

25 NOVEMBER 2021

# Thailand Energy

## Reintroduction of diesel price cap, B7 policy

### Diesel price cap at THB28/litre for four months

On 24 Nov-21, the Thai regulator, the Energy Regulatory Commission (ERC), revealed that the agency, after over 10 years, will reintroduce its policies of 1) a diesel price cap at THB28/litre; 2) cut the biodiesel types from three (B7, B10, and B20) to one only (B7) – a blended fuel of 7% crude palm oil (CPO)-based methyl ester (B100) and 93% diesel produced from refineries; and 3) a marketing margin (MM) cap at THB1.4/litre, down by THB0.4/litre. These three policies will be enforced for four months starting from 1 Dec-21 to 31 Mar-22 with the goal of alleviating the cost of living. It is also in response to the request made by truck drivers who demanded a price fixed at THB25/litre for diesel.

### Oil station plays hurt while refinery plays should remain intact

The three reintroduced policies by the ERC for four months are a negative surprise for us and the market, following the ERC's previous mandate of the three-week cap on the THB30/litre diesel price and THB1.4/litre MM in Oct-21. We estimate that the impact from these three policies will be significant for downstream oil station operators. PTG, as a pure play and with its less diversified business portfolio, will likely feel the hardest pinch, followed by BCP, SUSCO, ESSO, and OR, from the most to least impacted companies, in our estimation.

### Implications of the triple policies on the diesel price subsidy

Rather than cutting any of the multiple taxes imposed on the prices of fuels, including diesel, the ERC has instead chosen to push the burden onto private oil station operators, including 1) the lower MM by THB0.4/litre, which could reduce earnings by THB0.2-0.4b per quarter for oil station plays; 2) cutting the demand for B100 by 1-4% in 4Q21-1Q22, the period when only B7 will be supplied and the production of B10 and B20 will be cut, effectively eliminating the demand for B100 by 70m litres in 4Q21 and 250m litres in 1Q22, based on our estimates; and 3) the THB28/litre diesel price cap implies a USD80-82/bbl Brent crude price range, while the THB31-34/USD currency exchange rate could still pose a downside risk for oil station operators' earnings if the Brent crude price spikes further.

### Prefer refineries – SPRC, TOP and IRPC – over oil station plays in 4Q21

Given the looming earnings downside for oil operators in 4Q21-1Q22, we prefer Thai refinery companies as our top picks in the cyclical sectors in 4Q21, based on 1) a sustained, higher market gross refining margin (GRM) on the back of stronger demand; and 2) no downside from the ERC's price cap. SPRC and TOP are our top picks in the Thai refinery sector, while IRPC is our preferred choice for integrated refinery and petrochemical growth, thanks to its improving GRM and margins for chemicals in 4Q21 onward.



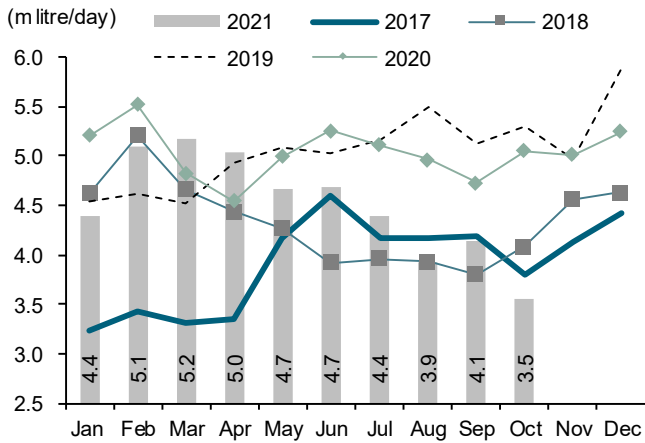
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## Subsidy burden on private oil station operators

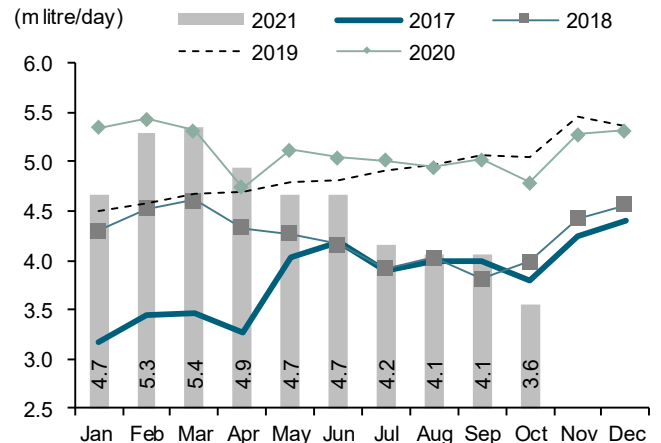
On 24 Nov-21, the ERC announced three policies: 1) a diesel price cap at THB28/litre; 2) cutting the biodiesel types from three (B7, B10, and B20) to one only (B7); and 3) an MM cap at THB1.4/litre, down by THB0.4/litre. These three policies will be enforced for four months starting from 1 Dec-21 to 31 Mar-22 with the goal of alleviating the cost of living. It is also in response to the request made by truck drivers who demanded a price fixed at THB25/litre for diesel.

**Exhibit 1: Thailand's biodiesel production**



Source: Department of Energy Business (DOEB)

**Exhibit 2: Thailand's biodiesel consumption**

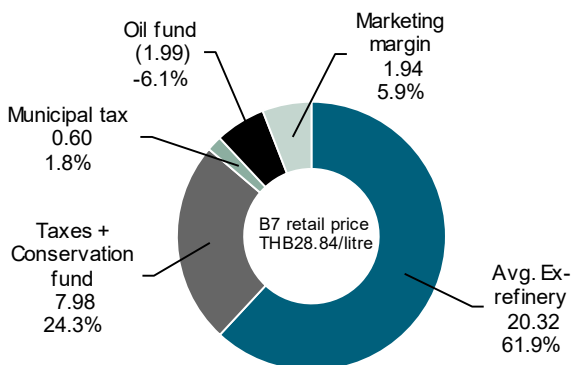


Source: DOEB

The three reintroduced policies by the ERC for four months are a negative surprise for us and the market, following the ERC's previous mandate of the three-week cap on the THB30/litre diesel price and THB1.4/litre MM in Oct-21. We estimate that the impact from these three policies will be significant for downstream oil station operators. PTG, as a pure play and with its less diversified business portfolio, will likely feel the hardest pinch, followed by BCP, SUSCO, ESSO, and OR, from the most to least impacted companies, in our estimation.

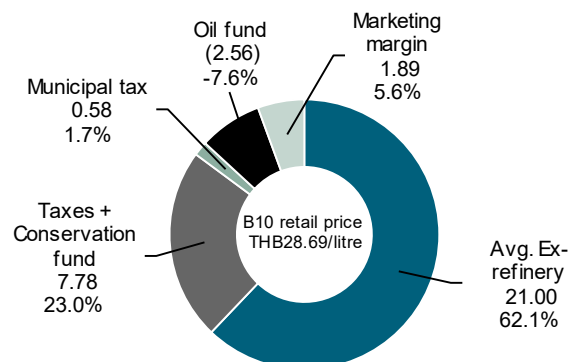
**Impacts from the new policies.** Rather than cutting any of the multiple taxes imposed on the prices of fuels, including diesel, the ERC has instead chosen to push the burden onto private oil station operators. Based on the retail price of diesel on 24 Nov-21 at THB28.8/litre for B7 and THB28.7/litre for B10, the aggregate taxes account for 26.1% of the B7 price and 24.7% of B10, while the ex-refinery price accounts for 61.9% of B7 and 62.1% of B10 and the MM represents only 5.6-5.9% of the total retail prices of B7 and B10.

**Exhibit 3: Price structure – Diesel B7 (THB28.8/litre retail price at USD82.3/bbl Brent crude oil price on 24 Nov-21)**



Price as of 24 November 2021  
Source: Energy Planning and Policy Office (EPPO)

**Exhibit 4: Price structure – Diesel B10 (THB28.7/litre retail price at USD82.3/bbl Brent crude oil price on 24 Nov-21)**



Price as of 24 November 2021  
Source: EPPO

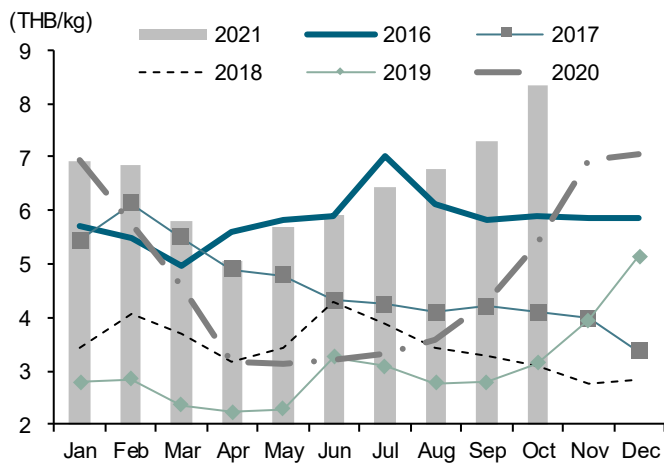
The ERC has decided to reduce the diesel price by putting the subsidies on the shoulders of the private oil station operators, including:

1) A lower MM by THB0.4/litre, which could reduce earnings by THB0.2-0.4b per quarter for oil station plays.

2) Cutting the demand for B100 by 1-4% in 4Q21-1Q22, the period when only B7 will be supplied and the production of B10 and B20 will be cut, effectively eliminating the demand for B100 by 70m litres in 4Q21 and 250m litres in 1Q22, based on our estimates. The main reason to cut the B100 blending into the biodiesel price for B7 is due to the currently high prices of CPO at THB43/kg and B100 at THB40/litre; much higher than the ex-refinery price of diesel at THB20-21/litre. Hence, the reduction in the B100 blend could reduce the price of biodiesel by THB0.4/litre, based on our estimate.

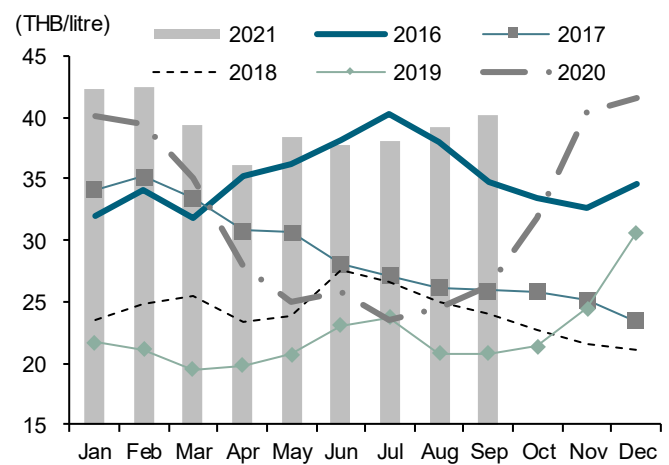
3) The THB28/litre diesel price cap implies a USD80-82/bbl Brent crude price range, while we think the THB31-34/USD currency exchange rate could still pose a downside risk for oil station operators' earnings if the Brent crude price spikes further.

**Exhibit 5: Thailand – palm price**



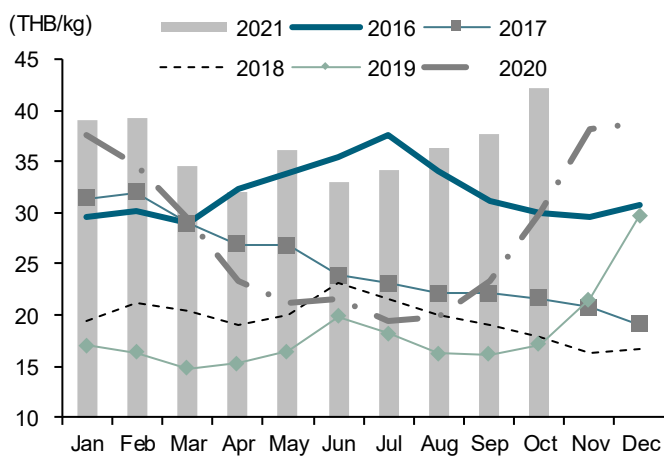
Source: Department of Internal Trade (DIT)

**Exhibit 6: Thailand – B100 price**



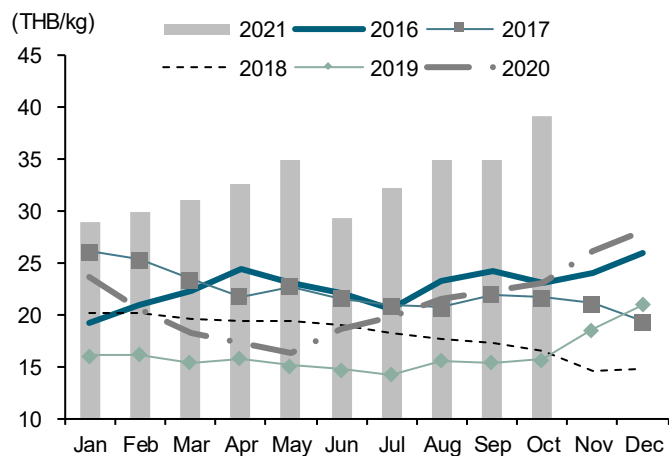
Source: DIT

**Exhibit 7: Thailand – CPO price**



Source: DIT

**Exhibit 8: Malaysia – CPO price**



Source: DIT

## Exhibit 9: Peer comparisons - Refinery

Company	BBG code	Rec	Share Price (LCY)	Target price (LCY)	Upside (%)	Market Cap (USD m)	3Y EPS CAGR (%)	----- PE -----		---- ROE ----		---- PBV ----		EV / EBITDA	
								21E (x)	22E (x)	21E (%)	22E (%)	21E (x)	22E (x)	21E (x)	22E (x)
<b>THAILAND</b>															
Thai Oil	TOP TB	BUY	51.75	67.00	29	3,166	nm	8.3	9.0	10.6	9.3	0.9	0.8	7.4	7.9
Star Petroleum	SPRC TB	BUY	9.70	13.50	39	1,261	43.7	7.3	7.2	20.4	18.8	1.4	1.3	5.8	4.1
Bangchak Corp	BCP TB	BUY	26.00	38.00	46	1,059	nm	13.6	6.2	5.6	11.5	0.7	0.7	9.4	7.2
Esso Thailand	ESSO TB	HOLD	7.65	8.90	16	794	67.8	6.0	5.2	26.8	24.5	1.4	1.2	5.8	4.7
Ptt Global Chem	PTTGC TB	BUY	60.75	75.00	23	8,215	nm	8.4	10.9	11.2	8.7	0.9	1.0	10.6	9.9
lrpc	IRPC TB	BUY	4.08	5.80	42	2,500	nm	5.2	6.5	19.9	14.6	1.0	0.9	4.3	4.9
Tipco Asphalt	TASCO TB	BUY	18.30	22.50	23	866	(5.7)	12.9	9.5	14.8	19.1	1.9	1.7	10.0	7.1
<b>Thailand avg</b>						<b>17,861</b>	<b>22.4</b>	<b>8.3</b>	<b>9.1</b>	<b>13.5</b>	<b>11.7</b>	<b>1.0</b>	<b>1.0</b>	<b>8.5</b>	<b>7.9</b>
<b>INDIA</b>															
Bharat Petrom	BPCL IN	NA	403.35	NA	NA	11,743	35.3	8.6	8.8	24.7	18.3	1.9	1.6	7.6	7.8
Hindustan Petro	HPCL IN	NA	324.10	NA	NA	6,170	36.1	6.1	6.7	24.1	18.0	1.4	1.2	5.9	7.2
Indian Oil	IOCL IN	NA	127.60	NA	NA	16,122	nm	7.9	6.5	14.6	14.9	1.1	1.0	6.8	5.7
<b>India avg</b>						<b>34,036</b>	<b>35.6</b>	<b>7.8</b>	<b>7.3</b>	<b>19.8</b>	<b>16.7</b>	<b>1.4</b>	<b>1.2</b>	<b>6.9</b>	<b>6.7</b>
<b>TAIWAN</b>															
Formosa Petro	6505 TT	NA	98.80	NA	NA	33,873	82.5	18.3	20.5	15.5	12.7	2.7	2.6	11.4	12.8
<b>Taiwan avg</b>						<b>33,873</b>	<b>82.5</b>	<b>18.3</b>	<b>20.5</b>	<b>15.5</b>	<b>12.7</b>	<b>2.7</b>	<b>2.6</b>	<b>11.4</b>	<b>12.8</b>
<b>SOUTH KOREA</b>															
Sk Innovation	096770 KS	NA	219,000.00	NA	NA	16,887	nm	27.5	15.4	4.6	8.3	1.2	1.1	8.4	7.7
Gs Holdings	078930 KS	NA	40,500.00	NA	NA	3,144	389.7	3.1	3.8	13.5	9.6	0.4	0.4	7.2	7.2
S-Oil Corp	010950 KS	NA	89,200.00	NA	NA	8,443	nm	6.7	7.2	24.3	19.5	1.5	1.3	5.1	5.6
<b>South Korea avg</b>						<b>28,473</b>	<b>389.7</b>	<b>18.6</b>	<b>11.7</b>	<b>11.4</b>	<b>11.8</b>	<b>1.2</b>	<b>1.1</b>	<b>7.3</b>	<b>7.0</b>
<b>Refinery under coverage</b>						17,861	22.4	8.3	9.1	13.5	11.7	1.0	1.0	8.5	7.9
<b>Average (all)</b>						114,243	81.88	13.68	12.60	15.45	13.49	1.69	1.57	8.59	8.77

Share price as of 24 November 2021

Sources: Bloomberg, FSSIA estimates

## Exhibit 10: Peer comparisons – Service stations

Company	BBG code	Rec	Share Price (LCY)	Target price (LCY)	Upside (%)	Market Cap (USD m)	3Y EPS CAGR (%)	----- PE -----		---- ROE ----		---- PBV ----		EV / EBITDA	
								21E (x)	22E (x)	21E (%)	22E (%)	21E (x)	22E (x)	21E (x)	22E (x)
<b>THAILAND</b>															
PTT Oil and Retail	OR TB	BUY	26.25	36	37	9,447	1.6	33.6	27.4	13.9	11.5	3.3	3.1	22.4	16.5
Ptg Energy	PTG TB	BUY	15.00	18.3	22	751	6.1	15.9	13.6	19.0	20.0	2.9	2.6	6.0	5.3
Esso Thailand	ESSO TB	HOLD	7.65	8.9	16	794	67.8	6.0	5.2	26.8	24.5	1.4	1.2	5.8	4.7
Bangchak Corp	BCP TB	BUY	26.00	38	46	1,059	nm	13.6	6.2	5.6	11.5	0.7	0.7	9.4	7.2
Susco	SUSCO TB	BUY	3.30	3.5	6	99	17.3	12.2	10.6	8.2	8.5	0.9	0.9	16.1	13.2
WP Energy	WP TB	BUY	5.15	5.9	15	79	9.7	23.4	14.1	9.0	14.7	2.1	2.0	4.6	3.6
Siamgas & petroc	SGP TB	NA	13.30	NA	NA	732	nm	nm	nm	nm	nm	nm	nm	nm	nm
<b>Thailand avg</b>						<b>12,960</b>	<b>4.5</b>	<b>27.2</b>	<b>21.7</b>	<b>13.5</b>	<b>12.2</b>	<b>2.7</b>	<b>2.5</b>	<b>17.9</b>	<b>13.3</b>
<b>MALAYSIA</b>															
Petronas Dagangan	PETD MK	NA	20.00	NA	NA	4,717	40.7	34.6	27.5	9.8	12.4	3.6	3.5	14.3	12.6
<b>Malaysia avg</b>						<b>4,717</b>	<b>40.7</b>	<b>34.6</b>	<b>27.5</b>	<b>9.8</b>	<b>12.4</b>	<b>3.6</b>	<b>3.5</b>	<b>14.3</b>	<b>12.6</b>
<b>Average (all)</b>						17,678	14.2	29.1	23.3	12.5	12.2	2.9	2.8	17.0	13.1

Share price as of 24 November 2021

Sources: Bloomberg, FSSIA estimates

## Corporate Governance report of Thai listed companies 2020

EXCELLENT LEVEL										
AAV	ADVANC	AF	AIRA	AKP	AKR	ALT	AMA	AMATA	AMATAV	ANAN
AOT	AP	ARIP	ARROW	ASP	BAFS	BANPU	BAY	BCP	BCPG	BDMS
BEC	BEM	BGRIM	BIZ	BKI	BLA	BOL	BPP	BRR	BTS	BWG
CENTEL	CFRESH	CHEWA	CHO	CIMBT	CK	CKP	CM	CNT	COL	COMAN
COTTO	CPALL	CPF	CPI	CPN	CSS	DELTA	DEMCO	DRT	DTAC	DTC
DV8	EA	EASTW	ECF	ECL	EGCO	EPG	ETE	FNS	FPI	FPT
FSMART	GBX	GC	GCAP	GEL	GFPT	GGC	GPSC	GRAMMY	GUNKUL	HANA
HARN	HMPRO	ICC	ICI	III	ILINK	INTUCH	IRPC	IVL	JKN	JSP
JWD	K	KBANK	KCE	KKP	KSL	KTB	KTC	LANNA	LH	LHFG
LIT	LPN	MAKRO	MALEE	MBK	MBKET	MC	MCOT	METCO	MFEC	MINT
MONO	MOONG	MSC	MTC	NCH	NCL	NEP	NKI	NOBLE	NSI	NVD
NYT	OISHI	ORI	OTO	PAP	PAP	PCSGH	PDJ	PG	PHOL	PLANB
PLAT	PORT	PPS	PR9	PREB	PRG	PRM	PSH	PSL	PTG	PTT
PTTEP	PTTGC	PYLON	Q-CON	QH	QTC	RATCH	RS	S	S & J	SAAM
SABINA	SAMART	SAMTEL	SAT	SC	SCB	SCC	SCCC	SCG	SCN	SDC
SEAFCO	SEAOIL	SE-ED	SELIC	SENA	SIRI	SIS	SITHAI	SMK	SMPC	SNC
SONIC	SORKON	SPALI	SPI	SPRC	SPVI	SSSC	SST	STA	SUSCO	SUTHA
SVI	SYMC	SYNTEC	TACC	TASCO	TCAP	TFMAMA	THANA	THANI	THCOM	THG
THIP	THRE	THREL	TIP	TIPCO	TISCO	TK	TKT	TTB	TMILL	TNDT
TNL	TOA	TOP	TPBI	TQM	TRC	TRC	TSC	TSR	TSTE	TSTH
TTCL	TTW	TU	TVD	TVI	TVO	TWPC	U	UAC	UBIS	UV
VGI	VIH	WACOAL	WAVE	WHA	WHAUP	WICE	WINNER	TRUE		

VERY GOOD LEVEL										
2S	ABM	ACE	ACG	ADB	AEC	AEONTS	AGE	AH	AHC	AIT
ALLA	AMANAHA	AMARIN	APCO	APCS	APURE	AQUA	ASAP	ASEFA	ASIA	ASIAN
ASIMAR	ASK	ASN	ATP30	AUCT	AWC	AYUD	B	BA	BAM	BBL
BFIT	BGC	BJC	BJCHI	BROOK	BTW	CBG	CEN	CGH	CHARAN	CHAYO
CHG	CHOTI	CHOW	CI	CIG	CMC	COLOR	COM7	CPL	CRC	CRD
CSC	CSP	CWT	DCC	DCON	DDD	DOD	DOHOME	EASON	EE	ERW
ESTAR	FE	FLOYD	FN	FORTH	FSS	FTE	FVC	GENCO	GJS	GL
GLAND	GLOBAL	GLOCON	GPI	GULF	GYT	HPT	HTC	ICN	IFS	ILM
IMH	INET	INSURE	IRC	IRCP	IT	ITD	ITEL	J	JAS	JCK
JCKH	JMART	JMT	KBS	KCAR	KGI	KIAT	KOOL	KTIS	KWC	KWM
L&E	LALIN	LDC	LHK	LOXLEY	LPH	LRH	LST	M	MACO	MAJOR
MBAX	MEGA	META	MFC	MGT	MILL	MITSIB	MK	MODERN	MTI	MVP
NETBAY	NEX	NINE	NTV	NWR	OCC	OGC	OSP	PATO	PB	PDG
PDI	PICO	PIMO	PJW	PL	PM	PPP	PRIN	PRINC	PSTC	PT
QLT	RCL	RICHY	RML	RPC	RWI	S11	SALEE	SAMCO	SANKO	SAPPE
SAWAD	SCI	SCP	SE	SEG	SFP	SGF	SHR	SIAM	SINGER	SKE
SKR	SKY	SMIT	SMT	SNP	SPA	SPC	SPCG	SR	SRICHA	SSC
SSF	STANLY	STI	STPI	SUC	SUN	SYNEX	T	TAE	TAKUNI	TBSP
TCC	TCMC	TEAM	TEAMG	TFG	TIGER	TITLE	TKN	TKS	TM	TMC
TMD	TMI	TMT	TNITY	TNP	TNR	TOG	TPA	TPAC	TPCORP	TPOLY
TPS	TRITN	TRT	TRU	TSE	TVT	TWP	UEC	UMI	UOBKH	UP
UPF	UPOIC	UT	UTP	UWC	VL	VNT	VPO	WIJK	WP	XO
YUASA	ZEN	ZIGA	ZMICO							

GOOD LEVEL										
7UP	A	ABICO	AJ	ALL	ALUCON	AMC	APP	ARIN	AS	AU
B52	BC	BCH	BEAUTY	BGT	BH	BIG	BKD	BLAND	BM	BR
BROCK	BSBM	BSM	BTNC	CAZ	CCP	CGD	CITY	CMAN	CMO	CMR
CPT	CPW	CRANE	CSR	D	EKH	EP	ESSO	FMT	GIFT	GREEN
GSC	GTB	HTECH	HUMAN	IHL	INOX	INSET	IP	JTS	JUBILE	KASET
KCM	KKC	KUMWEL	KUN	KWG	KYE	LEE	MATCH	MATI	M-CHAI	MCS
MDX	MJD	MM	MORE	NC	NDR	NER	NFC	NNCL	NPK	NUSA
OCEAN	PAF	PF	PK	PLE	PMTA	POST	PPM	PRAKIT	PRECHA	PRIME
PROUD	PTL	RBF	RCI	RJH	ROJNA	RP	RPH	RSP	SF	SFLEX
SGP	SISB	SKN	SLP	SMART	SOLAR	SPG	SQ	SSP	STARK	STC
SUPER	SVOA	TC	TCCC	THMUI	TIW	TNH	TOPP	TPCH	TIPIP	TPLAS
TTI	TYCN	UKEM	UMS	VCOM	VRANDA	WIN	WORK	WPH		

## Description

## Score Range

Excellent

90-100

Very Good

80-89

Good

70-79

## Disclaimer:

The disclosure of the survey results 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 evaluation 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 results may be changed after that date. FSS International Investment Advisory Company Limited does not confirm nor certify the accuracy of such survey results.

\* CGR scoring should be considered with news regarding wrong doing of the company or director or executive of the company such unfair practice on securities trading, fraud, and corruption SEC imposed a civil sanction against insider trading of director and executive; \*\* delisted

Source: Thai Institute of Directors Association (IOD); FSSIA's compilation

## Anti-corruption Progress Indicator 2020

CERTIFIED										
2S	ADVANC	AI	AIE	AIRA	AKP	AMA	AMANAH	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	CENTEL	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	SEAOIL	SE-ED	SELIC
SENA	SGP	SIRI	SITHAI	SMIT	SMK	SMPC	SNC	SNP	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	TTB	TMD	TMILL	TMT
TNITY	TNL	TNP	TNR	TOG	TOP	TPA	TPCORP	TPP	TRU	TSC
TSTH	TTCL	TU	TVD	TVI	TVO	TWPC	U	UBIS	UEC	UKEM
UOBKH	UWC	VGI	VIH	VNT	WACOAL	WHA	WHAUP	WICE	WIJK	XO
ZEN	TRUE									
DECLARED										
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

Level	
Certified	This level indicates practical participation with thoroughly examination in relation to the recommended procedures from the audit committee or the SEC's certified auditor, being a certified member of Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) or already passed examination to ensure independence from external parties.
Declared	This level indicates determination to participate in the Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC)

**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, FSS International Investment Advisory Company Limited does not confirm, verify, or certify the accuracy and completeness of the assessment results.

Note: 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: 1) companies that have declared their intention to join CAC, and; 2) companies certified by CAC.

Source: The Securities and Exchange Commission, Thailand; \* FSSIA's compilation

## GENERAL DISCLAIMER

### ANALYST(S) CERTIFICATION

#### Suwat Sinsadok FSS International Investment Advisory Securities Co., Ltd

The individual(s) identified above certify(ies) that (i) all views expressed in this report accurately reflect the personal view of the analyst(s) with regard to any and all of the subject securities, companies or issuers mentioned in this report; and (ii) no part of the compensation of the analyst(s) was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed herein.

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Company	Ticker	Price	Rating	Valuation & Risks
Thai Oil	TOP TB	THB 51.75	BUY	Downside risks to our EV/EBITDA-based TP are a sharp rise in oil price and weak demand for refined oil products.
Star Petroleum Refining	SPRC TB	THB 9.70	BUY	TP is based on EV/EBITDA. Downside risks are a sharp rise in oil price and weak demand for refined oil products.
Bangchak Corp	BCP TB	THB 26.00	BUY	The downside risks to our SoTP-based TP include: 1) lower-than-expected demand for petroleum products; 2) higher crude premiums; and 3) unplanned shutdowns of the company's refinery plants.
Esso Thailand	ESSO TB	THB 7.65	HOLD	The downside risks to our SoTP-based TP on ESSO include 1) lower-than-expected demand for petroleum products; 2) a higher crude premium; and 3) unplanned shutdowns of its refinery and petrochemical plants. The upside risks include 1) higher-than-expected demand for petroleum products; and 2) a lower crude premium.
PTT Global Chemical	PTTGC TB	THB 60.75	BUY	The key downside risks to our EV/EBITDA-based TP are the weaker-than-expected HDPE price and HDPE-naphtha margin.
IRPC PCL	IRPC TB	THB 4.08	BUY	Key risks to our positive view and EV/EBITDA-based target price are weaker-than-expected oil product demand growth and lower-than-expected PP-naphtha and SM-benzene margins.
Tipco Asphalt	TASCO TB	THB 18.30	BUY	Downside risks to our EV/EBITDA multiple based TP include 1) a lower asphalt margin due to a oversupply in Asia on the back of faster recovery of utilisation rate for global refiners; and 2) a lower-than-expected supply of alternative crudes and asphalt.
PTT Oil and Retail Business	OR TB	THB 26.25	BUY	The downside risks to our SOTP-based TP include: 1) lower-than-expected demand for petroleum products; 2) a lower marketing margin; and 3) weaker-than-expected jet demand.
PTG Energy	PTG TB	THB 15.00	BUY	The downside risks to our SoTP-based TP include 1) a government cap on oil prices; and 2) weaker demand for diesel and gasoline.
Susco	SUSCO TB	THB 3.30	BUY	The downside risks to our SOTP-based TP include: 1) lower-than-expected demand for petroleum products; 2) a lower marketing margin; and 3) weaker-than-expected jet fuel demand.
WP Energy	WP TB	THB 5.15	BUY	The downside risks to our SOTP-based TP include: 1) lower-than-expected demand for LPG gas; and 2) a lower marketing margin.

Source: FSSIA estimates

#### Additional Disclosures

Target price history, stock price charts, valuation and risk details, and equity rating histories applicable to each company rated in this report is available in our most recently published reports. You can contact the analyst named on the front of this note or your representative at Finansia Syrus Securities Public Company Limited

FSSIA may incorporate the recommendations and target prices of companies currently covered by FSS Research into equity research reports, denoted by an 'FSS' before the recommendation. FSS Research is part of Finansia Syrus Securities Public Company Limited, which is the parent company of FSSIA.

All share prices are as at market close on 24-Nov-2021 unless otherwise stated.

## RECOMMENDATION STRUCTURE

### Stock ratings

Stock ratings are based on absolute upside or downside, which we define as  $(\text{target price}^* - \text{current price}) / \text{current price}$ .

**BUY (B).** The upside is 10% or more.

**HOLD (H).** The upside or downside is less than 10%.

**REDUCE (R).** The downside is 10% or more.

Unless otherwise specified, these recommendations are set with a 12-month horizon. Thus, it is possible that future price volatility may cause a temporary mismatch between upside/downside for a stock based on market price and the formal recommendation.

\* In most cases, the target price will equal the analyst's assessment of the current fair value of the stock. However, if the analyst doesn't think the market will reassess the stock over the specified time horizon due to a lack of events or catalysts, then the target price may differ from fair value. In most cases, therefore, our recommendation is an assessment of the mismatch between current market price and our assessment of current fair value.

### Industry Recommendations

**Overweight.** The analyst expects the fundamental conditions of the sector to be positive over the next 12 months.

**Neutral.** The analyst expects the fundamental conditions of the sector to be maintained over the next 12 months.

**Underweight.** The analyst expects the fundamental conditions of the sector to be negative over the next 12 months.

### Country (Strategy) Recommendations

**Overweight (O).** Over the next 12 months, the analyst expects the market to score positively on two or more of the criteria used to determine market recommendations: index returns relative to the regional benchmark, index sharpe ratio relative to the regional benchmark and index returns relative to the market cost of equity.

**Neutral (N).** Over the next 12 months, the analyst expects the market to score positively on one of the criteria used to determine market recommendations: index returns relative to the regional benchmark, index sharpe ratio relative to the regional benchmark and index returns relative to the market cost of equity.

**Underweight (U).** Over the next 12 months, the analyst does not expect the market to score positively on any of the criteria used to determine market recommendations: index returns relative to the regional benchmark, index sharpe ratio relative to the regional benchmark and index returns relative to the market cost of equity.