

Thailand Refinery

Request for subsidies is a likely solution

- The Thai PM and energy minister indicated that the government is considering requesting, not requiring, Thai refiners to lower their GRMs.
- We think that subsidies, rather than forced GRM cuts, will have a limited impact on refiners' earnings in the range of 2-5%.
- ESSO and BCP are our top picks.

Will government's cul-de-sac lead to refiner subsidies for fuel prices?

According to Kaohoon, on 14 June 2022, the Thai PM and energy minister indicated that the government is considering requesting, not requiring, Thai refiners to lower their gross refining margins (GRMs), currently at over USD20/bbl for the Singapore GRM, to alleviate the country's currently high fuel prices. After deploying tax cuts and oil fund subsidies, the government is now short of solutions to fight the higher fuel prices, which contributed to Thailand's inflation rising to 7.1% in May 2022. The news of the government's potential GRM cuts led to the collapses of refiners' share prices by over 15% within two trading days.

Request for subsidies is likely a solution to curb the retail fuel prices

We believe the downside risk for GRM cuts by the government is now significantly subsiding given the existing free-market competition laws for the refinery sector which had been liberalised decades ago. According to the PM, the government may not be able to force Thai refiners to cut their GRMs but instead may request refiners to provide subsidies voluntarily to help support the retail fuel prices. In May 2008, three refiners, TOP, BCP, and IRPC, together voluntarily subsidised THB1.4b to the government to help fight the high retail fuel prices during the global oil crisis when the price hit over USD140/bbl. The government had initiated requests for four refiners in the PTT group (TOP, IRPC, PTTGC, and BCP) to cut their GRMs by THB1/litre (USD5/bbl GRM) for diesel. In addition, refiners agreed to sell 122m litres of diesel at a THB3/litre price, lower than the market price for six months, with a total subsidy worth THB2.19b or a USD0.2/bbl GRM cut.

Refiners' profits: GRM, OPEX, fuel loss, margin losses for fuel oil and by-products

According to Prachachart, on 8 June 2022, Mr. Bandit Thamprachamchit, the chairman of the refinery industry and petrochemical group, Thailand Industry Association, proposed details of the GRM structure, derived from the product margins over crude cost based on each refiner's production yield structure. On average, Thai refiners produced 20% gasoline, 50% diesel, 10% jet fuel, 8% fuel oil, and 12% other products. Hence, the hefty margins of gasoline, diesel, and jet over crude price would have to be offset by 1) margin losses for fuel oil and other by-products (30% yield); 2) a USD5/bbl fuel cost (fuel loss at 4% of crude cost); and 3) operating, interest, and depreciation expenses of USD5/bbl.

Buy ahead of subsidy relief, not GRM cuts

We think that subsidies, rather than forced GRM cuts, will have a limited impact on refiners' earnings in the range of 2-5%, and hence recommend investors to buy refiners ahead of the strong 2Q22 net profit announcements we expect to see; ESSO and BCP are our top picks.

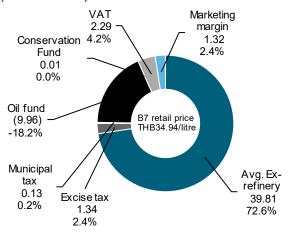


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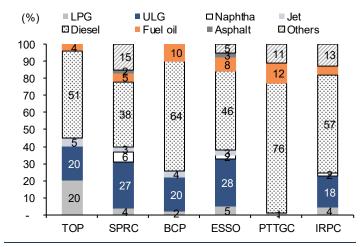
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Exhibit 1: Biodiesel B7 retail price structure as of 14 Jun-22 (THB34.94/litre)



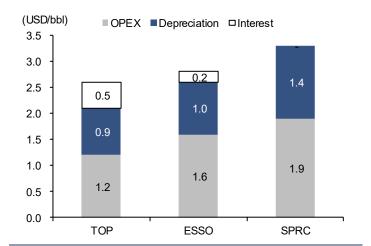
Source: Energy Policy and Planning Office (EPPO)

Exhibit 3: Product yield breakdown as of 1Q22



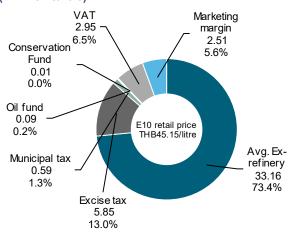
Source: Companies

Exhibit 5: Cost structures of three major Thai refiners



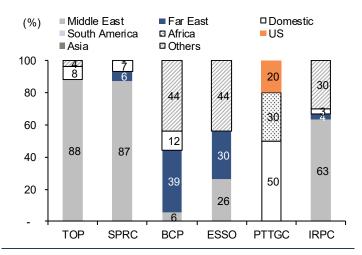
Sources: Companies; FSSIA estimates

Exhibit 2: Gasoline E10 retail price structure as of 14 Jun-22 (THB45.15/litre)



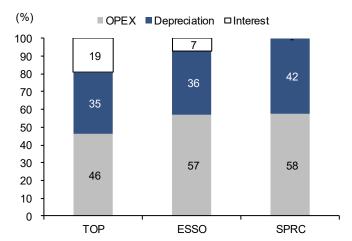
Source: EPPO

Exhibit 4: Crude mix breakdown as of 1Q22



Source: Companies

Exhibit 6: Cost structures (%) of three major Thai refiners



Sources: Companies; FSSIA estimates

Corporate Governance report of Thai listed companies 2021

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AF	BEM	CPI	GGC	KCE	MTC	PORT	SAT	SPVI	TIPCO	TVO	
AH	BGC	CPN	GLAND	KKP	MVP	PPS	SC	SSSC	TISCO	TWPC	
AIRA	BGRIM	CRC	GLOBAL	KSL	NCL	PR9	SCB	SST	TK	U	
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AMA	BPP	DEMCO	GULF	LANNA	NOBLE	PROUD	SCGP	SUN	TNITY	VGI	
AMATA	BRR	DRT	GUNKUL	LH	NSI	PSH	SCM	SUSCO	TOA	VIH	
AMATAV	BTS	DTAC	HANA	LHFG	NVD	PSL	SDC	SUTHA	TOP	WACOAL	
ANAN	BTW	DUSIT	HARN	LIT	NWR	PTG	SEAFCO	SVI	TPBI	WAVE	
AOT	BWG	EA	HMPRO	LPN	NYT	PTT	SEAOIL	SYMC	TQM	WHA	
AP	CENTEL	EASTW	ICC	MACO	OISHI	PTTEP	SE-ED	SYNTEC	TRC	WHAUP	
ARIP	CFRESH	ECF	ICHI	MAJOR	OR	PTTGC	SELIC	TACC	TRU	WICE	
ARROW	CHEWA	ECL	III	MAKRO	ORI	PYLON	SENA	TASCO	TRUE	WINNER	
ASP	CHO	EE	ILINK	MALEE	OSP	Q-CON	SHR	TCAP	TSC	ZEN	
AUCT	CIMBT	EGCO	ILM	MBK	OTO	QH	SIRI	TEAMG	TSR		
AWC	CK	EPG	INTUCH	MC	PAP	QTC	SIS	TEMAMA	TSTE		
AYUD	CKP	ETC	IP	MCOT	PCSGH	RATCH	SITHAI	TGH	TSTH		
BAFS	CM	FPI	IRPC	METCO	PDG	RS	SMK	THANA	TTA		
BANPU	CNT	FPT	ITEL	MFEC	PDJ	S	SMPC	THANI	TTB		
BAY	COM7	FSMART	IVL	MINT	PG	S&J	SNC	THCOM	TTCL		
BBL	COMAN	GBX	JSP	MONO	PHOL	SAAM	SONIC	THG	TTW		
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AIT	BEYOND	CWT	GYT	KEX	MICRO	PPP	SAWAD	SR	TMC	VL	
ALL	BFIT	DCC	HEMP	KGI	MILL	PPPM	SCI	SRICHA	TMD	VPO	
ALLA	BJC	DCON	HPT	KIAT	MITSIB	PRIME	SCN	SSC	TMI	VRANDA	
ALUCON	BJCHI	DHOUSE	HTC	KISS	MK	PRIN	SCP	SSF	TMILL	WGE	
AMANAH	BLA	DOD	HYDRO	KOOL	MODERN	PRINC	SE	STANLY	TNL	WIIK	
AMARIN	BR	DOHOME	ICN	KTIS	MTI	PSG	SFLEX	STGT	TNP	WP	
APCO	BROOK	DV8	IFS	KUMWEL	NBC	PSTC	SFP	STOWER	TOG	XO	
APUBE	CBG	EASON	IMH	KUN	NCAP	PT	SFT	STPI	TPA	XPG	
APURE	CEN	EFORL	IND	KWC	NCH	QLT	SGF	SUC	TPAC	YUASA	
AQUA	CGH	ERW	INET	KWM	NETBAY	RBF	SIAM	SWC	TPCS		
ASAP	CHARAN	ESSO	INSET	L&E	NEX	RCL	SINGER	SYNEX	TPS		
ASEFA	CHAYO	ESTAR	INSURE	LDC	NINE	RICHY	SKE	TAE	TRITN		
ASIA	CHG	ETE	IRC	LEO	NRF	RML	SKN	TAKUNI	TRT		
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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.

Sources: Thai Institute of Directors Association (IOD); FSSIA's compilation; data as of 26 October 2021

^{*} 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

Anti-corruption Progress Indicator

2S	BCH	CPALL	GC	K	MFC	PE	QLT	SNP	THCOM	TU
7UP	ВСР	CPF	GCAP	KASET	MFEC	PG	QTC	SORKON	THIP	TVD
ADVANC	BCPG	CPI	GEL	KBANK	MILL	PHOL	RATCH	SPACK	THRE	TVI
AF	BE8	CPN	GFPT	KBS	MINT	PK	RML	SPALI	THREL	TVO
Al	BEYOND	CSC	GGC	KCAR	MONO	PL	RWI	SPC	TIDLOR	TWPC
AIE	BGC	DCC	GJS	KCE	MOONG	PLANB	S&J	SPI	TIPCO	U
AIRA	BGRIM	DELTA	GPI	KGI	MSC	PLANET	SAAM	SPRC	TISCO	UBE
AKP	BJCHI	DEMCO	GPSC	KKP	MST	PLAT	SABINA	SRICHA	TKS	UBIS
ALPHAX	BKI	DIMET	GSTEEL	KSL	MTC	PM	SAPPE	SSF	TKT	UEC
AMA	BLA	DRT	GUNKUL	KTB	MTI	PPP	SAT	SSP	TMD	UKEM
AMANAH	BPP	DTAC	HANA	KTC	NBC	PPPM	SC	SSSC	TMILL	UOBKH
AMATA	BROOK	DUSIT	HARN	KWC	NEP	PPS	SCB	SST	TMT	UPF
AMATAV	BRR	EA	HEMP	KWI	NINE	PR9	SCC	STA	TNITY	UV
AP	BSBM	EASTW	HENG	L&E	NKI	PREB	SCCC	STOWER	TNL	VGI
APCS	BTS	ECL	HMPRO	LANNA	NMG	PRG	SCG	SUSCO	TNP	VIH
AQUA	BWG	EGCO	HTC	LH	NNCL	PRINC	SCN	SVI	TNR	WACOA
ARROW	CEN	EP	ICC	LHFG	NOBLE	PRM	SEAOIL	SYMC	TOG	WHA
AS	CENTEL	EPG	ICHI	LHK	NOK	PROS	SE-ED	SYNTEC	TOP	WHAUP
ASIAN	CFRESH	ERW	IFEC	LPN	NSI	PSH	SELIC	TAE	TOPP	WICE
ASK	CGH	ESTAR	IFS	LRH	NWR	PSL	SENA	TAKUNI	TPA	WIIK
ASP	CHEWA	ETE	ILINK	M	occ	PSTC	SGP	TASCO	TPP	XO
AWC	CHOTI	FE	INET	MAKRO	OGC	PT	SINGER	TBSP	TRU	ZEN
AYUD	CHOW	FNS	INSURE	MALEE	ORI	PTG	SIRI	TCAP	TRUE	
В	CIG	FPI	INTUCH	MATCH	PAP	PTT	SITHAI	TCMC	TSC	
BAFS	CIMBT	FPT	IRC	MBAX	PATO	PTTEP	SKR	TFG	TSTE	
BAM	CM	FSMART	IRPC	MBK	PB	PTTGC	SMIT	TFI	TSTH	
BANPU	CMC	FSS	ITEL	MC	PCSGH	PYLON	SMK	TFMAMA	TTA	
BAY	COM7	FTE	IVL	MCOT	PDG	Q-CON	SMPC	TGH	TTB	
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ALT	CPL	DHOUSE	FLOYD	JTS	NCAP	NYT	SAK	STECH	TSI	ZIGA
APCO	CPR	DOHOME	GULF	KEX	NCL	OR	SCGP	STGT	VARO	
B52	CPW	ECF	III	KUMWEL	NOVA	PIMO	SCM	TKN	VCOM	
BEC	CRC	EKH	INOX	LDC	NRF	PLE	SIS	TMI	VIBHA	

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)

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Note: Companies participating in Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) under Thai Institute of Directors (as of 26 October 2021) are categorised into: 1) companies that have declared their intention to join CAC, and; 2) companies certified by CAC.

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

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Suwat Sinsadok, CFA, FRM, ERP FSS International Investment Advisory Securities Co., Ltd

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Company	Ticker	Price	Rating	Valuation & Risks
Thai Oil	TOP TB	THB 53.50	BUY	Downside risks to our EV/EBITDA-based TP are a sharp fall in oil price and weak demand for refined oil products.
Star Petroleum Refining	SPRC TB	THB 12.60	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 31.75	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 11.80	BUY	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.
PTT Global Chemical	PTTGC TB	THB 45.25	REDUCE	The key upside risks to our EV/EBITDA-based TP are a stronger-than-expected HDPE price and HDPE-naphtha margin.
IRPC PCL	IRPC TB	THB 3.40	REDUCE	Key risks to our bearish view and EV/EBITDA-based target price are rising margins of PP-naphtha, SM and ABS-benzene, and a higher market GRM.
PTT PCL	PTT TB	THB 36.50	BUY	Risks to our SoTP-based valuation are the oil price and potential earnings downside from government intervention.

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

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All share prices are as at market close on 13-Jun-2022 unless otherwise stated.

RECOMMENDATION STRUCTURE

Stock ratings

Stock ratings are based on absolute upside or downside, which we define as (target price* - current price) / 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.