

STAR PETROLEUM REFINING

THAILAND / OIL & GAS

SPRC TB

BUY

UNCHANGED

TARGET PRICE	THB13.50
CLOSE	THB10.20
UP/DOWNSIDE	+32.4%
PRIOR TP	THB13.50
CHANGE IN TP	UNCHANGED
TP vs CONSENSUS	+16.8%

GRM upside after oil spill downside

- We believe the downside from the oil spill is now limited to less than USD10m.
- Beyond the oil spill downside, we see an earnings upside from the rising market GRM to over USD5/bbl in 4Q21 into 1H22.
- Maintain BUY and our target price of THB13.5.

Oil spill damage successfully contained since 31 Jan-22

Five days after the oil spill incident of over 0.4m bbls from 25-30 Jan-22, SPRC has successfully contained, cleaned, and managed the incident, as confirmed by government agencies and local authorities, including the Marine Department and the Royal Thai Navy. While the oil leak incident is regrettable, we think SPRC's highly effective, fast, and very responsive actions to contain the damage reflects SPRC's efficient crisis management.

Oil spill downside could be limited to within USD10m

We believe the downside from the oil spill is now limited to less than USD10m, comprising: 1) the USD1m deductible amount for third-party liability from SPRC's USD100m insurance coverage for the compensation paid to fishermen, operators of hotels and other tourist-related businesses on the seaside of Samet island; 2) the property damage to the single-point mooring (SPM) site, which SPRC estimates to be less than USD1m; and 3) SPRC is expected to incur an additional freight expense of USD4-5m in Feb-22, assuming that SPRC is able to resume operations at its SPM by Mar-22.

Overlooked GRM upside from the jet fuel market rebound

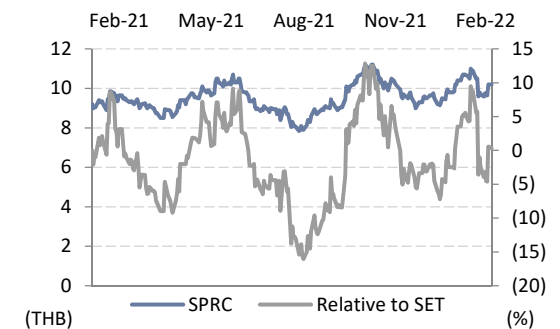
Looking beyond the oil spill downside, we see an earnings upside from SPRC's rising market gross refining margin (GRM) to over USD5/bbl in 4Q21 into 1H22, driven by the much higher margins for gasoline, diesel, and particularly jet fuel, based on the Dubai crude oil price despite the sharp rise in global crude prices. We believe this is due to tighter supply caused by geopolitical tensions and the highly disciplined co-operation by OPEC+ members to maintain the group's monthly crude oil production cap at only 0.4mbpd. We believe the current uptrend in product margins over the Dubai price should continue into at least mid-2022 given the stronger demand outlook and the resumption of intercontinental tourism.

Fundamentals resume their role as key share price catalyst

We maintain BUY and our target price of THB13.5. SPRC is now back as our top pick in the Thai refinery sector given the company's successful and effective crisis management of the oil spill which limited the financial and corporate governance damages, allowing its share price to rerate.

KEY STOCK DATA

YE Dec (THB m)	2020	2021E	2022E	2023E
Revenue	130,163	155,948	183,906	185,774
Net profit	(6,004)	5,743	5,878	6,136
EPS (THB)	(1.38)	1.32	1.36	1.42
vs Consensus (%)	-	72.8	57.6	40.3
EBITDA	2,988	8,053	10,505	10,763
Core net profit	2,068	5,743	5,878	6,136
Core EPS (THB)	0.48	1.32	1.36	1.42
Chg. In EPS est. (%)	-	-	-	-
EPS growth (%)	nm	177.7	2.3	4.4
Core P/E (x)	21.4	7.7	7.5	7.2
Dividend yield (%)	-	7.8	8.8	8.8
EV/EBITDA (x)	17.7	6.0	4.3	3.9
Price/book (x)	1.7	1.5	1.4	1.3
Net debt/Equity (%)	32.6	14.9	3.0	(6.6)
ROE (%)	7.0	20.4	18.8	18.3



Share price performance	1 Month	3 Month	12 Month
Absolute (%)	(1.9)	3.0	10.3
Relative to country (%)	(3.1)	(0.1)	(1.6)
Mkt cap (USD m)			1,340
3m avg. daily turnover (USD m)			8.2
Free float (%)			39
Major shareholder	Chevron South Asia Holdings Pte Ltd (61%)		
12m high/low (THB)	11.50/7.75		
Issued shares (m)	4,335.90		

Sources: Bloomberg consensus; FSSIA estimates



Suwat Sinsadok, CFA, FRM, ERP
suwat.sin@fssia.com
+66 2611 3558

Siriluck Pinthusoonthorn
siriluck.pin@fssia.com
+66 2611 3562

Investment thesis

With IMO 2020 coming into force in Jan 2020 – limiting the sulphur content in fuel oil used by the shipping industry – we think SPRC faces a potential downside risk from a lower fuel oil-Dubai spread, but this should be offset by a widening diesel-fuel oil spread. While purely a refinery business, SPRC's earnings sustainability comes from its low-cost structure, high crude flexibility and high operational efficiency, supported by its parent, Chevron.

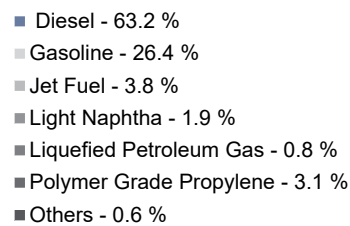
We think SPRC's earnings will continue to grow in 2021-22, driven by sustainable earnings from a higher market gross refining margin (GRM) and its low-cost structure.

Company profile

SPRC is a subsidiary of US-based Chevron, with capacity of 165kb/d. Its competitive, low-cost structure and high crude consumption flexibility are key to sustaining its high market GRM.

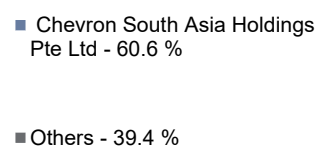
www.sprc.co.th

Principal activities (revenue, 2020)



Source: Star Petroleum Refining

Major shareholders



Source: Star Petroleum Refining

Catalysts

Higher refinery utilisation rates and a higher market GRM are key potential earnings drivers.

Risks to our call

TP is based on EV/EBITDA. Downside risks are a sharp rise in oil price and weak demand for refined oil products.

Event calendar

Date	Event
Feb 2022	4Q21/2021 results announcement

Key assumptions

	2021E	2022E	2023E
Utilisation rate (%)	90.0	95.0	95.0
Market GRM (USD/bbl)	4.5	5.3	6.0
Dubai crude price (USD/bbl)	55.0	50.0	50.0
Gasoline-Dubai spread (USD/bbl)	10.0	14.0	16.0
Jet-Dubai spread (USD/bbl)	5.0	12.0	15.0
Diesel-Dubai spread (USD/bbl)	6.0	15.0	15.0
Fuel oil-Dubai spread (USD/bbl)	(3.0)	(7.0)	(7.0)
Crude premium (USD/bbl)	3.3	4.3	4.3

Source: FSSIA estimates

Earnings sensitivity

- For every 1% increase in average Dubai oil price, we project that 2022 earnings would rise by 2.8%, and vice versa, all else being equal.
- For every 1% increase in market GRM, we project that 2022 earnings would rise by 2.5%, and vice versa, all else being equal.
- Stability in crude oil price, rising diesel cracks and low crude premiums are key for earnings growth.

Source: FSSIA estimates

Oil spill is now well contained

SPRC's underwater pipeline at the SPM site about 20km southeast of Map Ta Phut Industrial Port began leaking on 25 Jan-22, releasing an estimated 160,000 litres of oil into the sea before it could be plugged. On 29 Jan-22, Rayong's Mae Ram Phueng Beach was declared a disaster area. Satellite images showed the slick had spread across 47 square km of the Gulf of Thailand.

Before the oil spill incident was successfully brought under control, an estimated 50,000 litres of oil escaped into the ocean 20km (12 miles) from the coastline of eastern Thailand. Late on Friday, 28 Jan-22, some of the oil came ashore on Mae Ram Phueng Beach, a popular beach for local tourists in Rayong province.

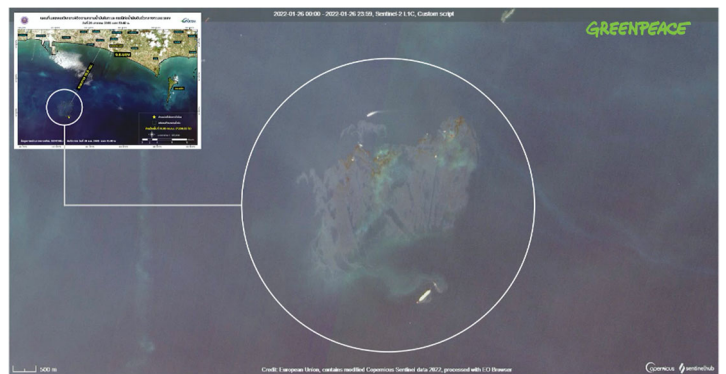
The latest satellite image from the government's Geo-Informatics and Space Technology Development Agency (GISTDA) showed the oil spill had spread to cover a 67-sq-km (25.87-sq-mile) area of the sea. Most of the oil had formed a thin film rather than a thick oil slick, navy spokesman Vice-Admiral Pokkrong Monthatphalin told reporters, citing aerial photographs.

Exhibit 1: Oil slick reaches Mae Ramphueng beach



Source: [Greenpeace](#)

Exhibit 2: Oil spill on satellite image



Source: [Greenpeace](#)

Five days after the oil spill incident of over 0.4m bbls from 25-30 Jan-22, SPRC announced that it had successfully contained, cleaned up, and managed the incident, which was confirmed by government agencies and authorities, including the Marine Department, the Royal Thai Navy, and local and municipal governments.

Exhibit 3: SPRC's management handed out care packages to communities in the oil spill area



Source: [Nation](#)

Exhibit 4: The clean-up team for the oil spill



Source: [CNN](#)

While the oil leak incident is regrettable, we think SPRC's highly effective, fast, and very responsive actions to contain the damage reflects SPRC's efficient crisis management.

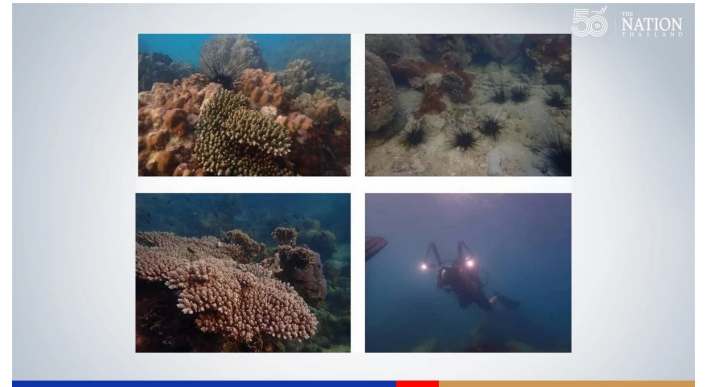
According to the local newspaper The Nation, SPRC has handed out care packages and sent a team to monitor the progress of the oil spill clean-up efforts, as well as find out what problems local communities may face due to the oil spill.

Exhibit 5: Divers surveyed the impact of the oil spill on underwater marine life



Source: [Nation](#)

Exhibit 6: Marine life and corals in the oil spill area



Source: [Nation](#)

Environmental impact assessment. There remains a debate whether SPRC's recent oil spill has had any significant impact on the environment.

What do opponents believe? According to the local news source Thai PBS World, a government-sponsored news channel, marine scientists at Chulalongkorn University say that it may take a year or more for the impact from the recent oil spill in the sea off Rayong province to manifest on coral in the area.

Divers from a research team at the Marine Resources Research Institute of the Faculty of Science at Chulalongkorn University have collected samples of sea water, sediment and marine life from the affected area to test for the presence of hydrocarbons and dispersants, and their impact on the marine environment.

The institute's director, Dr. Voranop Viyakarn, said that from his experience, environmental impact assessments after previous, large-scale oil spills and the clean-up operations that followed were not thoroughly and comprehensively conducted, particularly regarding the impact on coral.

On the surface, the coral may look fine, he said, but the inner portion which is not visible may be badly affected by the clean-up chemicals, which he suspects are harmful to the marine environment. The long-term impact is unknown, he added.

Meanwhile, Dr. Suchana Chavanich, the institute's deputy director, said that in lab tests, chemicals from oil and dispersants can cause coral to become barren or stop breeding. If the coral stops reproducing, even temporarily, it may take 3-5 years to return to normal and start again.

What do proponents say? In contrast, the Department of Marine and Coastal Resources reported on Monday, 31 Jan-22 that the oil leak near Rayong's Map Ta Phut industrial estate had not affected the marine ecosystem in the area yet. After the incident on 25 Jan-22, SPRC began using chemicals to disperse the oil.

The Department of Marine and Coastal Resources also reported that, so far, no oil slicks have been reported on the beaches or coral reefs in Koh Samet's Ao Prao Bay, and added that the quality of seawater was normal with no smell of oil and that marine life was unaffected.

What do we think? Overall, we believe SPRC's fast and efficient response in implementing an effective crisis management strategy to successfully contain the oil slick within only five days, along with its immediate distribution of care packages and compensation paid to the people affected by the incident, should help alleviate the negative impact of the oil spill on the environment and the company's corporate image.

4Q21 results forecast

We project SPRC to post a strong 4Q21 net profit of THB1.76b, up 14.6x q-q and 104% y-y. We project its core net profit excluding inventory gains (losses) to be THB886m, driven by:

- The increase in the market GRM to USD5.9/bbl, up from USD2.34/bbl in 3Q21, led by the sharp rise in jet, gasoline, and diesel margins over the Dubai price, thanks to the rebound in demand after the global economic recovery;
- The higher utilisation rate of 140kbpd, up from 129kbpd in 3Q21, thanks to the higher jet-Dubai margin that allowed SPRC to increase its refinery utilisation rate;
- The projected USD1.7/bbl operating expense and USD3.4/bbl overall cost, which is lower than the market GRM of USD5.9/bbl, based on our estimate;
- A pre-tax inventory gain of THB0.8b or USD26m due to the USD2.2/bbl q-q higher crude inventory price on SPRC's 4.6m bbls of crude intake.

Exhibit 7: 4Q21 results forecast

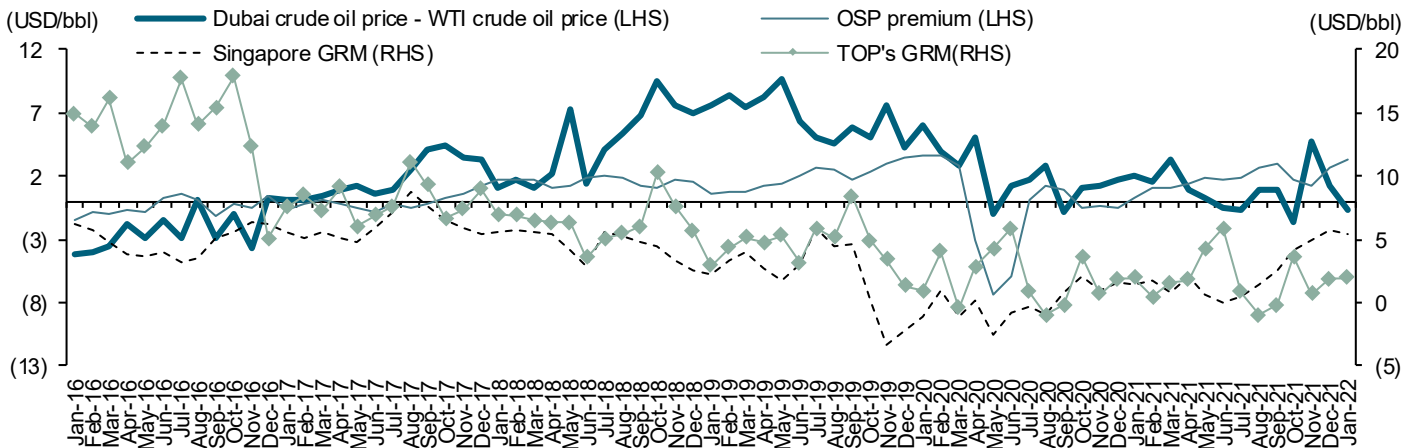
	4Q20	3Q21	4Q21E		
	(THB m)	(THB m)	(THB m)	(q-q%)	(y-y%)
Revenue	32,708	41,193	43,266	5.0	32.3
Operating costs	(31,082)	(40,180)	(41,153)	2.4	32.4
EBITDA	1,626	1,013	2,113	108.5	30.0
<i>EBITDA margin (%)</i>	5.0	2	4.9	<i>nm</i>	<i>nm</i>
Depn & amort.	(737)	(620)	(643)	3.7	(12.7)
EBIT	889	393	1,470	274.1	65.3
Interest expense	(45)	(54)	(55)	1.1	21.0
Interest & invt inc	0	0	0	<i>nm</i>	<i>nm</i>
Other income	38	16	35	118.1	(6.8)
Associates' contrib	0	0	0	<i>nm</i>	<i>nm</i>
Exceptionals	193	(213)	858	<i>nm</i>	344.9
Pretax profit	1,074	141	2,308	1,536.0	114.9
Tax	(211)	(28)	(550)	1,848.3	160.5
<i>Tax rate (%)</i>	20	20	24	<i>nm</i>	<i>nm</i>
Minority interests	0	0	0	<i>nm</i>	<i>nm</i>
Net profit	863	113	1,758	1,457.9	103.8
Non-recurring	641	463	(872)	(288.3)	(236.1)
Core net profit	222	(350)	886	<i>nm</i>	299.2
EPS (THB)	0.20	0.03	0.66	2,426.6	230.4
Core EPS (THB)	0.05	(0.08)	1.16	<i>nm</i>	2,164.7

Sources: SPRC, FSSIA estimates

Market GRM is now structurally on an uptrend

In the past 12 months, the market GRM has been rising from zero in Jun-20 to over USD5/bbl for the Singapore benchmark GRM, mainly from the higher jet, diesel and gasoline margins over the Dubai crude price due to the global demand recovery.

Exhibit 8: Dubai – WTI crude price, OSP premium, Singapore GRM, TOP’s GRM



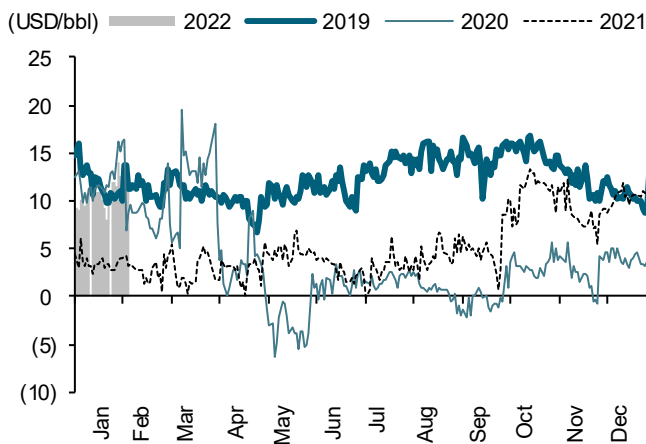
Source: Bloomberg

However, the market GRM of Thai Oil (TOP TB, BUY, TP THB67), a benchmark that we employ to track the overall market GRM for Thai refinery companies, including SPRC, has been rising only since Nov-21 after the jet-Dubai margin began to structurally increase from the USD5-7/bbl range to over USD10/bbl from Nov-21 to Feb-22.

The jump in the jet-Dubai margin has been driven by improving global demand and the resumption of intercontinental flights as the Covid-19 pandemic evolves to become a localised, endemic disease to which most of the global population has already developed some degree of immunity, according to the World Health Organization.

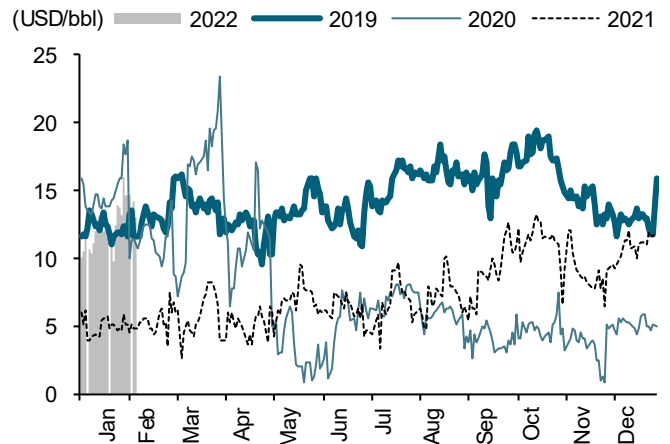
Similarly, the higher margin for diesel-Dubai is also being driven by the gradual recovery in demand now that economic activity is back on the recovery path to normal levels within 2022, based on our estimate.

Exhibit 9: Jet Kerosene fob Spot Price – Dubai crude oil price



Source: Bloomberg

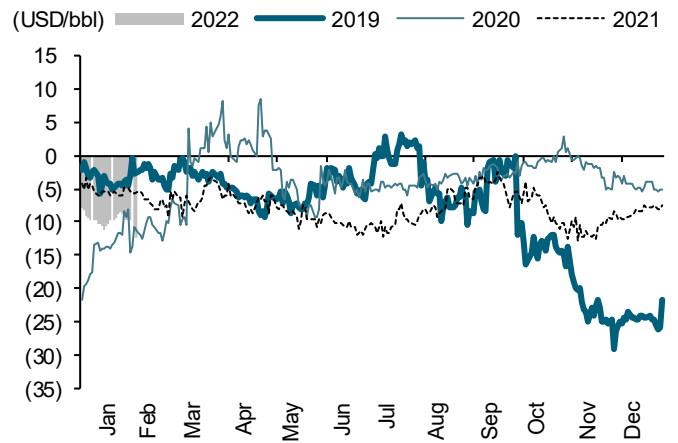
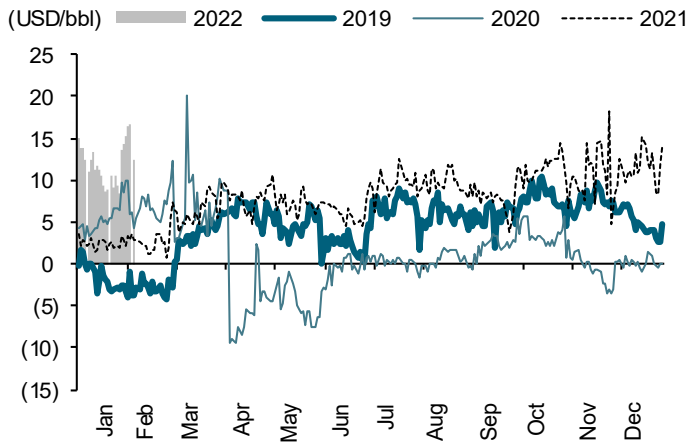
Exhibit 10: Gasoil 0.5% Sulphur fob SG Spot Price – Dubai crude oil price



Source: Bloomberg

Exhibit 11: 92 Octane Gasoline fob Spot Price – Dubai crude oil price

Exhibit 12: High Sulphur Fuel Oil Spot fob Singapore - Dubai crude oil price



Source: Bloomberg

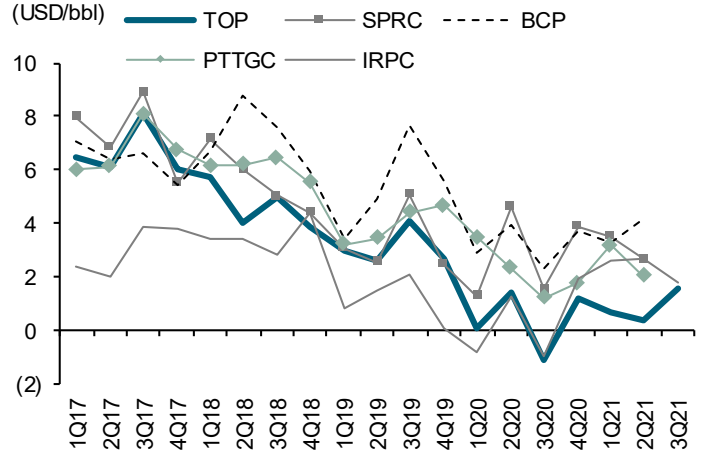
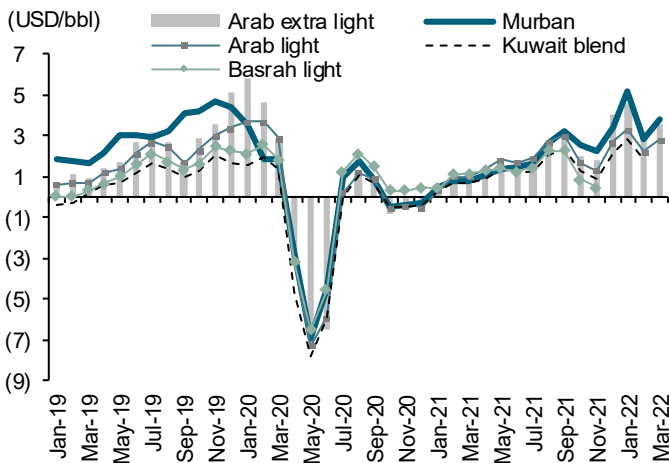
Source: Bloomberg

Despite the higher crude premiums announced by Saudi Arabia for its major crude types of Arab light and Arab extra light, followed by the hike in the forward Murban-Dubai crude premium to over USD3/bbl as of Mar-22, SPRC’s management expects the positive impact of the higher product-crude margins to overshadow the rising crude prices and premiums, resulting in a USD3-6/bbl q-q higher market GRM to USD5-8/bbl in 4Q21-1Q22.

We project that SPRC’s market GRM will rise to over USD7/bbl in 1Q22, up from USD5.9/bbl in 4Q21, as the margins of jet, diesel, and gasoline over Dubai have all continued to increase q-q due to the tighter demand-supply balance.

Exhibit 13: Crude premiums

Exhibit 14: Market GRMs of Thai refinery companies



Source: TOP

Source: Companies

Financial Statements

Star Petroleum Refining

Profit and Loss (THB m) Year Ending Dec	2019	2020	2021E	2022E	2023E
Revenue	168,840	130,163	155,948	183,906	185,774
Cost of goods sold	(169,486)	(126,265)	(146,804)	(172,115)	(173,711)
Gross profit	(646)	3,898	9,144	11,792	12,063
Other operating income	-	-	-	-	-
Operating costs	(1,690)	(911)	(1,091)	(1,287)	(1,300)
Operating EBITDA	(2,336)	2,988	8,053	10,505	10,763
Depreciation	(2,565)	(2,832)	(2,660)	(3,286)	(3,286)
Goodwill amortisation	0	0	0	0	0
Operating EBIT	(4,901)	156	5,392	7,218	7,477
Net financing costs	1,179	142	(294)	(261)	(229)
Associates	0	0	0	0	0
Recurring non-operating income	2,650	215	1,946	253	278
Non-recurring items	(2,621)	(8,072)	0	0	0
Profit before tax	(3,693)	(7,559)	7,045	7,210	7,527
Tax	885	1,555	(1,302)	(1,332)	(1,391)
Profit after tax	(2,809)	(6,004)	5,743	5,878	6,136
Minority interests	0	0	0	0	0
Preferred dividends	0	0	0	0	0
Other items	-	-	-	-	-
Reported net profit	(2,809)	(6,004)	5,743	5,878	6,136
Non-recurring items & goodwill (net)	2,621	8,072	0	0	0
Recurring net profit	(187)	2,068	5,743	5,878	6,136
Per share (THB)					
Recurring EPS *	(0.04)	0.48	1.32	1.36	1.42
Reported EPS	(0.65)	(1.38)	1.32	1.36	1.42
DPS	0.18	0.00	0.80	0.90	0.90
Diluted shares (used to calculate per share data)	4,336	4,336	4,336	4,336	4,336
Growth					
Revenue (%)	(19.3)	(22.9)	19.8	17.9	1.0
Operating EBITDA (%)	nm	nm	169.5	30.4	2.5
Operating EBIT (%)	nm	nm	3,365.0	33.9	3.6
Recurring EPS (%)	nm	nm	177.7	2.3	4.4
Reported EPS (%)	nm	nm	nm	2.3	4.4
Operating performance					
Gross margin inc. depreciation (%)	(1.9)	0.8	4.2	4.6	4.7
Gross margin of key business (%)	(1.9)	(5.4)	4.2	4.6	4.7
Operating EBITDA margin (%)	(1.4)	2.3	5.2	5.7	5.8
Operating EBIT margin (%)	(2.9)	0.1	3.5	3.9	4.0
Net margin (%)	(0.1)	1.6	3.7	3.2	3.3
Effective tax rate (%)	24.0	20.6	18.5	18.5	18.5
Dividend payout on recurring profit (%)	(423.1)	-	60.4	66.4	63.6
Interest cover (X)	1.9	(2.6)	25.0	28.6	33.9
Inventory days	33.0	38.9	23.5	22.8	24.5
Debtor days	21.3	22.0	19.9	16.9	16.7
Creditor days	27.7	30.9	20.3	19.7	21.2
Operating ROIC (%)	(10.3)	0.4	(3.3)	(4.6)	(4.9)
ROIC (%)	(4.6)	0.8	(4.2)	(4.3)	(4.6)
ROE (%)	(0.5)	7.0	20.4	18.8	18.3
ROA (%)	(2.1)	3.9	12.0	12.1	12.2
* Pre-exceptional, pre-goodwill and fully diluted					
Revenue by Division (THB m)					
Diesel	74,741	82,239	45,146	44,486	32,842
Gasoline	50,452	34,428	56,279	56,298	63,867
Jet Fuel	10,802	4,950	9,528	4,641	8,578
Light Naphtha	4,027	2,524	4,561	5,164	5,164

Sources: Star Petroleum Refining; FSSIA estimates

Financial Statements

Star Petroleum Refining

Cash Flow (THB m) Year Ending Dec	2019	2020	2021E	2022E	2023E
Recurring net profit	(187)	2,068	5,743	5,878	6,136
Depreciation	2,565	2,832	2,660	3,286	3,286
Associates & minorities	-	-	-	-	-
Other non-cash items	-	-	-	-	-
Change in working capital	(1,245)	2,661	167	73	6
Cash flow from operations	1,133	7,561	8,570	9,237	9,428
Capex - maintenance	(2,518)	(2,518)	(2,660)	(3,286)	(3,286)
Capex - new investment	(1,965)	(2,216)	(393)	(1,019)	(1,019)
Net acquisitions & disposals	0	0	0	0	0
Other investments (net)	6,645	2,146	0	0	0
Cash flow from investing	2,162	(2,588)	(3,053)	(4,305)	(4,305)
Dividends paid	(8,317)	(3,362)	(2,168)	(3,469)	(3,902)
Equity finance	0	0	0	0	0
Debt finance	6,369	3,418	(3,237)	(3,500)	0
Other financing cash flows	(1,401)	(3,413)	786	2,037	2,038
Cash flow from financing	(3,348)	(3,357)	(4,619)	(4,931)	(1,865)
Non-recurring cash flows	-	-	-	-	-
Other adjustments	0	0	0	0	0
Net other adjustments	0	0	0	0	0
Movement in cash	(53)	1,615	898	0	3,258
Free cash flow to firm (FCFF)	3,341.14	5,149.65	5,810.94	5,193.16	5,351.56
Free cash flow to equity (FCFE)	8,263.77	4,977.52	3,065.75	3,469.09	7,160.63

Per share (THB)

FCFF per share	0.77	1.19	1.34	1.20	1.23
FCFE per share	1.91	1.15	0.71	0.80	1.65
Recurring cash flow per share	0.55	1.13	1.94	2.11	2.17

Balance Sheet (THB m) Year Ending Dec	2019	2020	2021E	2022E	2023E
Tangible fixed assets (gross)	69,391	69,353	71,621	73,888	76,156
Less: Accumulated depreciation	(42,705)	(45,197)	(47,857)	(51,143)	(54,430)
Tangible fixed assets (net)	26,686	24,156	23,764	22,745	21,726
Intangible fixed assets (net)	124	93	93	93	93
Long-term financial assets	-	-	-	-	-
Invest. in associates & subsidiaries	0	0	0	0	0
Cash & equivalents	20	1,635	2,532	2,533	5,791
A/C receivable	7,192	8,515	8,515	8,515	8,515
Inventories	17,856	9,052	9,892	11,597	11,705
Other current assets	456	121	146	172	173
Current assets	25,524	19,323	21,084	22,816	26,183
Other assets	1,960	2,969	2,969	2,969	2,969
Total assets	54,294	46,541	47,910	48,623	50,972
Common equity	32,476	26,427	30,002	32,411	34,645
Minorities etc.	0	0	0	0	0
Total shareholders' equity	32,476	26,427	30,002	32,411	34,645
Long term debt	0	8,857	5,000	0	0
Other long-term liabilities	484	517	517	517	517
Long-term liabilities	484	9,374	5,517	517	517
A/C payable	13,567	7,821	8,547	10,020	10,113
Short term debt	6,819	1,380	2,000	3,500	3,500
Other current liabilities	949	1,539	1,844	2,175	2,197
Current liabilities	21,334	10,740	12,391	15,695	15,810
Total liabilities and shareholders' equity	54,294	46,541	47,910	48,623	50,972
Net working capital	10,989	8,328	8,161	8,088	8,083
Invested capital	39,759	35,546	34,987	33,895	32,871

* Includes convertibles and preferred stock which is being treated as debt

Per share (THB)

Book value per share	7.49	6.09	6.92	7.48	7.99
Tangible book value per share	7.46	6.07	6.90	7.45	7.97

Financial strength

Net debt/equity (%)	20.9	32.6	14.9	3.0	(6.6)
Net debt/total assets (%)	12.5	18.5	9.3	2.0	(4.5)
Current ratio (x)	1.2	1.8	1.7	1.5	1.7
CF interest cover (x)	(7.7)	(49.5)	12.8	18.2	36.8

Valuation	2019	2020	2021E	2022E	2023E
Recurring P/E (x) *	(236.2)	21.4	7.7	7.5	7.2
Recurring P/E @ target price (x) *	(312.7)	28.3	10.2	10.0	9.5
Reported P/E (x)	(15.7)	(7.4)	7.7	7.5	7.2
Dividend yield (%)	1.8	-	7.8	8.8	8.8
Price/book (x)	1.4	1.7	1.5	1.4	1.3
Price/tangible book (x)	1.4	1.7	1.5	1.4	1.3
EV/EBITDA (x) **	(21.8)	17.7	6.0	4.3	3.9
EV/EBITDA @ target price (x) **	(28.0)	22.5	7.8	5.7	5.2
EV/invested capital (x)	1.3	1.5	1.4	1.3	1.3

* Pre-exceptional, pre-goodwill and fully diluted ** EBITDA includes associate income and recurring non-operating income

Sources: Star Petroleum Refining; 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	ICHI	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	SEOIL	SE-ED	SELIC	SENA	SIRI	SIS	SITHAI	SMK	SMPC	SNC
SONIC	SORKON	SPALI	SPI	SPRC	SPVI	SSSC	SST	STA	SPUSCO	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	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	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, CFA, FRM, ERP FSS International Investment Advisory Securities Co., Ltd

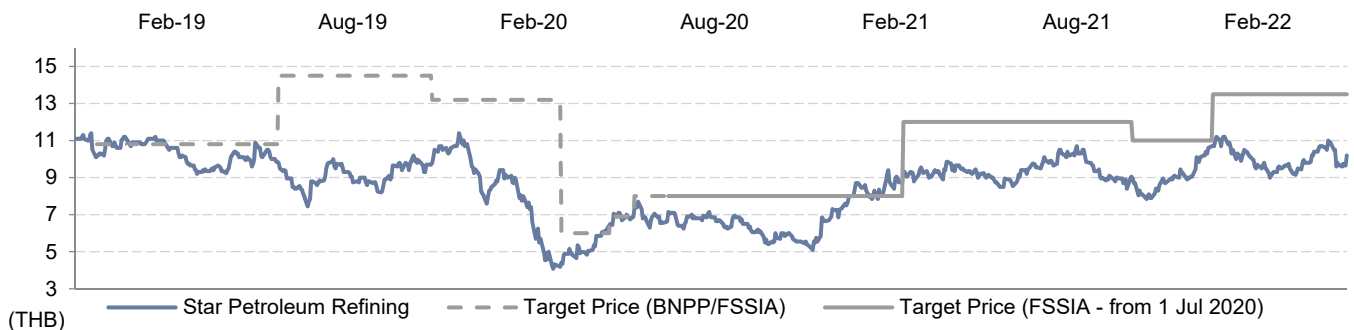
The individual(s) identified above certify(ies) that (i) all views expressed in this report accurately reflect the personal view of the analyst(s) with regard to any and all of the subject securities, companies or issuers mentioned in this report; and (ii) no part of the compensation of the analyst(s)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

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History of change in investment rating and/or target price

Star Petroleum Refining (SPRC TB)



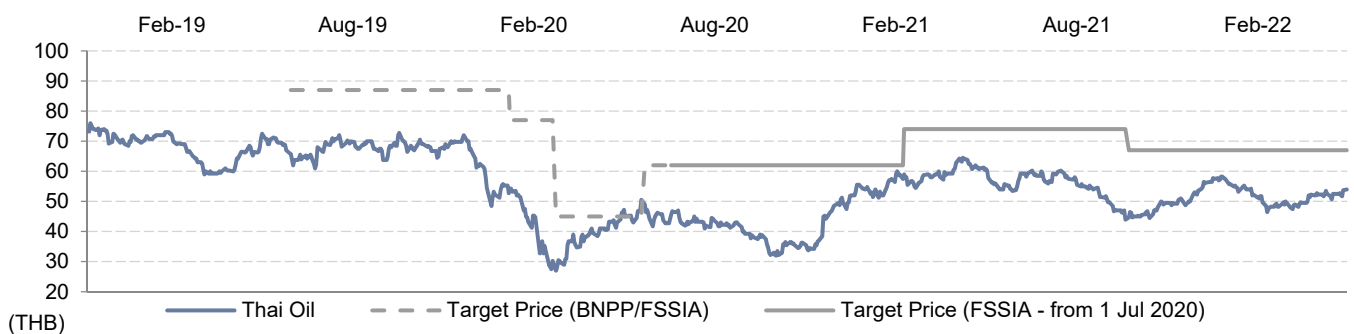
Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
26-Feb-2019	HOLD	10.80	31-Mar-2020	BUY	6.00	18-Jan-2021	BUY	12.00
01-Aug-2019	BUY	14.50	12-May-2020	BUY	6.90	03-Aug-2021	BUY	11.00
11-Dec-2019	BUY	13.20	02-Jun-2020	BUY	8.00	11-Oct-2021	BUY	13.50

Suwat Sinsadok, CFA, FRM, ERP started covering this stock from 18-Jun-2020

Price and TP are in local currency

Source: FSSIA estimates

Thai Oil (TOP TB)



Date	Rating	Target price	Date	Rating	Target price	Date	Rating	Target price
06-Aug-2019	BUY	87.00	23-Mar-2020	BUY	45.00	18-Jan-2021	BUY	74.00
12-Feb-2020	BUY	77.00	08-Jun-2020	BUY	62.00	30-Jul-2021	BUY	67.00

Suwat Sinsadok, CFA, FRM, ERP started covering this stock from 08-Jun-2020

Price and TP are in local currency

Source: FSSIA estimates

Company	Ticker	Price	Rating	Valuation & Risks
Star Petroleum Refining	SPRC TB	THB 10.20	BUY	TP is based on EV/EBITDA. Downside risks are a sharp rise in oil price and weak demand for refined oil products.
Thai Oil	TOP TB	THB 54.00	BUY	Downside risks to our EV/EBITDA-based TP are a sharp rise in oil price and weak demand for refined oil products.

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 07-Feb-2022 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.