

# STAR PETROLEUM REFINING

## THAILAND / ENERGY

# SPRC TB

# BUY

  
 UNCHANGED

## 3Q23 results at first glance

TARGET PRICE	THB11.70
CLOSE	THB7.65
UP/DOWNSIDE	+52.9%
TP vs CONSENSUS	+8.7%

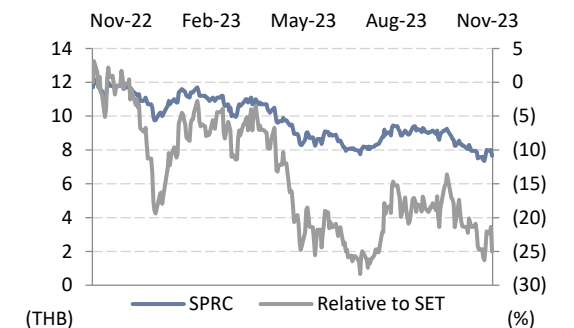
### 3Q23 results in line with estimates

#### Highlights

- 3Q23 net profit is at THB4.2b (a difference of +THB6.3b q-q and +THB9.3b y-y), in line with our estimate.** The improvement was mainly from the spike in GRM due to an increase in mainly middle distillate spreads (i.e. diesel and jet) and a higher stock gain thanks to the higher oil price q-q. This was more than enough to offset the lower utilization rate (80% in 3Q23 vs 89% in 2Q23) or production volume from the scheduled shutdown and maintenance. 3Q23 EBITDA came in at THB6.1b compared to negative EBITDA in 2Q23 and 3Q22.
- Surge in GRM and stock gain.** 3Q23 market GRM was at USD8.36/bbl, improving by USD7.02/bbl q-q and USD2.36/bbl y-y. The stock gain in the quarter was at USD7.99/bbl compared to a stock loss of USD2.79/bbl in 2Q23 and a loss of USD13.34/bbl in 3Q22. As a result, the accounting GRM for the quarter was at USD16.35/bbl, turning around from -USD1.45/bbl in 2Q23 and -USD7.34/bbl in 3Q22.
- Expect weaker earnings in 4Q23 but brighter outlook in 2024.** We estimate that 4Q23 earnings will be significantly softer q-q from the weak petroleum product Dubai spreads, especially from gasoline (USD-8.0/bbl q-q), coupled with higher crude premiums. QTD Singapore GRM is at USD3.87/bbl, which is down from USD9.51/bbl in 2Q23. Nevertheless, we believe the 2024 earnings outlook will be stronger, aided by the reopening of its single-point mooring system.
- Maintain BUY on SPRC with our TP of 11.70/share.**

#### KEY STOCK DATA

YE Dec (THB m)	2022	2023E	2024E	2025E
Revenue	285,264	224,246	315,255	312,961
Net profit	7,674	3,307	4,152	5,065
EPS (THB)	1.77	0.76	0.96	1.17
vs Consensus (%)	-	(19.1)	(18.2)	(12.6)
EBITDA	12,243	7,108	8,337	9,382
Recurring net profit	7,674	3,307	4,152	5,065
Core EPS (THB)	1.77	0.76	0.96	1.17
EPS growth (%)	296.1	(56.9)	25.5	22.0
Core P/E (x)	4.3	10.0	8.0	6.5
Dividend yield (%)	14.5	5.0	6.3	7.6
EV/EBITDA (x)	3.5	6.0	4.7	3.7
Price/book (x)	0.9	0.8	0.8	0.7
Net debt/Equity (%)	24.9	23.2	13.8	3.8
ROE (%)	21.0	8.4	9.9	11.3



Share price performance	1 Month	3 Month	12 Month
Absolute (%)	(7.3)	(13.6)	(37.3)
Relative to country (%)	(5.5)	(7.0)	(27.5)
Mkt cap (USD m)	932		
3m avg. daily turnover (USD m)	7.2		
Free float (%)	39		
Major shareholder	Chevron South Asia Holdings Pte Ltd (61%)		
12m high/low (THB)	12.60/7.20		
Issued shares (m)	4,335.90		

Sources: Bloomberg consensus; FSSIA estimates



#### Kwanwaree Apichartsatporn

Fundamental Investment Analyst on Securities; License no. 117055  
 kwanwaree.a@fssia.com, +66 2646 9968

## Financial performance highlights

### Exhibit 1: 3Q23 results summary

	3Q22	2Q23	3Q23			2023E	% of 2023E
	(THB m)	(THB m)	(THB m)	(q-q%)	(y-y%)	(THB m)	(%)
Revenue	76,146	53,883	61,107	13.4	(19.7)	224,246	78
Operating costs	(81,053)	(55,665)	(54,959)	(1.3)	(32.2)	(217,137)	
EBITDA	(4,907)	(1,782)	6,148	>100%	>100%	7,108	92
<i>EBITDA margin (%)</i>	(6.4)	(3.3)	10.1	<i>nm</i>	<i>nm</i>	3.2	
Depn & amort.	(696)	(624)	(668)	7.0	(4.0)	(2,603)	
EBIT	(5,603)	(2,406)	5,480	>100%	>100%	4,506	103
Interest expense	(77)	(106)	(56)	(47.2)	(27.2)	(296)	
Other income	16	15	40	168.9	144.8	0	
Exceptionals	(620)	(134)	(163)	22.0	(73.7)	(300)	
Pretax profit	(6,284)	(2,631)	5,301	(301.5)	(184.4)	4,090	103
Tax	1,257	526	(1,056)	(300.7)	(184.1)	(783)	
<i>Tax rate (%)</i>	20	20	20	<i>nm</i>	<i>nm</i>	19	
Minority interests	0	0	0	<i>nm</i>	<i>nm</i>	0	
Net profit	(5,027)	(2,105)	4,245	>100%	>100%	3,307	102

Sources: SPRC; FSSIA estimates

### Exhibit 2: Quarterly key earnings drivers

	3Q22	2Q23	3Q23	q-q	y-y
	(USD/bbl)	(USD/bbl)	(USD/bbl)	(USD/bbl)	(USD/bbl)
Marketing GRM	6.00	1.34	8.36	7.02	2.36
Stock gain/(loss)	(13.34)	(2.79)	7.99	10.78	21.33
Accounting GRM	(7.34)	(1.45)	16.35	17.80	23.69
Crude premium	10.53	2.80	1.76	(1.04)	(8.77)
Gasoline-Dubai	13.07	16.54	18.97	2.43	5.90
Diesel-Dubai	35.22	14.54	26.93	12.39	(8.29)
Utilization rate (%)	87.5	88.9	79.7	(9.24)	(7.84)

Source: SPRC

## Financial Statements

### Star Petroleum Refining

Profit and Loss (THB m) Year Ending Dec	2021	2022	2023E	2024E	2025E
Revenue	172,484	285,264	224,246	315,255	312,961
Cost of goods sold	(168,407)	(272,833)	(217,546)	(306,956)	(303,640)
<b>Gross profit</b>	<b>4,077</b>	<b>12,432</b>	<b>6,700</b>	<b>8,298</b>	<b>9,321</b>
Other operating income	-	-	-	-	-
Operating costs	(749)	(2,791)	(2,194)	(3,085)	(3,062)
<b>Operating EBITDA</b>	<b>5,972</b>	<b>12,243</b>	<b>7,108</b>	<b>8,337</b>	<b>9,382</b>
Depreciation	(2,644)	(2,603)	(2,603)	(3,123)	(3,123)
Goodwill amortisation	0	0	0	0	0
<b>Operating EBIT</b>	<b>3,328</b>	<b>9,640</b>	<b>4,506</b>	<b>5,214</b>	<b>6,258</b>
Net financing costs	147	60	(596)	(255)	(165)
Associates	-	-	-	-	-
Recurring non-operating income	(371)	(106)	180	185	191
Non-recurring items	2,809	0	0	0	0
<b>Profit before tax</b>	<b>5,913</b>	<b>9,594</b>	<b>4,090</b>	<b>5,144</b>	<b>6,284</b>
Tax	(1,166)	(1,921)	(783)	(992)	(1,220)
<b>Profit after tax</b>	<b>4,746</b>	<b>7,674</b>	<b>3,307</b>	<b>4,152</b>	<b>5,065</b>
Minority interests	0	0	0	0	0
Preferred dividends	0	0	0	0	0
Other items	-	-	-	-	-
<b>Reported net profit</b>	<b>4,746</b>	<b>7,674</b>	<b>3,307</b>	<b>4,152</b>	<b>5,065</b>
<b>Non-recurring items &amp; goodwill (net)</b>	<b>(2,809)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Recurring net profit</b>	<b>1,937</b>	<b>7,674</b>	<b>3,307</b>	<b>4,152</b>	<b>5,065</b>
<b>Per share (THB)</b>					
Recurring EPS *	0.45	1.77	0.76	0.96	1.17
Reported EPS	1.09	1.77	0.76	0.96	1.17
DPS	0.18	1.11	0.38	0.48	0.58
Diluted shares (used to calculate per share data)	4,336	4,336	4,336	4,336	4,336
<b>Growth</b>					
Revenue (%)	32.5	65.4	(21.4)	40.6	(0.7)
Operating EBITDA (%)	99.9	105.0	(41.9)	17.3	12.5
Operating EBIT (%)	2,038.5	189.7	(53.3)	15.7	20.0
Recurring EPS (%)	(6.3)	296.1	(56.9)	25.5	22.0
Reported EPS (%)	nm	61.7	(56.9)	25.5	22.0
<b>Operating performance</b>					
Gross margin inc. depreciation (%)	2.4	4.4	3.0	2.6	3.0
Gross margin exc. depreciation (%)	3.9	5.3	4.1	3.6	4.0
Operating EBITDA margin (%)	3.5	4.3	3.2	2.6	3.0
Operating EBIT margin (%)	1.9	3.4	2.0	1.7	2.0
Net margin (%)	1.1	2.7	1.5	1.3	1.6
Effective tax rate (%)	19.7	20.0	20.0	20.0	20.0
Dividend payout on recurring profit (%)	39.9	62.7	50.0	50.0	50.0
Interest cover (X)	(20.1)	(158.8)	7.9	21.2	39.1
Inventory days	28.1	27.2	36.2	26.4	30.2
Debtor days	23.0	17.6	23.3	16.6	16.7
Creditor days	24.0	18.1	19.5	14.7	17.4
Operating ROIC (%)	(1.9)	(4.5)	(1.9)	(2.2)	(2.6)
ROIC (%)	(1.6)	(4.3)	(1.9)	(2.1)	(2.6)
ROE (%)	6.4	21.0	8.4	9.9	11.3
ROA (%)	3.7	12.6	5.1	6.3	7.5
* Pre exceptional, pre-goodwill and fully diluted					
<b>Revenue by Division (THB m)</b>					
	2021	2022	2023E	2024E	2025E
Diesel	74,023	125,384	96,331	97,182	96,102
Gasoline	57,584	81,205	64,260	62,285	62,114
Jet Fuel	2,927	17,192	13,400	13,489	13,324
Light Naphtha	7,270	10,287	8,622	9,586	9,560

Sources: Star Petroleum Refining; FSSIA estimates

## Financial Statements

### Star Petroleum Refining

Cash Flow (THB m) Year Ending Dec	2021	2022	2023E	2024E	2025E
Recurring net profit	1,937	7,674	3,307	4,152	5,065
Depreciation	2,644	2,603	2,603	3,123	3,123
Associates & minorities	-	-	-	-	-
Other non-cash items	-	-	-	-	-
Change in working capital	(6,107)	(9,574)	1,968	(1,453)	105
<b>Cash flow from operations</b>	<b>(1,526)</b>	<b>703</b>	<b>7,878</b>	<b>5,822</b>	<b>8,293</b>
Capex - maintenance	(2,602)	(2,557)	(2,603)	(2,603)	(2,603)
Capex - new investment	(104)	(1,438)	(3,809)	(1,232)	(1,082)
Net acquisitions & disposals	0	0	0	0	0
Other investments (net)	1,677	(792)	180	368	191
<b>Cash flow from investing</b>	<b>(1,030)</b>	<b>(4,787)</b>	<b>(6,232)</b>	<b>(3,467)</b>	<b>(3,494)</b>
Dividends paid	0	(4,936)	(1,518)	(1,220)	(2,509)
Equity finance	0	0	0	0	0
Debt finance	(2,183)	1,677	269	(3,000)	(3,000)
Other financing cash flows	6,049	4,475	120	2,279	1,973
<b>Cash flow from financing</b>	<b>3,866</b>	<b>1,215</b>	<b>(1,128)</b>	<b>(1,941)</b>	<b>(3,536)</b>
Non-recurring cash flows	-	-	-	-	-
Other adjustments	0	0	0	0	0
<b>Net other adjustments</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Movement in cash</b>	<b>1,310</b>	<b>(2,869)</b>	<b>519</b>	<b>414</b>	<b>1,263</b>
Free cash flow to firm (FCFF)	(2,343.71)	(3,767.76)	1,942.42	2,609.72	4,964.56
Free cash flow to equity (FCFE)	1,310.00	2,067.27	2,036.10	1,633.72	3,772.56

#### Per share (THB)

FCFF per share	(0.54)	(0.87)	0.45	0.60	1.14
FCFE per share	0.30	0.48	0.47	0.38	0.87
Recurring cash flow per share	1.06	2.37	1.36	1.68	1.89

Balance Sheet (THB m) Year Ending Dec	2021	2022	2023E	2024E	2025E
Tangible fixed assets (gross)	77,210	80,007	86,419	87,269	88,269
Less: Accumulated depreciation	(52,992)	(57,271)	(59,874)	(62,477)	(65,079)
<b>Tangible fixed assets (net)</b>	<b>24,219</b>	<b>22,735</b>	<b>26,545</b>	<b>24,792</b>	<b>23,189</b>
<b>Intangible fixed assets (net)</b>	<b>93</b>	<b>113</b>	<b>113</b>	<b>113</b>	<b>113</b>
Long-term financial assets	-	-	-	-	-
Invest. in associates & subsidiaries	0	0	0	0	0
Cash & equivalents	2,945	76	594	1,007	2,271
A/C receivable	13,219	14,328	14,328	14,328	14,328
Inventories	16,486	23,762	18,901	24,973	24,700
Other current assets	81	92	72	102	101
<b>Current assets</b>	<b>32,731</b>	<b>38,258</b>	<b>33,895</b>	<b>40,409</b>	<b>41,400</b>
Other assets	1,683	2,182	2,182	2,000	2,000
<b>Total assets</b>	<b>58,726</b>	<b>63,288</b>	<b>62,735</b>	<b>67,314</b>	<b>66,702</b>
Common equity	34,371	38,707	40,497	43,428	45,984
Minorities etc.	0	0	0	0	0
<b>Total shareholders' equity</b>	<b>34,371</b>	<b>38,707</b>	<b>40,497</b>	<b>43,428</b>	<b>45,984</b>
Long term debt	3,374	0	7,000	6,000	3,000
Other long-term liabilities	950	677	677	677	677
<b>Long-term liabilities</b>	<b>4,324</b>	<b>677</b>	<b>7,677</b>	<b>6,677</b>	<b>3,677</b>
A/C payable	13,961	12,780	10,166	14,369	14,213
Short term debt	4,680	9,731	3,000	1,000	1,000
Other current liabilities	1,390	1,393	1,095	1,540	1,528
<b>Current liabilities</b>	<b>20,031</b>	<b>23,904</b>	<b>14,261</b>	<b>16,909</b>	<b>16,741</b>
<b>Total liabilities and shareholders' equity</b>	<b>58,726</b>	<b>63,288</b>	<b>62,435</b>	<b>67,014</b>	<b>66,402</b>
Net working capital	14,435	24,009	22,040	23,493	23,388
Invested capital	40,430	49,039	50,880	50,398	48,690

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

#### Per share (THB)

Book value per share	7.93	8.93	9.34	10.02	10.61
Tangible book value per share	7.91	8.90	9.31	9.99	10.58

#### Financial strength

Net debt/equity (%)	14.9	24.9	23.2	13.8	3.8
Net debt/total assets (%)	8.7	15.3	15.0	8.9	2.6
Current ratio (x)	1.6	1.6	2.4	2.4	2.5
CF interest cover (x)	(8.6)	(57.4)	10.8	12.2	30.4

Valuation	2021	2022	2023E	2024E	2025E
<b>Recurring P/E (x) *</b>	<b>17.1</b>	<b>4.3</b>	<b>10.0</b>	<b>8.0</b>	<b>6.5</b>
<b>Recurring P/E @ target price (x) *</b>	<b>26.2</b>	<b>6.6</b>	<b>15.3</b>	<b>12.2</b>	<b>10.0</b>
Reported P/E (x)	7.0	4.3	10.0	8.0	6.5
Dividend yield (%)	2.3	14.5	5.0	6.3	7.6
Price/book (x)	1.0	0.9	0.8	0.8	0.7
Price/tangible book (x)	1.0	0.9	0.8	0.8	0.7
EV/EBITDA (x) **	6.4	3.5	6.0	4.7	3.7
EV/EBITDA @ target price (x) **	9.3	4.9	8.5	6.8	5.6
EV/invested capital (x)	0.9	0.9	0.8	0.8	0.7

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

Sources: Star Petroleum Refining; FSSIA estimates

# Star Petroleum Refining (SPRC TB)

**FSSIA ESG rating**

**44.50 / 100**
**Exhibit 3: FSSIA ESG score implication**

Rating	Score	Implication
★★★★★	>79-100	Leading its industry peers in managing the most significant ESG risks which not only better cost efficiency but also lead to higher profitability.
★★★★	>59-79	A mixed track record of managing the most significant ESG risks and opportunities relative to industry peers.
★★★	<b>&gt;39-59</b>	<b>Relevant ESG materiality matrix has been constructively addressed, well-managed and incorporated into day-to-day operations, in which targets and achievements are evaluated annually.</b>
★★	>19-39	Relevant ESG materiality matrix has been identified with key management in charge for progress to be followed up on and to provide intensive disclosure. Most targets are conventional and achievable.
★	1-19	The company has adopted the United Nations Sustainable Development Goals (UN SDGs), established sustainability management guidelines and fully complies with regulations or ESG suggested guidance from related organizations such as the SET and SEC.

Sources: FSSIA estimates

**Exhibit 4: ESG – peer comparison**

	FSSIA ESG score	----- Domestic ratings -----						----- Global ratings -----						--- Bloomberg ---	
		DJSI	SET THSI	THSI	CG score	AGM level	Thai CAC	Morningstar ESG risk	ESG Book	MSCI	Moody's	Refinitiv	S&P Global	ESG score	Disclosure score
SET100	69.20	5.34	4.40	4.40	4.76	4.65	3.84	Medium	51.76	BBB	20.87	58.72	63.91	3.72	28.17
Coverage	67.12	5.11	4.15	4.17	4.83	4.71	3.53	Medium	52.04	BB	16.97	56.85	62.09	3.40	31.94
BCP	77.54	--	Y	Y	5.00	5.00	Certified	Medium	56.04	AA	--	79.53	83.00	6.34	69.77
ESSO	30.81	--	--	--	4.00	5.00	--	Severe	46.89	--	--	45.86	17.00	2.06	34.92
IRPC	86.08	Y	Y	Y	5.00	5.00	Certified	Medium	59.62	A	--	80.95	76.00	6.72	--
SPRC	44.50	--	--	--	5.00	5.00	Certified	High	55.86	--	--	36.91	28.00	3.77	54.54
TOP	84.35	Y	Y	Y	5.00	5.00	Certified	Medium	52.10	BBB	38.00	75.83	88.00	6.81	--

Sources: [SETTRADE.com](https://www.settrade.com); FSSIA's compilation
**Exhibit 5: ESG score by Bloomberg**

FY ending Dec 31	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
<b>ESG financial materiality scores - ESG score</b>	—	—	—	4.18	3.77
BESG environmental pillar score	—	—	—	2.70	2.03
BESG social pillar score	—	—	—	5.62	5.27
BESG governance pillar score	—	—	—	5.59	5.76
<b>ESG disclosure score</b>	<b>54.20</b>	<b>53.69</b>	<b>55.75</b>	<b>54.54</b>	<b>54.54</b>
Environmental disclosure score	37.93	37.93	37.93	37.93	37.93
Social disclosure score	40.96	39.42	45.62	41.99	41.99
Governance disclosure score	83.59	83.59	83.59	83.59	83.59
<b>Environmental</b>					
Emissions reduction initiatives	Yes	Yes	Yes	Yes	Yes
Climate change policy	Yes	Yes	Yes	Yes	Yes
Climate change opportunities discussed	No	No	No	No	No
Risks of climate change discussed	No	No	No	No	No
GHG scope 1	1,212	1,129	1,328	1,264	1,316
GHG scope 2 location-based	2	2	4	2	4
GHG Scope 3	—	—	—	—	—
Carbon per unit of production	0.15	0.17	0.19	0.19	0.17
Biodiversity policy	No	No	No	No	No
Energy efficiency policy	Yes	Yes	Yes	Yes	Yes
Total energy consumption	5,525	4,758	5,390	5,221	5,476
Renewable energy use	—	—	—	—	—
Electricity used	7	5	20	6	20
Fuel used - natural gas	239,550	221,438	221,622	219,433	243,955

Sources: Bloomberg; FSSIA's compilation

**Exhibit 6: ESG score by Bloomberg (cont.)**

<b>FY ending Dec 31</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
Fuel used - crude oil/diesel	No	No	No	No	No
Waste reduction policy	Yes	Yes	Yes	Yes	Yes
Hazardous waste	15	18	13	8	8
Total waste	18	18	14	8	8
Waste recycled	16	18	14	8	8
Waste sent to landfills	0.01	0.01	0.01	0.00	0.00
Environmental supply chain management	No	No	No	No	No
Water policy	Yes	Yes	Yes	Yes	Yes
Water consumption	—	—	—	—	—
<b>Social</b>					
Human rights policy	Yes	Yes	Yes	Yes	Yes
Policy against child labor	No	No	No	No	No
Quality assurance and recall policy	Yes	Yes	Yes	Yes	Yes
Consumer data protection policy	No	Yes	Yes	Yes	Yes
Equal opportunity policy	Yes	Yes	Yes	Yes	Yes
Gender pay gap breakout	No	No	No	No	No
Pct women in workforce	23.79	24.25	24.00	23.05	25.00
Pct disabled in workforce	—	—	—	—	—
Business ethics policy	Yes	Yes	Yes	Yes	Yes
Anti-bribery ethics policy	Yes	Yes	Yes	Yes	Yes
Health and safety policy	Yes	Yes	Yes	Yes	Yes
Lost time incident rate - employees	0.00	0.00	0.00	0.00	0.00
Total recordable incident rate - employees	—	—	0.00	—	—
Training policy	Yes	Yes	Yes	Yes	Yes
Fair remuneration policy	No	No	No	No	No
Number of employees – CSR	496.00	503.00	479.00	499.00	548.00
Employee turnover pct	1.97	0.85	1.30	1.80	2.20
Total hours spent by firm - employee training	26,288.00	22,132.00	11,496.00	10,978.00	19,180.00
Social supply chain management	No	No	No	No	No
<b>Governance</b>					
<b>Board size</b>	<b>7</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>7</b>
<b>No. of independent directors (ID)</b>	<b>3</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>3</b>
No. of women on board	1	2	2	1	1
No. of non-executive directors on board	6	7	7	7	6
Company conducts board evaluations	Yes	Yes	Yes	Yes	Yes
No. of board meetings for the year	5	6	5	6	6
Board meeting attendance pct	100	93	100	98	91
Board duration (years)	3	3	3	3	3
Director share ownership guidelines	No	No	No	No	No
Age of the youngest director	44	45	41	43	44
Age of the oldest director	72	73	74	75	76
<b>No. of executives / company managers</b>	<b>14</b>	<b>15</b>	<b>14</b>	<b>14</b>	<b>14</b>
No. of female executives	3	4	3	3	5
Executive share ownership guidelines	No	No	No	No	No
<b>Size of audit committee</b>	<b>3</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>3</b>
No. of ID on audit committee	3	4	4	4	3
Audit committee meetings	4	4	4	4	6
Audit meeting attendance %	100	100	100	100	82
<b>Size of compensation committee</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>3</b>
No. of ID on compensation committee	2	2	2	2	1
No. of compensation committee meetings	4	3	3	4	2
Compensation meeting attendance %	100	100	100	100	75
<b>Size of nomination committee</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>3</b>
No. of nomination committee meetings	4	3	3	4	2
Nomination meeting attendance %	100	100	100	100	75
<b>Sustainability governance</b>					
Verification type	No	No	No	No	No

Sources: Bloomberg; FSSIA's compilation

## Disclaimer for ESG scoring

ESG score	Methodology	Rating																			
The Dow Jones Sustainability Indices (DJSI) By S&P Global	The DJSI World applies a transparent, rules-based component selection process based on the companies' Total Sustainability Scores resulting from the annual S&P Global Corporate Sustainability Assessment (CSA). Only the top-ranked companies within each industry are selected for inclusion.	Be a member and invited to the annual S&P Global Corporate Sustainability Assessment (CSA) for DJSI. Companies with an S&P Global ESG Score of less than 45% of the S&P Global ESG Score of the highest scoring company are disqualified. The constituents of the DJSI indices are selected from the Eligible Universe.																			
Sustainability Investment List (THSI) by The Stock Exchange of Thailand (SET)	THSI quantifies responsibility in Environmental and Social issues by managing business with transparency in Governance, updated annually. Candidates must pass the preemptive criteria, with two crucial conditions: 1) no irregular trading of the board members and executives; and 2) free float of >150 shareholders, and combined holding must be >15% of paid-up capital. Some key disqualifying criteria include: 1) CG score of below 70%; 2) independent directors and free float violation; 3) executives' wrongdoing related to CG, social & environmental impacts; 4) equity in negative territory; and 5) earnings in red for > 3 years in the last 5 years.	To be eligible for <b>THSI inclusion</b> , verified data must be scored at a minimum of 50% for each indicator, unless the company is a part of DJSI during the assessment year. The scoring will be fairly weighted against the nature of the relevant industry and materiality. <b>SETTHSI Index</b> is extended from the THSI companies whose 1) market capitalization > THB5b (~USD150b); 2) free float >20%; and 3) liquidity >0.5% of paid-up capital for at least 9 out of 12 months. The SETTHSI Index is a market capitalisation-weighted index, cap 5% quarterly weight at maximum, and no cap for number of stocks.																			
<b>CG Score</b> by Thai Institute of Directors Association (Thai IOD)	An indicator of CG strength in sustainable development, measured annually by the Thai IOD, with support from the Stock Exchange of Thailand (SET). The results are from the perspective of a third party, not an evaluation of operations.	Scores are rated in six categories: 5 for Excellent (90-100), 4 for Very Good (80-89), 3 for Good (70-79), 2 for Fair (60-69), 1 for Pass (60-69), and not rated for scores below 50. Weightings include: 1) the rights; 2) and equitable treatment of shareholders (weight 25% combined); 3) the role of stakeholders (25%); 4) disclosure & transparency (15%); and 5) board responsibilities (35%).																			
<b>AGM level</b> By Thai Investors Association (TIA) with support from the SEC	It quantifies the extent to which shareholders' rights and equitable treatment are incorporated into business operations and information is transparent and sufficiently disclosed. All form important elements of two out of five the CG components to be evaluated annually. The assessment criteria cover AGM procedures before the meeting (45%), at the meeting date (45%), and after the meeting (10%). <i>(The first assesses 1) advance circulation of sufficient information for voting; and 2) facilitating how voting rights can be exercised. The second assesses 1) the ease of attending meetings; 2) transparency and verifiability; and 3) openness for Q&amp;A. The third involves the meeting minutes that should contain discussion issues, resolutions and voting results.)</i>	The scores are classified into four categories: 5 for Excellent (100), 4 for Very Good (90-99), 3 for Fair (80-89), and not rated for scores below 79.																			
<b>Thai CAC</b> By Thai Private Sector Collective Action Against Corruption (CAC)	The core elements of the Checklist include corruption risk assessment, establishment of key controls, and the monitoring and developing of policies. The Certification is good for three years. <i>(Companies deciding to become a CAC certified member start by submitting a Declaration of Intent to kick off an 18-month deadline to submit the CAC Checklist for Certification, including risk assessment, in place of policy and control, training of managers and employees, establishment of whistleblowing channels, and communication of policies to all stakeholders.)</i>	The document will be reviewed by a committee of nine professionals. A passed Checklist will move for granting certification by the CAC Council approvals whose members are twelve highly respected individuals in professionalism and ethical achievements.																			
<b>Morningstar Sustainalytics</b>	The Sustainalytics' ESG risk rating provides an overall company score based on an assessment of how much of a company's exposure to ESG risk is unmanaged. <i>Sources to be reviewed include corporate publications and regulatory filings, news and other media, NGO reports/websites, multi-sector information, company feedback, ESG controversies, issuer feedback on draft ESG reports, and quality &amp; peer reviews.</i>	A company's ESG risk rating score is the sum of unmanaged risk. The more risk is unmanaged, the higher ESG risk is scored. <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>NEGL</th> <th>Low</th> <th>Medium</th> <th>High</th> <th>Severe</th> </tr> </thead> <tbody> <tr> <td>0-10</td> <td>10-20</td> <td>20-30</td> <td>30-40</td> <td>40+</td> </tr> </tbody> </table>	NEGL	Low	Medium	High	Severe	0-10	10-20	20-30	30-40	40+									
NEGL	Low	Medium	High	Severe																	
0-10	10-20	20-30	30-40	40+																	
<b>ESG Book</b>	The ESG score identifies sustainable companies that are better positioned to outperform over the long term. The methodology considers the principle of financial materiality including information that significantly helps explain future risk-adjusted performance. Materiality is applied by over-weighting features with higher materiality and rebalancing these weights on a rolling quarterly basis.	The total ESG score is calculated as a weighted sum of the features scores using materiality-based weights. The score is scaled between 0 and 100 with higher scores indicating better performance.																			
<b>MSCI</b>	MSCI ESG ratings aim to measure a company's management of financially relevant ESG risks and opportunities. It uses a rules-based methodology to identify industry leaders and laggards according to their exposure to ESG risks and how well they manage those risks relative to peers. <table border="1" style="margin-left: auto; margin-right: auto;"> <tbody> <tr> <td><b>AAA</b></td> <td>8.571-10.000</td> <td rowspan="3"><b>Leader:</b></td> <td rowspan="3">leading its industry in managing the most significant ESG risks and opportunities</td> </tr> <tr> <td><b>AA</b></td> <td>7.143-8.570</td> </tr> <tr> <td><b>A</b></td> <td>5.714-7.142</td> </tr> <tr> <td><b>BBB</b></td> <td>4.286-5.713</td> <td rowspan="3"><b>Average:</b></td> <td rowspan="3">a mixed or unexceptional track record of managing the most significant ESG risks and opportunities relative to industry peers</td> </tr> <tr> <td><b>BB</b></td> <td>2.857-4.285</td> </tr> <tr> <td><b>B</b></td> <td>1.429-2.856</td> </tr> <tr> <td><b>CCC</b></td> <td>0.000-1.428</td> <td><b>Laggard:</b></td> <td>lagging its industry based on its high exposure and failure to manage significant ESG risks</td> </tr> </tbody> </table>	<b>AAA</b>	8.571-10.000	<b>Leader:</b>	leading its industry in managing the most significant ESG risks and opportunities	<b>AA</b>	7.143-8.570	<b>A</b>	5.714-7.142	<b>BBB</b>	4.286-5.713	<b>Average:</b>	a mixed or unexceptional track record of managing the most significant ESG risks and opportunities relative to industry peers	<b>BB</b>	2.857-4.285	<b>B</b>	1.429-2.856	<b>CCC</b>	0.000-1.428	<b>Laggard:</b>	lagging its industry based on its high exposure and failure to manage significant ESG risks
<b>AAA</b>	8.571-10.000	<b>Leader:</b>	leading its industry in managing the most significant ESG risks and opportunities																		
<b>AA</b>	7.143-8.570																				
<b>A</b>	5.714-7.142																				
<b>BBB</b>	4.286-5.713	<b>Average:</b>	a mixed or unexceptional track record of managing the most significant ESG risks and opportunities relative to industry peers																		
<b>BB</b>	2.857-4.285																				
<b>B</b>	1.429-2.856																				
<b>CCC</b>	0.000-1.428	<b>Laggard:</b>	lagging its industry based on its high exposure and failure to manage significant ESG risks																		
<b>Moody's ESG solutions</b>	Moody's assesses the degree to which companies take into account ESG objectives in the definition and implementation of their strategy policies. It believes that a company integrating ESG factors into its business model and relatively outperforming its peers is better positioned to mitigate risks and create sustainable value for shareholders over the medium to long term.																				
<b>Refinitiv ESG rating</b>	Designed to transparently and objectively measure a company's relative ESG performance, commitment and effectiveness across 10 main themes, based on publicly available and auditable data. The score ranges from 0 to 100 on relative ESG performance and insufficient degree of transparency in reporting material ESG data publicly. <i>(Score ratings are 0 to 25 = poor; &gt;25 to 50 = satisfactory; &gt;50 to 75 = good; and &gt;75 to 100 = excellent.)</i>																				
<b>S&amp;P Global</b>	The S&P Global ESG Score is a relative score measuring a company's performance on and management of ESG risks, opportunities, and impacts compared to its peers within the same industry classification. The score ranges from 0 to 100.																				
<b>Bloomberg</b>	ESG Score	Bloomberg score evaluating the company's aggregated Environmental, Social and Governance (ESG) performance. The score is based on Bloomberg's view of ESG financial materiality. The score is a weighted generalized mean (power mean) of Pillar Scores, where the weights are determined by the pillar priority ranking. Values range from 0 to 10; 10 is the best.																			
Bloomberg	ESG Disclosure Score	Disclosure of a company's ESG used for Bloomberg ESG score. The score ranges from 0 for none to 100 for disclosure of every data point, measuring the amount of ESG data reported publicly, and not the performance on any data point.																			

Source: FSSIA's compilation

## GENERAL DISCLAIMER

### ANALYST(S) CERTIFICATION

#### Kwanwaree Apichartsatoporn FSS International Investment Advisory Securities Co., Ltd

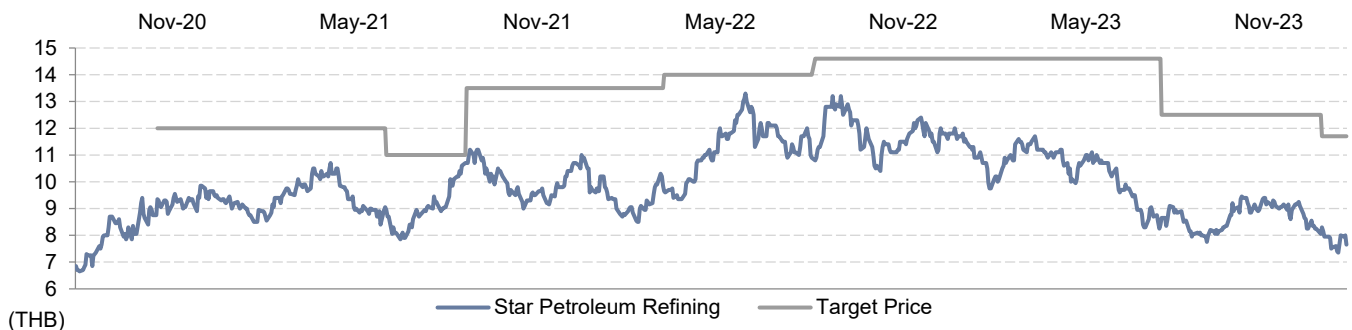
The individual(s) identified above certify(ies) that (i) all views expressed in this report accurately reflect the personal view of the analyst(s) with regard to any and all of the subject securities, companies or issuers mentioned in this report; and (ii) no part of the compensation of the analyst(s)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

This report has been prepared by FSS International Investment Advisory Securities Company Limited (FSSIA). The information herein has been obtained from sources believed to be reliable and accurate; however FSSIA makes no representation as to the accuracy and completeness of such information. Information and opinions expressed herein are subject to change without notice. FSSIA has no intention to solicit investors to buy or sell any security in this report. In addition, FSSIA does not guarantee returns nor price of the securities described in the report nor accept any liability for any loss or damage of any kind arising out of the use of such information or opinions in this report. Investors should study this report carefully in making investment decisions. All rights are reserved.

This report may not be reproduced, distributed or published by any person in any manner for any purpose without permission of FSSIA. Investment in securities has risks. Investors are advised to consider carefully before making investment decisions.

### 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
18-Jan-2021	BUY	12.00	30-Mar-2022	BUY	14.00	17-Oct-2023	BUY	11.70
03-Aug-2021	BUY	11.00	05-Aug-2022	BUY	14.60			
11-Oct-2021	BUY	13.50	01-Jun-2023	BUY	12.50			

Kwanwaree Apichartsatoporn started covering this stock from 01-Jun-2023

Price and TP are in local currency

Source: FSSIA estimates

Company	Ticker	Price	Rating	Valuation & Risks
Star Petroleum Refining	SPRC TB	THB 7.65	BUY	Downside risks to our P/BV-based TP are weak demand for refined oil products, a lower crude oil price and GRM, the delay of the SPM reopening, and lawsuit risk related to the oil spill off Rayong in 2022.

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.

All share prices are as at market close on 08-Nov-2023 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.