



Management's Discussion and  
Analysis Of Financial Condition and  
Result Of Operations

For Quarter 3/2019 and  
9 months ended September 2019

"One family...  
Fueling the future of Thailand"

**SPRC**

Star Petroleum Refining Public Company Limited

## 1) Company's Operating Result

(US\$ Million)	Q3/19	Q2/19	+ / (-)	Q3/18	+ / (-)	9M/19	9M/18	+ / (-)
Total Revenue	1,435	1,553	(118)	1,571	(136)	4,479	4,781	(302)
EBITDA	(17)	(6)	(12)	71	(89)	63	305	(242)
EBIT	(38)	(26)	(12)	50	(88)	1	242	(241)
Gain on foreign exchange	7	16	(9)	16	(9)	34	23	10
Net income (Loss)	(30)	(19)	(11)	38	(68)	4	191	(187)
Net income (Loss) (US\$ per share)	(0.01)	(0.00)	(0.00)	0.01	(0.02)	0.00	0.04	(0.04)
Accounting gross refining margin (US\$/barrel) <sup>(1)</sup>	3.11	2.29	0.82	6.34	(3.23)	4.51	8.51	(4.00)
Market gross refining margin (US\$/barrel) <sup>(2)</sup>	5.07	2.57	2.50	5.05	0.02	3.54	6.12	(2.58)

Crude intake (thousand barrels/day)	144.7	151.5	(6.6)	143.3	1.6	153.3	157.7	(4.5)
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(Baht Million)	Q3/19	Q2/19	+ / (-)	Q3/18	+ / (-)	9M/19	9M/18	+ / (-)
Total Revenue	44,307	49,332	(5,026)	52,050	(7,743)	141,036	154,492	(13,455)
EBITDA	(538)	(174)	(364)	2,359	(2,897)	2,022	9,807	(7,785)
EBIT	(1,166)	(822)	(345)	1,662	(2,829)	80	7,764	(7,684)
Gain on foreign exchange	227	512	(285)	526	(299)	1,066	757	309
Net income (Loss)	(925)	(599)	(325)	1,248	(2,173)	166	6,144	(5,978)
Net income (Loss) (Baht per share)	(0.21)	(0.14)	(0.08)	0.29	(0.50)	0.04	1.42	(1.38)

<sup>(1)</sup> margin includes inventory gain/loss based on weighted average inventory cost.

<sup>(2)</sup> margin is calculated based on current replacement cost.

Exchange rate (Baht/US\$)	Q3/19	Q2/19	+ / (-)	Q3/18	+ / (-)	9M/19	9M/18	+ / (-)
Average FX	30.88	31.76	(0.88)	33.15	(2.26)	31.47	32.33	(0.86)
Closing FX	30.77	30.92	(0.15)	32.58	(1.81)	30.77	32.58	(1.81)

In Q3/19 SPRC financial performance was negatively impacted from low throughput, low refining margin, stock loss and also expenses relating to the planned turnaround in Q4/19. SPRC crude intake in Q3/19 was 144.7 thousand barrels per day, or 88% of the refining capacity which is lower than Q2/19 due to the optimization of economic returns and the end of run plant condition of some process units. The reduction in crude intake contributed to lower sale revenue during the quarter. Accounting gross refining margin in Q3/19 was higher than Q2/19 but still relatively low at US\$3.11/bbl due to the stock loss resulting from the declining in oil price during the quarter. These unfavorable factors resulted to negative EBITDA, EBIT and net income of SPRC in Q3/19. However if excluding stock gain (loss), market refining margin has improved from US\$2.57/bbl in Q2/19 to US\$5.07/bbl in Q3/19 due to the recovery of the refinery product prices over Dubai, especially Mogas and Jet. Favorable factor to earning in this quarter is the exchange gain of US\$7 million (Baht 227 million) due to the continuing appreciation of Baht against U.S. Dollar, but still lower than exchange gain in Q2/19.

Compared Q3/19 with Q3/18, total sale revenue was lower mainly as a result of lower product price while sale volume was almost the same and crude intake was slightly higher. Market refining margin in Q3/19 approximated the same quarter of last year at around US\$5/bbl. However EBITDA and NIAT for Q3/19 were negative while they were positive in Q3/18. Because of the declining in oil price in Q3/19, EBITDA and NIAT in Q3/19 were adversely impacted from stock loss while there was stock gain in Q3/18,

and also from the expenses relating to the planned turnaround. There was exchange gain from Baht appreciation in Q3/19 but still lower than Q2/19.

Compared 9M/19 with 9M/18, crude intake and sale revenue in 9M/19 were lower than 9M/18. Crude run was averaged at 153.3 thousand barrels per day, or 93% utilization, decreased from 157.7 thousand barrels per day in 9M/18, impacted from the reduction in refinery unit's throughput to optimize the refinery run during low refining margin in the market and the end of run condition of some process units. EBITDA and net income for 9M/19 decreased from 9M/18 which were impacted from low accounting refining margin, despite a slight stock gain, weak market refining margin and planned turnaround expenses. Excluding stock gain, market gross refining margin in 9M/19 was low at US\$3.54/bbl comparing to US\$6.12/bbl in 9M/18 due to weak demand and excess supply in first half of this year. However, the appreciation of Baht in 2019 resulted to exchange gain in 9M/19 and favorably supported the earnings.

## 2) Market Condition

MOPS Pricing	Q3/19	Q2/19	+/(-)	Q3/18	+/(-)
Dubai crude oil	61.16	67.38	-6.23	74.25	-13.09
Light Naphtha (MOPJ)	54.87	60.08	-5.21	74.08	-19.21
Gasoline (premium)	72.80	74.89	-2.09	85.80	-13.00
Jet Fuel	76.90	79.60	-2.69	88.73	-11.83
Diesel	76.50	79.76	-3.26	88.63	-12.13
Fuel Oil	62.08	65.08	-3.00	71.74	-9.66

Spread over Dubai	Q3/19	Q2/19	+/(-)	Q3/18	+/(-)
Light Naphtha (MOPJ)	-6.29	-7.31	1.02	-0.18	-6.11
Gasoline (premium)	11.64	7.51	4.13	11.54	0.10
Jet Fuel	15.74	12.21	3.53	14.48	1.26
Diesel	15.35	12.38	2.97	14.38	0.97
Fuel Oil	0.92	-2.31	3.23	-2.52	3.44

Average Dubai price for Q3/19 was US\$61.16/bbl, decreased from US\$67.38/bbl in Q2/19. Crude oil prices fall as worries over a Middle East conflict have eased, oil production in the Gulf of Mexico has resumed after a storm, U.S. crude oil production rose to an all-time high of 12.36 million barrels per day in 2019 and worries have emerged over Chinese economic growth. In September, Middle East crude benchmarks Oman and Dubai jumped as attack on top oil exporter Saudi Arabia's oil facilities threatens global oil supplies.

Gasoline spread over Dubai rise to US\$11.64/bbl. Gasoline market in September rose to their highest after news of attacks on Saudi Arabia's oil facilities, which could hamper light distillates production. A rise in Indian imports on an increase in domestic supply amid the planned refinery maintenance and upgrades ahead of the country's tighter retail fuel specifications in 2020. However, market still pressure on a surge of Chinese gasoline exports. Singapore light distillates stocks were 10.1 million barrels on average, averaging 15% lower y/y.

Naphtha spread over Dubai in Q3/19 was minus US\$6.29/bbl. Asia's naphtha crack continues its recovery after the restart of ethylene crackers in Northeast Asia post planned maintenance season, summer driving season in the West and the permanent shutdown of the PES refinery in the United States have also pulled naphtha volumes from Europe for gasoline blending and resulted in lower western arbitrage inflows to Asia. In September, Asian naphtha market gained support in the second half as market participants react to reports of the Abqaiq attack and expected more demand for gasoline blending in Europe.

Jet and Diesel crack spread over Dubai was relatively strong compare to gasoline, averaging US\$15.74/bbl and US\$15.35/bbl, respectively. Middle distillate cracks were supported by summer travel season, increased stockpiling of kerosene ahead of winter demand reduces Asian exports through the end of the year. Gasoil cracks continued to rise, supported by a combination of strong fundamentals and stockpiling ahead of IMO 2020. Market also tightened on reduced regional supply and low inventory levels. Singapore inventories were 13.7 million barrels on average, averaging 35% higher y/y.

Fuel oil spread over Dubai in Q3/19 was US\$0.92/bbl, higher than Q2/19. The fuel oil market increase as shortage of supplies have boosted fuel oil premiums in Asia and concern on high Middle Eastern summer demand curbed arbitrage flows to Asia. Moreover, market also support on lower fuel oil export from the attack on state-owned producer Saudi Aramco's crude-processing facilities at Abqaiq. Singaporean fuel oil inventories maintained topped-up, averaging 16% higher y/y.

Due to increase in product market, SPRC's average market refining margin in Q3/19 was US\$5.07/bbl as compared to US\$2.57/bbl in Q2/19 and US\$5.05/bbl in Q3/18. In Q3/19, SPRC maximized margin from good benefit captured from process and crude optimization and maximized domestic placement for all products.

Sources: Reuters, IHS, Platts

### 3) Financial Results

	US\$ Million			US\$ Million		US\$ Million		
	Q3/19	Q2/19	+ / (-)	Q3/18	+ / (-)	9M/19	9M/18	+ / (-)
Total Revenue	1,435	1,553	(118)	1,571	(136)	4,479	4,781	(302)
Cost of sales	(1,472)	(1,588)	116	(1,530)	58	(4,489)	(4,542)	53
<b>Gross profit</b>	<b>(38)</b>	<b>(35)</b>	<b>(3)</b>	<b>41</b>	<b>(78)</b>	<b>(10)</b>	<b>239</b>	<b>(249)</b>
Other income	0	0	0	0	(0)	1	2	(1)
Gain on exchange rate	7	16	(9)	16	(9)	34	23	10
Administrative expenses	(8)	(8)	(0)	(6)	(1)	(24)	(22)	(2)
Income tax	8	7	1	(12)	20	4	(49)	53
<b>Net income (Loss)</b>	<b>(30)</b>	<b>(19)</b>	<b>(11)</b>	<b>38</b>	<b>(68)</b>	<b>4</b>	<b>191</b>	<b>(187)</b>

	Baht Million			Baht Million		Baht Million		
	Q3/19	Q2/19	+ / (-)	Q3/18	+ / (-)	9M/19	9M/18	+ / (-)
Total Revenue	44,307	49,332	(5,026)	52,050	(7,743)	141,036	154,492	(13,455)
Cost of sales	(45,470)	(50,435)	4,966	(50,709)	5,239	(141,295)	(146,818)	5,523
<b>Gross profit</b>	<b>(1,163)</b>	<b>(1,103)</b>	<b>(60)</b>	<b>1,341</b>	<b>(2,504)</b>	<b>(259)</b>	<b>7,673</b>	<b>(7,932)</b>
Other income	9	8	0	11	(2)	30	72	(43)
Gain on exchange rate	227	512	(285)	526	(299)	1,066	757	309
Administrative expenses	(238)	(238)	1	(213)	(25)	(751)	(695)	(56)
Income tax	255	232	23	(398)	653	114	(1,580)	1,694
<b>Net income (Loss)</b>	<b>(925)</b>	<b>(599)</b>	<b>(325)</b>	<b>1,248</b>	<b>(2,173)</b>	<b>166</b>	<b>6,144</b>	<b>(5,978)</b>

## Production Volumes

Petroleum products	Q3/19	Q2/19	Q3/18	Thousands barrels	
				9M/19	9M/18
Polymer Grade Propylene	392	356	399	1,108	1,136
Liquefied Petroleum Gas	670	641	665	2,008	1,980
Light Naphtha	556	681	504	1,917	1,831
Gasoline	3,788	3,577	3,818	11,114	11,930
Jet Fuel	1,209	1,124	1,194	3,668	3,826
Diesel	5,422	5,372	5,308	16,576	17,323
Fuel Oil	1,175	1,355	1,597	3,923	5,099
Asphalt	198	233	197	674	596
Mix C4	431	405	439	1,228	1,348
Other <sup>(1)</sup>	929	1,510	1,215	4,059	3,449
<b>Total production</b>	<b>14,771</b>	<b>15,254</b>	<b>15,336</b>	<b>46,276</b>	<b>48,518</b>

<sup>(1)</sup> Includes sulfur and reformat and products sold pursuant to our cracker feed exchange with PTT Global Chemical (PTTGC).

## Total Sale Revenue

Petroleum products <sup>(1)</sup>	Q3/19	Q2/19	Q3/18	US\$ Million	
				9M/19	9M/18
Polymer Grade Propylene	27	24	34	76	94
Liquefied Petroleum Gas	28	31	37	89	100
Light Naphtha	27	39	45	106	133
Gasoline	463	463	470	1,341	1,429
Jet Fuel	87	97	104	286	338
Diesel	626	666	645	1,924	1,996
Fuel Oil	73	83	112	235	315
Asphalt	9	13	10	39	34
Mix C4	27	29	31	81	104
Crude	0	0	0	11	0
Others <sup>(2)</sup>	67	107	83	291	238
<b>Total Revenue</b>	<b>1,435</b>	<b>1,553</b>	<b>1,571</b>	<b>4,479</b>	<b>4,781</b>

<sup>(1)</sup> Includes Government LPG and oil subsidies.

<sup>(2)</sup> Includes sulfur, reformat and products sold pursuant to our cracker feed exchange with PTT Global Chemical (PTTGC).

Q3/19 sale revenue decreased 8% compared to Q2/19. The decrease was mainly due to lower sale volumes which decreased from 16.5 million barrels in Q2/19 to 15.5 million barrels in Q3/19 and in line with the decrease in refinery throughput.

Comparing Q3/19 with Q3/18 sale revenue decreased 9% mainly from the lower petroleum product price in this year while sale volume in Q3/19 approximated to Q3/18 of 15.5 million barrels.

Sale revenue for 9M/19 also decreased 6% compared to 9M/18. The decrease was mainly due to the decrease in petroleum product price from 1) a decrease in global oil price and 2) weak product crack spread comparing to crude oil. Sales volume of petroleum products was at 48.5 million barrels in 9M/19, slightly lower than 9M/18 which was at 48.9 million barrels.

In Q3/19, the company sold its petroleum products based on sale revenue to Chevron, PTT&PTTOR and other oil and petrochemical companies in the proportion of 57%, 33% and 10%, respectively.

### ***Cost of Sales***

Lower production, lower sale volumes and lower oil price in Q3/19 resulted to lower cost of sale in Q3/19 comparing Q2/19 and Q3/18. However, higher costs relating to the planned refinery turnaround, which included in cost of sale, partly offset the decreasing in sale volumes and oil price.

Cost of sale in 9M/19 was slightly below 9M/18 due to lower crude price and lower sales volume.

### ***Gain on Foreign Exchange***

Compared Q3/19 with Q2/19 and Q3/18, foreign exchange gain for Q3/19 was US\$7 million (Baht 227 million) which was lower than prior quarter and same quarter of last year due to lower appreciation of Baht relative to the U.S. dollar in Q3/19 comparing to the appreciation in those quarters. Baht appreciation resulted in an increase in the value of Baht denominated receivables when converted to US\$ equivalent.

However foreign exchange gain for 9M/19 was higher than the 9M/18 due to higher appreciation of Baht relating to U.S. dollar.

### ***Administrative Expenses***

Administrative expenses in Q3/19 approximated with Q2/19 at US\$8 million (Baht 238 million).

Compared Q3/19 with Q3/18, higher administrative expenses was due to higher professional fee and foreign exchange impact from stronger Baht when converting Baht expenses to USD.

Comparing 9M/19 with 9M/18, administrative expense was slightly higher mainly due to the provision of employee benefit from the change in Labor Protection Act recorded in 2019 and exchange rate impact from Baht appreciation.

## 4) Analysis of Financial Position

	US\$ Million				Baht Million		
	30 Sep 2019	31 Dec 2018	+ / (-)	% + / (-)	30 Sep 2019	31 Dec 2018	+ / (-)
<b>Assets</b>							
Cash & cash equivalent	1	2	(2)	-74%	18	74	(56)
Other current assets	755	781	(25)	-3%	23,236	25,448	(2,211)
Non-current assets	897	904	(7)	-1%	27,592	29,489	(1,897)
<b>Total assets</b>	<b>1,653</b>	<b>1,687</b>	<b>(34)</b>	<b>-2%</b>	<b>50,847</b>	<b>55,011</b>	<b>(4,164)</b>
<b>Liabilities</b>							
Current liabilities	468	482	(13)	-3%	14,412	15,704	(1,293)
Non-current liabilities	16	24	(8)	-34%	482	778	(296)
<b>Total liabilities</b>	<b>484</b>	<b>505</b>	<b>(21)</b>	<b>-4%</b>	<b>14,893</b>	<b>16,482</b>	<b>(1,589)</b>
<b>Equity</b>							
Share capital & retained earnings	1,169	1,182	(13)	-1%	43,125	43,493	(368)
Other component of shareholders' equity					(7,171)	(4,965)	(2,206)
<b>Total equity</b>	<b>1,169</b>	<b>1,182</b>	<b>(13)</b>	<b>-1%</b>	<b>35,954</b>	<b>38,529</b>	<b>(2,575)</b>
<b>Total liabilities &amp; equity</b>	<b>1,653</b>	<b>1,687</b>	<b>(34)</b>	<b>-2%</b>	<b>50,847</b>	<b>55,011</b>	<b>(4,164)</b>

### Assets

Total assets as of 30 Sep 2019 decreased by US\$34 million (Baht 4,164 million) from 31 Dec 2018.

Total current assets decreased US\$27 million (Baht 2,267 million) mainly due to:

- a decrease in trade and other account receivables of US\$46 million (Baht 2,114) due to lower sale volume; but partly offset by
- an increase in inventory of US\$18 million (but decrease Baht 179 million due to foreign exchange impact on translation of USD inventory to Baht inventory) from higher inventory price reflecting from the higher oil price comparing to end Dec 2018 but partly offset by lowering inventory volume to prepare for the planned turnaround in Q4/19

Non-current assets were also lower mainly from a decrease in property, plant and equipment of US\$22 million (Baht 2,317 million) as depreciation expenses for 9M/19 more than offset the additional capital investment in refinery reliability and efficiency projects, but slightly offset by higher non-other current assets of US\$6 million (Baht 197 million) from prepaid expense and deferred tax assets.

### Liabilities

Total liabilities as of 30 Sep 2019 decreased US\$21 million (Baht 1,589 million) from 31 Dec 2018. The decrease in total liabilities is mainly from:

- a decrease in trade and other account payables of US\$69 million (Baht 2,824 million) from lower crude purchase in Sep 19 to prepare for the planned turnaround;
- a decrease in deferred tax liabilities of US\$14 million (Baht 449 million) resulted from exchange rate impact on temporary difference between accounting and tax book; but partly offset by

- c) an increase in S-T borrowing of US\$52 million (Baht 1,607 million) to support movement in working capital and turnaround spending; and
- d) an increase in employee benefit obligation of US\$6 million (Baht 153 million) due to the provision of employee benefit impacted from the change in Thai Labor Act on severance pay.

### Shareholders' Equity

Shareholders' equity as of 30 Sep 2019 decreased US\$13 million (Baht 2,575 million) from 31 Dec 2018 resulted from the net profit in 9M/2019 offset by dividend payment for 1H/19 net profit.

## 5) Statement of Cash Flow

9M/2019	US\$ Million	Baht Million
Net cash generated from operating activities	5	210
Net cash used in investing activities	(41)	(1,305)
Net cash generated from financing activities	35	1,095
<b>Net decrease in cash and cash equivalents</b>	<b>(1)</b>	<b>(0)</b>
<b>Cash and cash equivalents at the beginning of the period</b>	<b>2</b>	<b>74</b>
Adjustments from foreign exchange translation	(0)	(55)
<b>Cash and cash equivalents at the end of the period</b>	<b>1</b>	<b>18</b>

SPRC cash and cash equivalents slightly decreased from US\$2 million (Baht 74 million) at 31 Dec 2018 to US\$1 million (Baht 18 million) at 30 Sep 2019.

Details of cash flow activities in 9M/19 are as follow.

- a) Net cash generated from operating activities of US\$5 million (Baht 210 million) which was primarily due to:
  - a. cash generate from operating assets of US\$77 million (Baht 2,414 million), mainly from a decrease in trade receivables of US\$43 million (Baht 1,354 million) due to lower same volumes and a decrease in inventory value of US\$43 million (Baht 1,355 million) from lower inventory volume but partly offset by an increase in other current assets and other assets of US\$9 million (Baht 295 million) from prepaid expenses; but partly offset by
  - b. cash used in operating liabilities of US\$62 million (Baht 1,952 million), mainly from a decrease in trade and other payable of US\$67 million (Baht 2,118 million) due to lower crude oil purchase, partially offset by a slight increase in other current liabilities of US\$5 million (Baht 166 million); and
  - c. 9M/19 net profit of US\$4 million (Baht 166 million) and deduct non-cash items of US\$13 million (Baht 417 million);
- b) Net cash used in investing activities of US\$41 million (Baht 1,305 million), primarily on projects spending to increase refinery reliability, efficiency and upgrading.
- c) Net cash provided from financing activities of US\$35 million (Baht 1,095 million) from short term borrowing of US\$52 million (Baht 1,616 million) primarily to support working capital and major turnaround spending but partially offset by dividend payment for 1H/19 net income of US\$17 million (Baht 521 million).



## 6) Financial Ratios

		Q3/19	Q2/19	Q3/18	9M/19	9M/18
Current Ratio	(Time)	1.6	1.6	1.7	1.6	1.7
Net Profit Margin	(%)	(2.1)	(1.2)	2.4	0.1	4.0
Debt to Equity ratio	(Time)	0.4	0.5	0.5	0.4	0.5
Net Interest-Bearing Debt to Equity ratio	(Time)	0.0	0.1	0.2	0.0	0.2

**Note:**

Current Ratio	= Current Assets / Current Liabilities	(Time)
Net Profit Margin	= Quarter (Net Profit (Loss) / Total Revenue)	(%)
Debt to Equity Ratio	= Total Liabilities / Total Shareholders' Equity	(Time)
Net Interest Bearing Debt to Equity ratio	= Interest Bearing Debt - Cash / Total Shareholders' Equity	(Time)