS	0.17	0.16	0.10	0.07	0.19	191%	9%
Key ratios							
Gross margin (%)	48%	49%	44%	46%	42%		
SG&A/Revenue (%)	6%	7%	8%	9%	7%		
EBITDA margin (%)	52%	53%	46%	48%	43%		
Net profit margin (%)	30%	27%	17%	9%	25%		

Source: Company data, Krungsri Securities

Opportunities in waste power plants

8MW Siam Power waste power plant (SP)

TPCH entered the waste power plant industry after buying 50% stake in 8MW SP in October 2016. The project has been delayed since 2Q17 because of the introduction of the Maintenance of Public Sanitary and Order Act in mid-January. However, the ERC targets to announce the list of qualifying participants by April, 2018 and expects to award PPAs by September 2018. The PPAs will cover 100MW total capacity to be generated from municipal solid waste (MSW). SP has access to 3.8m tons of landfill waste supply that could be converted to 1.7m tons of RDF fuel to feed its 8MW power plant for 29 years. The delays have caused SP to incur administrative expenses after completing the plant and SP should contribute c.Bt20m losses in 2018. This project – when up and running - could add Bt1.1/sh to our TP.



TPCH: Status of 8MW Siam Power waste power plant

		On Hand	On Process	Note
	Land	✓		8 title deeds on a total land of 75 Rai
Source	ce of Fund		✓	On negotiation process with financial institutes
Tec	hnology	✓		
	Fuel	✓		3.8 Millions tons of garbage
	PPA		✓	May 2018
	ร.ง. 4	✓		Received on 12 April 2016 (durations 540 days)
License	อ. 1	✓		Received on 17 August 2016 (Until 16 Aug 2018)
	BOI RDF Plant	✓		Received on 10 January 2017 – 8 years Tax Holiday
	ESA		✓	

Source: Company data, Krungsri Securities

20MW SPP waste power plant

In February, TPCH plans to submit bids to develop 20MW SPP waste power plants in Nonthaburi via joint-ventures under Private Public Partnership (PPP) with government agencies. Contenders who meet the criteria would be announced by 1Q18 and construction would take two years. Hence, COD would be in 2020. Our preliminary value for the 20MW SPP plant (based on 100% owned) is Bt5.7/sh assuming 15% IRR.

Projects under Strategic Plan for Public-Private Partnerships, 2015-2019

Project	Department owner	Ministry	Project investment (Btm)	Private investment (Btm)
Municipal solid waste management to produce electricity with size not less than 800 tons per day at On- nut waste management station	Bangkok metropolis	Ministry of Interior	3,504	1,500
Municipal solid waste management project and waste power plants at Nonthaburi	Nonthaburi provincial administrative organization	Ministry of Interior	4,342	4,342
Municipal solid waste management project phase2 at Nakhonratchasima	Nakhonratchasima city municipality	Ministry of Interior	2,250	2,250

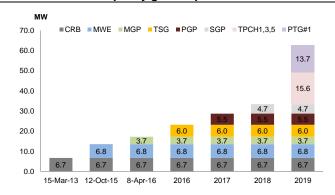
Source: Public private partnership act, Krungsri Securities



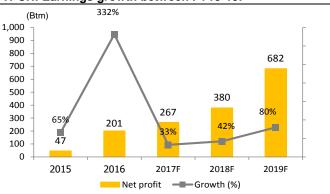
Expect FY18/19F earnings to grow by 42%/80%

We cut FY18-19F earnings by 13%-15% after imputing delays in COD for 9.9MW Satun green power plant (SGP) and 8MW waste power plant, and lower profits due to loss contribution from the RDF plant. These led us to revised down SG&A expenses for FY18-19F by 32%-38% and equity income by 69%-78%. However, TPCH will deliver strong earnings growth - 42%/80% in FY18/19F - supported by four VSPP plants (SGP, TPCH1, TPCH2, and TPCH5) with 20.3MW total equity capacity and one SPP plant (PTG#1) with 13.7MW equity capacity. COD for the latter is now expected to be June 2019 instead of February 2019.

TPCH: Contract capacity growth profile



TPCH: Earnings growth between FY15-19F



Source: Company data, Krungsri Securities

Source: Company data, Krungsri Securities

TPCH: Revised assumptions

	FY	FY17F		FY	18F	% chg	FY	19F	% chg
	old	new		old	new		old	new	
Revenue (Btm)	1,116	1,083	-3%	1,596	1,596	0%	2,749	2,517	-8%
COD SGP	Nov-17	Jan-17							
COD PTG phase 1	Feb-19	Jun-19							
Gross margin (%)	47.5%	45.2%	-5%	48.8%	48.3%	-1%	50.9%	50.7%	0%
SG&A expense (Btm)	116	85	-27%	164	112	-32%	280	174	-38%
Equity income (Btm)	49	23	-54%	121	27	-78%	125	39	-69%
Earnings (Btm)	301	267	-11%	444	380	-15%	780	682	-13%

Source: Company data, Krungsri Securities

Maintain OUTPERFORM, lower TP to Bt20 (from Bt23)

We maintain an OUTPERFORM rating but trimmed TP to Bt20 (from Bt23) after reducing long-term gross margins for power plants to reflect potentially higher fuel cost given programs to develop more biomass plants under Thailand's latest energy policy. This year will offer good opportunities for TPCH to secure more PPAs for VSPP, including waste power plants. Share price performance has been lagging peers' but TPCH offers solid earnings growth for FY18-19F. Current share price implies 15.9x FY18F PE, a deep discount to peers' average of 20.5x.



TPCH: Summary of Projects

Short name	Project	Province	Installed capacity	Contracted capacity	Owne rship	Owned by TPCH	COD	PPA	Revenue
CRB	Chang Raek Biopower	Nakorn Srithamarat	9.9	9.2	73%	6.7	15-Mar-13	Sign PPA	Fit of Bt 4.54
MWE	Maewong Energy	Nakorn Sawan	9.9	8.0	85%	6.8	12-Oct-15	Sign PPA	Fit of Bt 4.54
MGP	Mahachai Green Power	Mahachai, Samutprakan	9.9	8.0	46%	3.7	08-Apr-16	Sign PPA	Fit of Bt 4.54
TSG	Thungsung Green	Nakorn Srithamarat	9.9	9.2	65%	6.0	4-Oct-16	Sign PPA	Fit of Bt 4.54
PGP	Patthalung Green Power	Patthalung	9.9	9.2	60%	5.5	7-Jul-17	Sign PPA	Fit of Bt 4.54
SGP	Satun Green Power	Satun	9.9	9.2	51%	4.7	1Q18	Sign PPA	Fit of Bt 4.54
PTG#1	Pattani Phase 1	Pattani	23.0	21.0	65%	13.7	2Q19	Sign PPA	Adder of 1.3
TPCH1	TPCH Power1	Yala	9.9	9.0	65%	5.9	4Q18	Sign PPA	Fit of Bt 3.10
TPCH2	TPCH Power2	Yala	9.9	9.0	65%	5.9	4Q18	Sign PPA	Fit of Bt 3.10
TPCH5	TPCH Power5	Narathiwat	6.3	6.0	65%	3.9	4Q18	Sign PPA	Fit of Bt 3.42

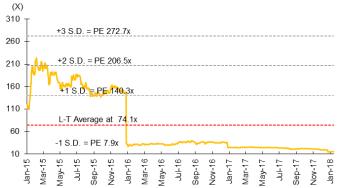
Source: Company data, Krungsri Securities

TPCH: Valuation of power plants based on DCF method at 6.0-6.4% WACC

Project	Equity Capacity	Target Price
CRB	6.7	2.4
MWE	6.8	2.3
MGP	3.7	1.2
TSG	6.0	2.8
PGP	5.5	2.7
SGP	4.7	2.3
PTG1	13.7	4.5
TPCH1	5.9	0.9
TPCH2	5.9	0.9
TPCH5	3.9	0.5
Total	62.6	20.4

Source: Company data, Krungsri Securities





Source: Bloomberg, Krungsri Securities

P/BV Band



Source: Bloomberg, Krungsri Securities





Peer Comparison

	Market	PE		P/B	V	EPS	S	Div Yield	ROE		Share	Price	
	Cap	(x))	(x))	G %	, 0	(%)	(%)		Perfor	mance	
BB Ticker Name	US\$	17F	18F	17F	18F	17F	18F	17F	18F	1M	3M	6M	YTD
TPCH TB TPC POWER HOLDINGS PCL	189	22.6	15.9	2.9	2.5	32.6	42.3	1.3	13.1	3.4	(9.6)	(14.8)	4.2
GUNKUL TB GUNKUL ENGINEERING PCL	950	41.2	20.7	2.9	2.6	44.4	99.0	1.1	7.4	2.5	3.0	4.6	3.0
EA TB ENERGY ABSOLUTE PCL	8,074	59.5	41.8	17.3	13.1	33.2	42.4	0.4	32.2	38.7	74.7	93.0	31.4
SPCG TB SPCG PCL	646	8.3	7.8	2.1	1.8	7.8	6.7	5.3	26.9	3.2	(3.9)	9.9	1.8
DEMCO TB DEMCO PCL	137	19.2	16.2	1.4	1.3	(242.3)	18.2	2.0	7.7	0.0	(4.0)	(7.7)	0.0
SUPER TB SUPERBLOCK PCL	1,004	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	(8.0)	(8.6)	(7.9)	0.0
Average (simple)		30.1	20.5	5.3	4.3	-24.8	41.7	2.0	17.5				

Source: Bloomberg, Krungsri Securities





INCOME STATEMENT (Btm)	2015	2016	2017F	2018F	2019F
Turnover	305	672	1,083	1,596	2,517
Cost of sales (COGS)	(181)	(345)	(502)	(691)	(1,086)
Depreciation & amortization	(34)	(62)	(92)	(134)	(155)
Gross profit	124	327	489	771	1,276
S&A expenses	(47)	(69)	(85)	(112)	(174)
Operating profit	76	258	404	659	1,102
Other operating income	0	0	0	0	0
EBIT	76	258	404	659	1,102
Interest expense	(27)	(45)	(65)	(93)	(111)
Interest income	0	0	0	0	0
Other income	18	16	15	22	24
Goodwill amortization	0	0	0	0	0
Pre-tax profit	67	230	354	588	1,015
Income tax on company & subsidiaries	4	2	0	0	0
Profit after tax	71	232	354	588	1,015
Minority interests	(22)	(59)	(110)	(235)	(371)
Share of associate net income	(2)	28	23	27	39
Preferred dividends	0	0	0	0	0
Recurring attributable net profit	47	201	267	380	682
Extraordinary items	0	0	(60)	0	0
Reported net profit	47	201	207	380	682
Shares in issue (Y/E, m)	401	401	401	401	401
Shares in issue (weighted avg, m)	401	401	401	401	401
EPS (before extraordinary items, Bt)	0.12	0.50	0.67	0.95	1.70
DPS (Bt)	0.00	0.00	0.20	0.28	0.51
DPS/EPS (%)	0	0	39	30	30
CASH FLOW (Btm)	2015	2016	2017F	2018F	2019F
Operating profit	76	258	404	659	1,102
Other operating income	0	0	0	0	0
EBIT	76	258	404	659	1,102
Depreciation & amortisation	34	62	92	134	155
EBITDA	110	320	496	793	1,257
Notional cash taxes on ungeared operations	(4)	(12)	(19)	(28)	(33)
Net change in working capital	(217)	12	(222)	(336)	(520)
CAPEX	(625)	(1,068)	(1,128)	(1,500)	(200)
Operating free cashflow (OpFCF)	(111)	321	254	429	703
Net interest income adjusted for tax impact	(19)	(31)	(45)	(65)	(78)
Net free cashflow (NetFCF)	(755)	(779)	(919)	(1,136)	426
Non-operating income (net of tax)	18	16	15	22	24
Equity income from associates	(2)	28	23	27	39
Investments	(50)	(244)	0	0	0
Net change in other assets/liabilities	(36)	89	0	0	0
Other items	(3)	1	(60)	0	0
Residual cashflow (RCF)	(829)	(888)	(941)	(1,088)	488
Dividends	0	0	(80)	(114)	(205)
Equity capital raised	5	2	0	0	0
Other items	119	37	(43)	(71)	(111)
Cashflow from financing	124	39	(123)	(184)	(316)
Net change in cash	(704)	(849)	(1,063)	(1,272)	172
Net cash/(debt) at YS	459	(245)	(1,095)	(2,158)	(3,430)
Ending net cash /(debt)	(245)	(1,095)	(2,158)	(3,430)	(3,258)
Increase/(decrease) in cash & equivalents	(611)	(159)	(335)	(22)	134
(Increase)/decrease in debt	(93)	(690)	(728)	(1,250)	38
NOPLAT (net op profit less adjusted tax)	72	247	384	631	1,069
Normalised OpFCF (est maint CAPEX)	443	1,277	1,382	1,929	903
FCFE (free cashflow to equity)	(736)	(198)	(213)	162	450





BALANCE SHEET (Btm)	2015	2016	2017F	2018F	2019F
Cash & equivalents	754	595	260	237	372
A/C receivable	192	295	461	705	1,090
Inventory	0	0	0	0	0
Others	319	273	416	614	968
Total Current Assets	1,266	1,163	1,137	1,556	2,430
Property and equipment	1,847	2,853	3,889	5,255	5,300
Investments & associates	123	366	366	366	366
Other assets	59	69	69	69	69
Goodwill	0	0	0	0	0
Total Assets	3,294	4,453	5,461	7,247	8,165
Short-term debt	138	140	168	218	230
A/C payable	92	191	278	383	602
Other current liabilities	30	0	0	0	0
Total Current Liabilities	261	331	446	601	832
Long-term debt	861	1,550	2,250	3,450	3,400
Other liabilities	35	134	134	134	134
Total Liabilities	1,157	2,015	2,830	4,185	4,366
Share capital	401	401	401	401	401
Share premium	1,286	1,288	1,288	1,288	1,288
Revaluation/Warrants/Treasury	0	0	0	0	0
Translation adjustment	0	0	0	0	0
Retained earnings	84	287	413	679	1,157
Total ordinary equity	1,772	1,976	2,103	2,368	2,846
Preferred equity	0	0	0	0	0
Minorities	366	462	529	694	954
Total equity & minorities	2,137	2,437	2,632	3,062	3,799
Accumulated depreciation	83	145	237	371	526
BV per ordinary share (Y/E, Bt)	4.42	4.92	5.24	5.90	7.09
Adjusted book value ps (Y/E, Bt)	4.42	4.92	5.24	5.90	7.09
RATIOS (%)	2015	2016	2017F	2018F	2019F
Growth					
Turnover	18.1	120.5	61.0	47.4	57.7
EBITDA	14.3	190.0	55.0	59.9	58.5
EBIT	9.9	238.9	56.3	63.3	67.2
Net profit	65.4	331.6	2.8	83.5	79.7
EPS pre-extraordinary items	64.9	331.6	32.6	42.3	79.7
EPS (diluted)	64.9	331.6	32.6	42.3	79.7
DPS	n/a	n/a	n/a	42.3	79.7
Accounting ratios					
Cash profit margin	51.7	57.8	53.7	56.7	56.8
Gross profit margin	40.5	48.6	45.2	48.3	50.7
Operating profit margin	25.0	38.4	37.3	41.3	43.8
Net profit margin	15.3	29.9	19.1	23.8	27.1
Turnover/Avg. total assets (x)	0.1	0.2	0.2	0.3	0.3
ROA	1.5	5.2	5.4	6.0	8.9
ROE	2.7	10.7	13.1	17.0	26.2
S&A/turnover	15.5	10.2	13.4	7.0	6.9
Effective tax rate	(6.0)	(8.0)	0.0	0.0	0.0
Operating performance					
EBITDA margin	36.2	47.6	45.8	49.7	49.9
	25.0	38.4	37.3	41.3	43.8
EBIT margin					
NOPLAT margin (NOPLAT/Turnover)	23.7	36.7	35.5	39.6	42.5
•		36.7 0.2	35.5 0.3	0.3	0.4
NOPLAT margin (NOPLAT/Turnover)	23.7				



CG Rating 2016 Companies with CG Rating

AMATA	AOT	BAFS	BAY	BCF	· I	BIGC	BTS	BWG		Ck	(CPF	=	CPN	С	SL	DELTA	DEMCO
DRT	DTAC	DTC I	EASTW	EGC	0 (SFPT	GPSC	GRAMM	ſΥ	HAN	ΙA	HMPF	RO	INTUC	H IR	RPC	IVL	KBANK
KCE	KKP	KTB	KTC	LHBAI	NK	LPN	MBK	MCOT	-	MIN	IT	MON	0	NKI	N	ΙΥΤ	ОТО	PHOL
PPS	PS	PSL	PTT	PTTE	P P	TTGC	QH	QTC		RAT	CH	SAMA	RT	SAMTE	L S	AT	SC	SCB
SCC	SCCC	SE-ED	SIM	SITH	AI .	SNC	SPALI	SSSC		STE	C	SVI		TCAP	TH	СОМ	TISCO	TKT
TMB	TNDT	TOP	TSC	TTC	L	TU	UV	VGI		WAC	DAL	WAV	E					
2S	AAV	ACAF	P AE	OVANC	AGE		AH	AHC	Ał	(P	ALUC	NC	AMANA	λH	ANAN	AP	APCO	APCS
ARIP	ASIA	ASIMA	.R	ASK	ASF	•	AUCT	AYUD	BAN	NPU	BBL		BDMS	3	BEM	BFIT	BLA	BOL
BROOK	CEN	CENTE	EL CF	FRESH	CGF	ł	CHG	CHO	CH	OW	CI		CIMB	Т	CKP	CM	CNS	CNT
COL	CPI	DCC		EA	ECF	:	EE	ERW	FOF	RTH	FPI		GCAF) (GLOBAL	GBX	GC	GL
GLOW	GUNKUL	. HOTPO	т т	YDRO	ICC		ICHI	IFEC	IN	ET	IRC	:	JSP		K	KSL	KTIS	L&E
LANNA	LH	LHK		LIT	LOXLI	ΞY	LRH	LST	N	Л	MAC	0	MALE	E	MBKET	MC	MEGA	MFC
MOONG	MSC	MTI	1	MTLS	NCF	ł	NOBLE	NSI	N	ΓV	OCC		OGC		OISHI	ORI	PACE	PAP
PCSGH	PDI	PE		PG	PJW	1	PLANB	PM	PF	PP	PR		PRANE	PΑ	PREM	PRG	PRINC	PT
PTG	PYLON	Q-CO	N F	RICHY	ROBI	NS	RS	RWI	5	3	SAMO	O	SABIN	Α	SALEE	S&J	SCG	SEAFO
SIAM	SINGER	SIS		SMK	SMP	С	SMT	SNP	S	PI	SPP	Т	SPRC		SR	SSF	SST	STA
SUSCO	SUTHA	SWC	: 5	SYMC	SYNE	X :	SYTNEC	TAE	TAK	UNI	TASC	O	TBSC	;	TCC	TF	TFI	TGCI
AEC	AEONTS	AF	AIR	A	AIT	AJ	AKR	AMAF	RIN	AMA	TAV	ARRO	W	APURE	. A	QUA	AMC	AS
BA	BEAUTY	BEC	BH	l	BIG	BJC	BJCHI	BKI)	BF	3	BROO	CK	BRR	В	TNC	CBG	CGD
CHARAN	CITY	CMR	COL	OR C	CM7	CPL	CSC	CSF	>	CS	R	CSS	3	CTW	D	CON	DIMET	DNA
EARTH	EASON	ECL	EFOI	RL E	PCO	EPG	ESSO	FE		FE	R	FOCL	JS	FSMAR ³	T I	FSS	FVC	GEL
GIFT	GLAND	GOLD	GST	EL (GYT	HPT	HTC	HTE	CH	IF:	S	IHL		ILINK	IN	SURE	IRPC	IT
ITD	J	JMART	JM	T JU	JBILE	JWD	KASET	KBS	3	KC	AR	KGI		KKC	K	OOL	KWC	KYE
LALIN	LPH	MAJOR	MAKE	RO M	ATCH	MATI	M-CHA	I MD	X	MF	EC	MJE)	MK	MC	DERN	MPG	NC
NCL	NDR	NEP	NOI	K N	IUSA	PATC	PCA	PDO	3	PI	=	PICC)	PIMO		PL	PLAT	PLE
PMTA	PPM	PRIN	PST	C	QLT	RCI	RCL	RIC	Н	RM	1L	RPC	;	SANKO) S	APPE	SAWAD	SCI
SCN	SCP	SEAOIL	. SEN	IA .	SIRI	SKR	SLP	SMC	Э	SM	IT	SORK	ON	SPA		SPC	SPCG	SPVI
SSC	STANLY	STPI	SUC	С Т	ACC	TCCC	TCMC	TEA	M	TF	D	TFG	i	TIC	-	TIW	TKN	TLUXE
TMD	TNP	TOPP	TPA	4 Т	PAC	TPCH	I TPIPL	TPOI	LY	TRI	TN	TRT		TTI		TVI	TWP	U
UBIS	UMI	UPOIC	UT	· ι	JWC	VIBHA	A VPO	VTE	Ē	WIC	CE	WIIK	(WIN		XO		

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 2016

Companies that have declared their intention to join CAC

Α	Al	AIE	AIR	AJ	ALUCON	AMATAV	AOT	APCO	AQUA	ARROW	ASIA	ASK	AU
BCH	BJC	BJCHI	BLAND	BR	BROCK	BRR	CEN	CGH	CHEWA	CHG	CHOTI	CHOW	CIG
COL	COM7	CPALL	CPF	CPR	CSC	EKH	EPCO	FC	FER	FPI	FSMART	GEL	GFPT
GGC	GIFT	GJS	GLOBAL	GOLD	GPSC	GREEN	GSTEL	GUNKUL	HARN	IFS	ILINK	INET	IRC
J	JMART	JMT	JUBILE	JUTHA	KASET	KBS	KCAR	KTECH	KWC	KYE	L&E	LEE	LIT
LVT	MAKRO	MATCH	MATI	MBAX	MC	MFEC	MIDA	MILL	ML	MTLS	NBC	NCL	NEP
NINE	NMG	NNCL	NTV	NUSA	NWR	OGC	PACE	PAF	PAP	PATO	PCSGH	PIMO	PK
PL	PLANB	POST	PRINC	PRO	PSTC	PYLON	QTC	ROH	ROJNA	RWI	SANKO	SAUCE	SC
SCCC	SCN	SEAOIL	SE-ED	SENA	SIRI	SMART	SPACK	SPPT	SPRC	SR	SRICHA	SST	STA
SUPER	SUSCO	SWC	SYMC	TAKUNI	TBSP	TFI	THE	TICON	TIP	TKN	TLUXE	TMILL	TMT
TNP	TPA	TRUE	TSE	TTI	TU	TVD	TVO	TVT	TWPC	U	UPA	UREKA	UWC
VGI	VIBHA	VIH	VNT	WAVE	WHA	WICE	WIIK						

Companies certified by CAC

ADVANC	AKP	AMANAH	AP	ASP	AYUD	BAFS	BANPU	BAY	BBL	BCP	BKI	BLA	BROOK
BTS	BWG	CENTEL	CFRESH	CIMBT	CM	CNS	CPI	CPN	CSL	DCC	DEMCO	DIMET	DRT
DTAC	DTC	EASTW	ECL	EGCO	FE	FNS	FSS	GBX	GCAP	GLOW	HANA	HMPRO	HTC
ICC	IFEC	INTUCH	IRPC	IVL	K	KBANK	KCE	KGI	KKP	KSL	KTB	KTC	LANNA
LHBANK	LHK	LPN	MBK	MBKET	MCOT	MFC	MINT	MONO	MOONG	MSC	MTI	NKI	NSI
OCC	OCEAN	PB	PDI	PE	PG	PHOL	PLAT	PM	PPP	PPS	PRANDA	PREB	PRG
PSH	PSL	PT	PTG	PTT	PTTEP	PTTGC	Q-CON	QH	QLT	RATCH	RML	ROBINS	S&J
SABINA	SAT	SCB	SCC	SCG	SGP	SINGER	SIS	SITHAI	SMIT	SMPC	SNC	SNP	SORKON
SPC	SPI	SSF	SSI	SSSC	SVI	SYNTEC	TAE	TCAP	TCMC	TFG	TGCI	THANI	THCOM
THRE	THREL	TIPCO	TISCO	TKT	TMB	TMD	TNITY	TNL	TOG	TOP	TPCORP	TRU	TSC
TSTH	TTCL	TVI	UOBKH	WACOAL									

N/A

2S	AAV	ABICO	ACAP	ACC	ADAM	AEC	AEONTS	AF	AFC	AGE	AH	AHC	AIT
AJA	AKR	ALLA	ALT	AMA	AMARIN	AMATA	AMC	ANAN	APCS	APEX	APURE	AQ	ARIP
AS	ASAP	ASEFA	ASIAN	ASIMAR	ASN	ATP30	AUCT	BA	BAT-3K	BCPG	BDMS	BEAUTY	BEC
BEM	BFIT	BGRIM	BGT	BH	BIG	BIZ	BKD	BLISS	BM	BOL	BPP	BSBM	BSM
BTC	BTNC	BTW	BUI	CBG	CCET	CCP	CGD	CHARAN	CHO	CHUO	CI	CITY	CK
CKP	CMO	CMR	CNT	COLOR	COMAN	CPH	CPL	CRANE	CRD	CSP	CSR	CSS	CTW
CWT	D	DCON	DCORP	DELTA	DIGI	DNA	DTCI	EA	EARTH	EASON	ECF	EE	EFORL
EIC	EMC	EPG	ERW	ESSO	ESTAR	ETE	EVER	F&D	FANCY	FMT	FN	FOCUS	FORTH
FTE	FVC	GC	GENCO	GL	GLAND	GRAMMY	GRAND	GTB	GYT	HFT	HOTPOT	HPT	HTECH
HYDRO	ICHI	ICN	IEC	IHL	III	INGRS	INOX	INSURE	IRCP	ΙΤ	ITD	ITEL	JAS
JCT	JSP	JTS	JWD	KAMART	KC	KCM	KDH	KIAT	KKC	KOOL	KTIS	KWG	LALIN
LDC	LH	LOXLEY	LPH	LRH	LST	LTX	M	MACO	MAJOR	MALEE	MANRIN	MAX	M-CHAI
MCS	MDX	MEGA	METCO	MGT	MJD	MK	MM	MODERN	MPG	MPIC	NC	NCH	NDR
NETBAY	NEW	NEWS	NFC	NOBLE	NOK	NPK	NPP	NVD	NYT	OHTL	OISHI	ORI	OTO
PAE	PDG	PERM	PF	PICO	PJW	PLANET	PRECHA	PMTA	POLAR	POMPUI	PPM	PRAKIT	PLE
PRIN	PRM	PTL	RAM	RCI	RCL	RICH	RICHY	RJH	ROCK	RP	RPC	RPH	RS
S	S11	SAFARI	SALEE	SAM	SAMART	SAMCO	SAMTEL	SAPPE	SAWAD	SAWANG	SCI	SCP	SDC
SE	SEAFCO	SELIC	SF	SFP	SGF	SHANG	SIAM	SIMAT	SKN	SKR	SKY	SLP	SMK
SMM	SMT	SOLAR	SPA	SPALI	SPCG	SPG	SPORT	SPVI	SQ	SSC	SSP	STANLY	STAR
STEC	STHAI	STPI	SUC	SUTHA	SVH	SVOA	SYNEX	Т	TACC	TAPAC	TASCO	TC	TCB
TCC	TCCC	TCJ	TCOAT	TEAM	TFD	TFMAMA	TGPRO	TH	THAI	THANA	THIP	THL	TIC
TIW	TK	TKS	TM	TMC	TMI	TMW	TNDT	TNH	TNPC	TNR	TOA	TOPP	TPAC
TPBI	TPCH	TPIPL	TPIPP	TPOLY	TPP	TR	TRC	TRITN	TRT	TRUBB	TSF	TSI	TSR
TSTE	TTA	TTL	TTTM	TTW	TUCC	TWP	TWZ	TYCN	UAC	UBIS	UEC	UKEM	UMI
UMS	UNIQ	UP	UPF	UPOIC	UT	UTP	UV	UVAN	VARO	VI	VNG	VPO	VTE
WG	WHAUP	WIN	WINNER	WORK	WORI D	WP	WPH	WR	XΟ	YCI	YNP	YUASA	ZIGA

Disclaimer

ZMICO

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 July 31, 2017) are categorised into:

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



Krungsri Securities Public Company Limited

Headquarters

898 Ploenchit Tower, 3rd Floor, Ploenchit Road, Lumpini

Pathumwan, Bangkok 10330 Tel: 0-2659-7000 Fax: 0-2658-5699 Internet Trading: 0-2659-7777

Branches

Emporium

662 Emporium Tower, Fl. 10, Sukhumvit 24 Road Klongton, Klongtoey, Bangkok 10110 Tel: 0-2695-4500 Fax: 0-2695-4599

Central Bangna

589/151 Central City Tower 1 Office, Fl. 27 Bangna-Trad Road, Bangna, Bangkok 10260 Tel: 0-2763-2000 Fax: 0-2399-1448

Rama II

111/917-919 Rama II Road, Smaedum, Bangkhuntien, Bangkok 10150 Tel: 0-2013-1745 Fax: 0-2895-9557

Vibhavadi-rangsit

Bank of Ayudhya Public Company Limited 123 Suntowers (B) Building, Vibhavadirangsit Road, Jompol, Jatujak, Bangkok 10900 Tel: 0-2273-8388 Fax: 0-2273-8399

Chonburi

64/17 Sukhumvit Road, Tambol Bang Plasoi, Amphur Muang, Chonburi 20000 Tel: 0-3312-6580 Fax: 0-3312-6588

Hat Yai Branch

90-92-94 Nipat U Tit Nueng Road,Tambol Hat Yai, Amphur Hat Yai, Songkhla 90110 Tel: 0-7422-1229 Fax: 0-7422-1411

Nakhon Pathom

67/1 Ratchadamnoen Road, Tambol Phra Pathom Jaedee, Amphur Muang, Nakhon Pathom 73000 Tel: 0-3427-5500-7 Fax: 0-3421-8989

Suphanburi

249/171-172 Moo 5 Tambol Ta Rahad, Amphur Muang, Suphanburi, 72000 Tel: 0-3596-7981 Fax: 0-3552-2449

Nakhon Ratchasima

168 Chomphon Road, Tambol Nai Muang, Amphur Muang Nakhon Ratchasima, Nakhon Ratchasima 30000 Tel: 0-4425-1211-4 Fax: 0-4425-1215

Khon Kaen

114 Sri Chan Road, Tambol Nai Muang, Amphur Muang, Khon Kaen 40000 Tel: 0-4322-6120 Fax: 0-4322-6180

Chiang Mai

70 Chang Phuak Road, Tambol Sri Phum Amphur Muang, Chiang Mai 50200 Tel: 0-5321-9234-6 Fax: 0-5321-9247

Chiang Rai

231-232 Thamalai Road, Tambol Wiang, Amphur Muang, Chiang Rai 57000 Tel: 0-5371-6489 Fax: 0-5371-6490

Phitsanulok

275/1 Phichaisongkram Road, Tambol Nai Muang, Amphur Muang, Phitsanulok 65000 Tel: 0-5530-3360 Fax: 0-5530-2580

Analyst Team	Sector Coverage	Central line: 662-659-7000	E-mail
Naphat Chantaraserekul, Head of Research	Energy, Petrochemical, Strategy	ext. 5000	naphat.chantaraserekul@krungsrisecurities.com
Kittisorn Pruitipat, CFA, FRM	Property, ICT, Contractor	ext. 5019	kittisorn.pruitipat@krungsrisecurities.com
Jesada Techahusdin, CFA	Banking, Consumer Finance, Insurance	ext. 5004	jesada.techahusdin@krungsrisecurities.com
Sunthorn Thongthip	Food, Transportation, Strategy	ext. 5009	sunthorn.thongthip@Krungsrisecurities.com
Worrapong Tuntiwutthipong	Electronic, Automotive, Commerce	ext. 5016	worrapong.tuntiwutthipong@krungsrisecurities.com
Karun Intrachai	Renewable Energy, Food	ext. 5010	karun.intrachai@krungsrisecurities.com
Teerapol Udomvej	Healthcare, Tourism	ext. 5012	teerapol.udomvej@krungsrisecurities.com
Kitti Pitakteerabandit	Transportation, Media	ext. 5008	kitti.pitakteerabandit@krungsrisecurities.com
Artit Jansawang	Mid - Small cap, MAI	ext. 5005	artit.jansawang@krungsrisecurities.com
Nurudon Rusme	Mid - Small cap, MAI	ext. 5007	narudon.rusme@krungsrisecurities.com
Nalinee Praman, Assistant Analyst	Mid - Small cap, MAI		
Chaiyot Jiwagkul	Technical	ext. 5006	chaiyot.jiwagkul@krungsrisecurities.com
Definition of Ratings		Fax 662-658-5643	

OUTPERFORM - Ste

- Stocks with an expected capital gain above 10% in the next 12 months for small-caps, above 5% for big-caps

NEUTRAL - Stocks with an expected capital gain between -10% and +10% in the next 12 months for small-caps, -5% to +5% for big-caps

UNDERPERFORM - Stocks with an expected capital gain below 10% in the next 12 months for small-caps, below 5% for big-caps

www.krungsrisecurities.com