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Fueling the Future of Thailand

Management's Discussion and
Analysis Of Financial Condition and Result Of Operations
Star Petroleum Refining Public Company Limited
For Quarter 1/2020

1) Company's Operating Result

(US\$ Million)	Q1/20	Q4/19	+ /(-)	Q1/19	+ /(-)
Total Revenue	1,256	912	344	1,492	(235)
EBITDA	(303)	(102)	(201)	86	(389)
EBIT	(326)	(123)	(203)	65	(391)
Gain on foreign exchange	7	5	2	10	(3)
Net income (Loss)	(261)	(98)	(163)	53	(314)
Net income (Loss) (US\$ per share)	(0.06)	(0.02)	(0.04)	0.01	(0.07)
Accounting gross refining margin (US\$/barrel) ⁽¹⁾	(20.34)	1.85	(22.19)	7.87	(28.21)
Market gross refining margin (US\$/barrel) ⁽²⁾	1.28	2.49	(1.21)	3.07	(1.79)

Crude intake (thousand barrels/day)	153.1	77.9	75.2	163.8	(10.7)
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(Baht Million)	Q1/20	Q4/19	+ /(-)	Q1/19	+ /(-)
Total Revenue	39,376	27,804	11,572	47,397	(8,021)
EBITDA	(9,622)	(3,104)	(6,518)	2,734	(12,356)
EBIT	(10,329)	(3,727)	(6,601)	2,068	(12,397)
Gain on foreign exchange	242	159	83	328	(86)
Net income (Loss)	(8,273)	(2,975)	(5,298)	1,690	(9,963)
Net income (Loss) (Baht per share)	(1.91)	(0.69)	(1.22)	0.39	(2.30)

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

⁽²⁾ margin is calculated based on current replacement cost.

Exchange rate (Baht/US\$)	Q1/20	Q4/19	+ /(-)	Q1/19	+ /(-)
Average FX	31.45	30.46	0.99	31.79	(0.34)
Closing FX	32.83	30.33	2.50	31.98	0.85

Due to the global pandemic COVID-19 crisis, SPRC's operating performance in Q1/20 was significantly impacted with lower production rates substantial loss in inventory valuation, and low market margin.

The spread of Coronavirus has significantly impacted to the demand for petroleum products especially on Jet fuel and gasoline resulted in the reduction in SPRC refinery utilization rate in Q1/20 to meet the reduced demand. However, comparing Q1/20 and Q4/19, crude intake for Q1/20 was 153 thousand barrels per day, equivalent to 87% of the refining capacity, higher than Q4/19 which was 78 thousand barrels per day due to the major turnaround. Following the higher refinery throughput in this quarter, sale revenue in Q1/20 was US\$1,256 million, an increase of US\$344 million despite a sharp decline in oil prices.

A sharp fall-off in oil price in March caused significant loss in SPRC's EBITDA, EBIT and net earnings for Q1/20. NIAT for the quarter was loss of US\$261 million comparing to loss of US\$98 million in prior quarter. Accounting refining margin in Q1/20 was considerably negative at US\$(20.34)/bbl comparing to US\$1.85/bbl last quarter, impacted by a huge stock loss which also including loss from inventory write down to net realizable value due to the oil price declining especially at the end of quarter. Excluding stock loss, market refining margin was low at US\$1.28/bbl, dropped from US\$2.49/bbl from continuing excessive supply of refinery products and COVID-19 impact. SPRC positive drivers in Q1/20 were favorable exchange gain and lower operating expenses while there were high expenses relating to the major turnaround in prior quarter.

Compared Q1/20 with Q1/19, sale revenue decreased 16% as a result of lower selling price. EBITDA, EBIT and net earnings in Q1/20 were negative while they were positive in Q1/19. Accounting gross refining margin in Q1/20 was negatively impacted from the oil price fall which resulted in a significant stock loss while the

oil price slightly rose in Q1/19 and resulted in a stock gain. Excluding stock gain or loss, Q1/20 market gross refining margin was still weak at US\$1.28/bbl, comparing to US\$3.07/bbl in Q1/19 due to the continuing of poor crack spread effected from the surplus of refinery products and reduced demand from COVID-19.

2) Market Condition

Pricing	Q1/20	Q4/19	+ /(-)
Dubai crude oil	50.66	62.08	-11.42
Light Naphtha	48.83	59.98	-11.16
Gasoline (premium)	57.23	75.01	-17.78
Jet Fuel	59.16	76.00	-16.83
Diesel	61.66	76.38	-14.71
Fuel Oil (HSFO)	43.28	43.41	-0.13

Q1/19	+ /(-)
63.49	-12.84
57.68	-8.86
67.27	-10.03
76.46	-17.29
76.27	-14.61
64.05	-20.77

Spread over Dubai	Q1/20	Q4/19	+ /(-)
Light Naphtha	-1.83	-2.09	0.26
Gasoline (premium)	6.58	12.93	-6.36
Jet Fuel	8.51	13.92	-5.41
Diesel	11.00	14.30	-3.29
Fuel Oil (HSFO)	-7.38	-18.67	11.29

Q1/19	+ /(-)
-5.81	3.98
3.77	2.81
12.96	-4.45
12.78	-1.77
0.55	-7.93

Average Dubai price for Q1/20 was US\$50.66/bbl, which was decreased from US\$62.08/bbl in Q4/19. Global oil demand could drop as much as 20 million barrels per day or 20% of total demand as 3 billion people are currently in a lockdown because of the coronavirus outbreak. However, OPEC wants to extend current oil output cuts until at least June, with the possibility of deeper reductions if oil demand is significantly impacted by the spread of coronavirus.

Gasoline spread over Dubai in Q1/20 fell to US\$6.58/bbl. Gasoline cracks fell as concern on strong stock builds within the region due to the ramp up of production at Pengerang and Hengyi in January, demand collapse as concern on COVID-19 infection and lockdowns in several countries including India, the United States and parts of Europe. Singapore light distillates stocks were 15.2 million barrels on average, increased by 20% Q-o-Q.

Naphtha spread over Dubai in Q1/20 was minus US\$1.83/bbl. Naphtha margins were dragged down by fears of the fast-spreading coronavirus weighing on the global economy and in turn, hitting petrochemicals demand. However, refinery maintenance in the Middle East could run cuts also limited naphtha production and some exports to Asia.

Jet and Diesel crack spreads over Dubai were US\$8.51/bbl and US\$11.00/bbl, respectively. Middle distillate cracks remained under pressure due to slowing regional economic activity, lower demand in both transportation and industrial sectors as respective responses to the COVID-19 outbreak. Singapore stocks increased to 13.1 million barrels, rise 25% Q-o-Q.

Fuel oil spread over Dubai in Q1/20 was minus US\$7.38/bbl, which was higher than Q4/19. High sulfur fuel oil cracks have been supported by declining supplies of the fuel as refiners and consumers switched to producing and consuming lower-sulfur fuel alternative following the introduction of a global sulfur cap at the start of the year and as complex refiners bought up cheap supplies of the fuel for use as refining feedstock. Weak of crude oil price also support fuel oil market. Singapore onshore fuel oil inventories increased by 22% Q-o-Q to 24.8 million barrels.

Due to higher crude premium, higher freight cost and product market effect especially weak in gasoline and fuel oil crack, SPRC's average market refining margin in Q1/20 was US\$1.28/bbl as compared to US\$2.49/bbl in Q4/19 and US\$3.07/bbl in Q1/19. In Q1/20, SPRC captured margin by maximizing light crude and optimizing crude throughput to meet domestic demand and continuing process optimization. SPRC also maximized synergy with Petrochemical plant for product optimization and maximized domestic placement for all products.

3) Financial Results

	US\$ Million		
	Q1/20	Q4/19	+ /(-)
Total Revenue	1,256	912	344
Cost of sales	(1,582)	(1,009)	(572)
Gross profit	(325)	(97)	(228)
Other income	0	0	0
Gain on exchange rate	7	5	2
Administrative expenses	(8)	(31)	23
Income tax	66	25	41
Net income (Loss)	(261)	(98)	(163)

US\$ Million	
Q1/19	+ /(-)
1,492	(235)
(1,429)	(153)
63	(388)
0	0
10	(3)
(9)	1
(12)	78
53	(314)

	Baht Million		
	Q1/20	Q4/19	+ /(-)
Total Revenue	39,376	27,804	11,572
Cost of sales	(49,701)	(30,756)	(18,946)
Gross profit	(10,325)	(2,952)	(7,373)
Other income	13	6	7
Gain on exchange rate	242	159	83
Administrative expenses	(258)	(939)	681
Income tax	2,108	771	1,337
Net income (Loss)	(8,273)	(2,975)	(5,298)

Baht Million	
Q1/19	+ /(-)
47,397	(8,021)
(45,390)	(4,311)
2,007	(12,333)
13	(0)
328	(86)
(276)	18
(373)	2,481
1,690	(9,963)

Production Volumes

Petroleum products	Thousands barrels		
	Q1/20	Q4/19	Q1/19
Polymer Grade Propylene	361	162	360
Liquefied Petroleum Gas	636	338	697
Light Naphtha	760	330	680
Gasoline	3,890	1,709	3,748
Jet Fuel	1,222	713	1,335
Diesel	6,183	2,867	5,782
Fuel Oil	1,010	599	1,394
Asphalt	126	71	243
Mix C4	520	168	391
Other ⁽¹⁾	1,111	154	1,620
Total production	15,820	7,110	16,251

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

Total Sale Revenue

Petroleum products ⁽¹⁾	US\$ Million		
	Q1/20	Q4/19	Q1/19
Polymer Grade Propylene	22	11	25
Liquefied Petroleum Gas	28	14	30
Light Naphtha	35	23	39
Gasoline	356	275	415
Jet Fuel	81	60	102
Diesel	601	470	631
Fuel Oil	40	19	80
Asphalt	4	4	16
Mix C4	26	12	25
Crude	10	19	10
Others ⁽²⁾	54	4	118
Total Revenue	1,256	912	1,492

⁽¹⁾ Includes Government LPG and oil subsidies.

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

Sale revenue in Q1/20 increased 38% from Q4/19 mainly from increase in sales volume of petroleum products resulted from the operation back to normal from the planned turnaround in Nov-Dec19. Sale volume increased to 16.4 million barrels in Q1/20 compared to 9.4 million barrels in Q4/19, partly offset with a decrease in average petroleum products price following the lower global oil price in Q1/20.

Q1/20 sale revenue decreased 16% compared to Q1/19 mainly from a decrease in average petroleum products price while total sale volume in Q1/20 slightly decreased to 16.4 million barrels from 16.6 million barrels in Q1/19.

In Q1/20, the company sold its petroleum products based on sale revenue to Chevron, PTT&PTTOR and other oil and petrochemical companies in the proportion of 52%, 37% and 11%, respectively.

Cost of Sales

Comparing cost of sale for Q1/20 with Q4/19, cost of sale increased 57%. The increase was in line with the increase in sale revenue but in a higher proportion due to higher weighted average cost of sale during the declining in oil price and also a loss from inventory write down to net realizable value of US\$160 million (Baht 5,061 million) in Q1/20 while the write down loss was US\$0.3 million (Baht 9 million) in Q4/19.

Comparing Q1/20 to Q1/19, despite a decrease in total revenue but cost of sale in Q1/20 increased 11% which also reflected from inventory loss from weighted average inventory during the declining in oil price and also a loss from inventory write down to market value.

Gain on Foreign Exchange

During Q1/20 Baht currency against US\$ became weaker and moved opposite to last year. In Q1/20 SPRC has exchange gain of US\$7 million comparing to US\$5 million in Q4/19 and US\$10 million in Q1/19. Exchange gain in Q1/20 despite Baht weaken was due to a net Baht denominated payables outstanding in Q1/20, which including short term borrowings. Baht weakened during the quarter resulted in a decrease in the value of Baht denominated payables when converted to US\$ equivalent. Q1/20 movement of Baht to US\$ was in an opposite direction to Q4/19 and Q1/19 when Baht moved stronger and SPRC has net Baht denominated receivables.

Administrative Expenses

Comparing Q1/20 with Q4/19, administrative expense in Q1/20 decreased US\$23 million from US\$31 million in Q4/19 when there was the loss of invoice payment, Excluding such loss recorded in Q4/19, administrative expense in Q1/20 approximated to prior quarter and same quarter of last year.

Income tax

Income tax in Q1/20 and Q4/19 reflected deferred income tax on operating loss which will be carried to offset future income.

4) Analysis of Financial Position

	US\$ Million				Baht Million		
	31 Mar 2020	31 Dec 2019	+ / (-)	% + / (-)	31 Mar 2020	31 Dec 2019	+ / (-)
Assets							
Cash & cash equivalent	1	1	1	79%	39	20	19
Other current assets	482	841	(359)	-43%	15,814	25,504	(9,690)
Non-current assets	974	949	25	3%	31,973	28,770	3,203
Total assets	1,457	1,790	(333)	-19%	47,826	54,294	(6,468)
Liabilities							
Current liabilities	641	703	(63)	-9%	21,039	21,334	(295)
Non-current liabilities	15	16	(1)	-6%	490	484	6
Total liabilities	656	719	(64)	-9%	21,529	21,818	(289)
Equity							
Share capital & retained earnings	801	1,071	(270)	-25%	31,606	40,150	(8,544)
Other component of shareholders' equity					(5,309)	(7,674)	2,365
Total equity	801	1,071	(270)	-25%	26,297	32,476	(6,179)
Total liabilities & equity	1,457	1,790	(333)	-19%	47,826	54,294	(6,468)

Assets

Total assets as of 31 March 2020 decreased by US\$333 million (Baht 6,468 million) from 31 Dec 2019.

Total current assets significantly decreased US\$358 million (Baht 9,671 million) mainly due to:

- a) a substantial decrease in inventory of US\$361 million (Baht 10,373 million) from lower inventory price due to a sharp decline in oil price especially at the end of Mar 20 which resulted to the write down of inventory to net realizable value of US\$162 million (Baht 5,319 million) as at 31 Mar 20 and also a decrease in inventory volume;
- b) a decrease in VAT receivables of US\$11 million (Baht 321 million) due to higher sales volume in Mar 20 comparing to Dec 19 resulted in VAT on sale higher than VAT on crude purchase which net to lower VAT receivables at end March;
- c) A slight decrease in trade and other receivables due to lower product selling price in Mar 20 despite higher sales volume comparing to Dec 19 after refinery shutdown; but partly offset by
- d) a current portion of prepaid income tax of US\$19 million (Baht 621 million) which was reclassified from non-current asset presented in prior quarter.

Non-current assets increased US\$25 million (Baht 3,203 million) mainly due to an increase in deferred tax asset of US\$69 million (Baht 2,332 million) from operating loss carryforward in Q1/20 but partly offset by a decrease in portion of prepaid income of US\$21 million (Baht 621 million) which was reclassified to current assets, and a decrease in property, plant and equipment of US\$22 million (but increase Baht 1,479 million from currency translation) due to depreciation expenses in Q1/20.

Liabilities

Total liabilities as of 31 Mar 20 decreased US\$64 million (Baht 289 million) from 31 Dec 2019. The reduction is mainly from:

- a) a significant decrease in trade and other account payables of US\$242 million (Baht 6,815 million) from a significant drop in crude oil price in Mar 20 comparing to Dec 19 and also from lower crude volume purchase; but partly offset by
- b) an increase in S-T borrowing of US\$166 million (Baht 6,026 million) to support the operating loss during the oil price and COVID-19 crisis;
- c) an increase in dividend payable of US\$8 million (Baht 271 million) for the 2019 approved dividend which will be paid in Apr 20; and
- d) an increase in excise tax payable of US\$4 million (Baht 222 million) from higher sale volume in Mar 20 comparing to Dec 19.

Shareholders' Equity

Shareholders' equity as of 31 Mar 2020 decreased US\$270 million (Baht 6,179 million) from 31 Dec 2019 resulted from the net loss in Q1/20 of US\$261 million and 2019 dividend payment of US\$8 million.

5) Statement of Cash Flow

Q1/2020	US\$ Million	Baht Million
Net cash used in operating activities	(174)	(5,544)
Net cash used in investing activities	(2)	(73)
Net cash generated from financing activities	177	5,558
Net decrease in cash and cash equivalents	0	(59)
Cash and cash equivalents at the beginning of the period	1	20
Adjustments from foreign exchange translation	0	77
Cash and cash equivalents at the end of the period	1	39

SPRC cash and cash equivalents were US\$1 million at the end of Mar 2020 and Dec 2019.

Details of cash flow activities in Q1/20 are as follow.

- a) Net cash used in operating activities of US\$174 million (Baht 5,544 million) which was primarily due to:
 - a. Q1/20 net loss of US\$261 million (Baht 8,273 million) and non-cash items of US\$106 million (Baht 3,322 million);
 - b. A net of cash used in operating assets and liabilities of US\$19 million (Baht 593 million). There were the decrease in both operating assets and liabilities in Q1/20 due to the declining in oil price. Operating assets decreased US\$215 million (Baht 6,769 million) mainly from a decrease in inventory US\$200 million (Baht 6,313 million) from lower inventory price and volume. Trade and other receivables slightly decreased US\$5 million (Baht 149 million) with lower selling price offset by higher sale volume. Other current asset also decreased US\$10 (Baht 307 million) from a decrease in VAT receivables. Operating liabilities also decreased US\$234 million (Baht 7,362 million) mainly from lower trade and other payables US\$239 million (Baht 7,527 million) due to the declining in oil price and lower volume of crude oil purchase.
- b) Net cash used in investing activities of US\$2 million (Baht 73 million);
- c) Net cash provided from financing activities of US\$177 million (Baht 5,558 million) from short term borrowings to support working capital and operating loss in Q1/20.

6) Financial Ratios

		Q1/20	Q4/19	Q1/19
Current Ratio	(Time)	0.8	1.2	1.7
Net Profit Margin	(%)	(20.8)	(10.7)	3.5
Debt to Equity ratio	(Time)	0.8	0.7	0.5
Net Interest-Bearing Debt to Equity ratio	(Time)	0.5	0.2	0.0

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)