



# Management's Discussion and Analysis of Financial Condition and Result of Operations

Star Petroleum Refining Public Company Limited

For Quarter 1/2022

## Table of Contents

1.	Company’s Operating Result .....	2
2.	Market Condition .....	3
3.	Financial Performance .....	4
	Financial Results .....	4
	Analysis of Financial Position .....	7
	Statement of Cash Flow .....	8
	Financial Ratios .....	9
4.	Company’s significant event .....	9
5.	Market Outlook.....	10
6.	Appendix .....	11

## 1. Company's Operating Result

(US\$ Million)	Q1/22	Q4/21	+ / (-)	Q1/21	+ / (-)
Total Revenue	1,967	1,574	393	1,213	754
EBITDA	218	88	130	107	111
Adjusted EBITDA <sup>(1)</sup>	96	53	43	19	77
Gain (loss) on foreign exchange	7	6	2	(1)	9
Net income	159	55	103	66	93
Net income (US\$ per share)	0.04	0.01	0.02	0.02	0.02
Accounting gross refining margin (US\$/barrel) <sup>(2)</sup>	20.61	8.16	12.45	10.67	9.94
Market gross refining margin (US\$/barrel) <sup>(3)</sup>	8.46	5.97	2.49	3.53	4.93
Crude intake (thousand barrels/day)	150.2	139.2	11.0	137.1	13.1
Crude intake Utilization	86%	80%	6%	78%	8%

(Baht Million)	Q1/22	Q4/21	+ / (-)	Q1/21	+ / (-)
Total Revenue	65,404	52,803	12,601	36,944	28,460
EBITDA	7,262	2,947	4,315	3,246	4,016
Adjusted EBITDA <sup>(1)</sup>	3,200	1,788	1,412	556	2,644
Gain (loss) on foreign exchange	242	199	43	(48)	289
Net income	5,284	1,855	3,430	2,006	3,279
Net income (Baht per share)	1.22	0.43	0.79	0.46	0.76

<sup>(1)</sup> Adjusted EBITDA refers EBITDA excluding Stock gain/loss, net NRV and Extra item

<sup>(2)</sup> margin includes inventory gain/loss based on weighted average inventory cost.

<sup>(3)</sup> margin is calculated based on current replacement cost.

Exchange rate (Baht/US\$)	Q1/22	Q4/21	+ / (-)	Q1/21	+ / (-)
Average FX	33.23	33.54	(0.31)	30.46	2.77
Closing FX	33.46	33.59	(0.14)	31.51	1.95

The rise in the price of Dubai crude oil and product spreads in Q1/22 was primarily due to the intensifying Russia-Ukraine conflict, as many countries considered banning Russian oil imports, causing severe disruption to global oil supply, as well as the stabilization of the COVID-19 situation despite a surge in the Omicron variant spreading, which had supported mobility and manufacturing activities demand. In Q1/22, the utilization rate for the crude intake was 150 thousand barrels per day, or equivalent to 86% of its refining capacity increased from 139 thousand barrels per day in Q4/21 and SPRC maintained crude and product optimizations to maximize domestic demand.

The greater EBITDA and net income of US\$159 million in Q1/22 compared to US\$55 million in Q4/21 was mostly due to the enhanced market refining margin and stock gain of US\$ 164 million in this quarter. The market refining margin improved considerably from US\$5.97/bbl in Q4/21 to US\$8.46/bbl in Q1/22, owing to rising refined product cracks due to Russia supply disruptions and demand recovery following an increase in global vaccination rate, resulting in COVID-19 situation was under control. Total operating expenditures in this quarter increased from the expenses and its provision related to SPM incident of US\$42 million. The baht appreciation during the quarter resulted in a foreign exchange gain of US\$ 7 million.

Compared Q1/22 with Q1/21, sale revenue increased 62% mainly from an increase of product prices and higher in domestic demand due to the resumption of more economic activities and more travel compared to during the COVID-19 pandemic in previous year quarter. EBITDA, EBIT and net profit in Q1/22 were significantly higher due to the strong refining margin in Q1/22 of US\$8.46/bbl compared to US\$3.53/bbl in Q1/21 with a large stock gain during the quarter but partly offset by the expenses and provision relating to SPM incident.

## 2. Market Condition

Pricing	Q1/22	Q4/21	+/(-)	Q1/21	+/(-)
Dubai crude oil	96.21	78.27	17.95	60.21	36.00
Light Naphtha (MOPJ)	98.05	82.68	15.37	62.08	35.97
Gasoline (premium)	114.03	93.71	20.32	67.41	46.62
Jet Fuel	112.74	88.48	24.26	63.44	49.30
Diesel	116.08	89.72	26.37	64.92	51.16
Fuel Oil	87.96	71.38	16.58	56.74	31.22

Spread over Dubai	Q1/22	Q4/21	+/(-)	Q1/21	+/(-)
Light Naphtha (MOPJ)	1.83	4.41	-2.57	1.87	-0.04
Gasoline (premium)	17.82	15.44	2.38	7.19	10.62
Jet Fuel	16.53	10.21	6.32	3.22	13.30
Diesel	19.87	11.45	8.42	4.70	15.16
Fuel Oil	-8.26	-6.89	-1.37	-3.47	-4.78

Average Dubai price for Q1/22 was US\$96.21/bbl, which significant increased from US\$78.27/bbl in Q4/21. The crude oil market continued rally on a bullish run during Q1/22 following Russia's invasion of Ukraine since late Feb 22 which cause severe disruption to Russian oil exports. The crude oil price has received support from an extremely tight market from the intensification of many countries imposed sanctions on Russia. While OPEC+ oil producers agreed to stick to their plans for a modest output rise in April, ignored the Ukraine crisis. Nevertheless, in term of fuel demand strengthen from firmer demand recovery despite high oil price in many regions.

Gasoline spread over Dubai in Q1/22 increased to US\$17.82/bbl. The gasoline cracks rose largely due to market tightened from several countries' economy relaxed their Covid19 restrictions. Mobility levels in many countries have risen as demand boost and improvement of Covid19 situation in countries with higher vaccination rate. However, the upside to gasoline has been limited by the recent Covid19 resurgence in China and demand downside amid high retails fuel prices across global. Global light distillate inventory levels in 5 key areas were lower than the five years average except Amsterdam-Rotterdam-Antwerp (ARA), most notably in the USA. Singapore inventories have fallen well below the history range due to lower export gasoline from China.

Naphtha spread over Dubai in Q1/22 decreased to US\$1.83/bbl. The naphtha crack was softened as a result of sluggish petchem margins and several petchem companies have lowered cracker runs. Furthermore, naphtha arrivals into Asia from the West were boosted by higher volumes from the USA, where gasoline blending demand declined seasonally during the end of 2021. On demand side, Naphtha demand remained soft due to planned and unplanned cracker outages and continued reduction in cracker-run rates during February have added pressure on naphtha demand and cracks.

Jet and diesel crack spreads over Dubai increased significantly from previous quarter to be US\$16.53/bbl and US\$17.87/bbl respectively. The Russia-Ukraine war and the sanctioning of Russian cargoes by some Western countries are exacerbated the supply tightness which cause the gasoil price spiked in March. Moreover, supply constraints in the West kept prices elevated and attracted more Asia and Middle East barrels, resulting in even lower inventories in the region. In addition, Jet crack was supported as several markets have been prompted to ease travel restrictions as Omicron wave subsides. Despite virus resurgence in various markets impacting cross-border travel, domestic aviation demand remains rather resilient in most markets. Nonetheless, the tightness in diesel markets propelled the jet/kerosene crack spread to a multi-month high. Refiners have prioritized diesel production over jet/kerosene despite improving international aviation demand which led supply tightness in Jet/Kerosene. However, the increase in cracks was limited by the waning demand for winter heating oil and high COVID-19 infection rates in mainland China. Global middle distillate inventory levels in 5 key areas were at their lowest level since at least 2017. Singapore middle distillate stocks decreased to 7.0 million barrels, falling 12% Q-o-Q due to supply tightness as well as manufacturing activities continue to pick up in the region

Fuel oil spread over Dubai in Q1/22 was -US\$8.26/bbl, which was lower than Q4/21. Fuel oil demand was reduced by weaker bunker demand as well as cooler weather reduced demand for power generation in South Asia. In addition, consumption slowed at Chinese ports owing to COVID-19 restrictions. However, supply tightness owing to the avoidance of Russian residues has tightened availability of HSFO feedstock. Singapore onshore fuel oil inventories increased by 7% Q-o-Q to 20.9 million barrels.

Due to the significant increased in middle distillate product crack, SPRC's average market refining margin in Q1/22 was US\$8.46/bbl, which is higher as compared to US\$5.97/bbl in Q4/21. The stronger demand in Thailand and the region supported SPRC to step up refinery throughput with higher margins. SPRC continues to capture margin by optimizing crude slate and throughput to meet stronger domestic demand and continued improve and optimize the process to capture margin during unprecedented high margin period.

### 3. Financial Performance

#### Financial Results

	US\$ Million			US\$ Million	
	Q1/22	Q4/21	+ / (-)	Q1/21	+ / (-)
Total Revenue	1,967	1,574	393	1,213	754
Cost of sales	(1,725)	(1,510)	(214)	(1,120)	(604)
<b>Gross profit</b>	<b>242</b>	<b>63</b>	<b>179</b>	<b>93</b>	<b>149</b>
Other income	0	1	(0)	0	0
Gain on exchange rate	14	9	5	8	6
Administrative expenses	(51)	(1)	(50)	(8)	(43)
Finance costs	(1)	(2)	0	(2)	1
Fair value loss on derivatives	(7)	(3)	(4)	(10)	3
Income tax	(40)	(12)	(27)	(17)	(23)
<b>Net income (Loss)</b>	<b>159</b>	<b>55</b>	<b>103</b>	<b>66</b>	<b>93</b>

	Baht Million			Baht Million	
	Q1/22	Q4/21	+ / (-)	Q1/21	+ / (-)
Total Revenue	65,404	52,803	12,601	36,944	28,460
Cost of sales	(57,333)	(50,677)	(6,656)	(34,111)	(23,222)
<b>Gross profit</b>	<b>8,071</b>	<b>2,126</b>	<b>5,945</b>	<b>2,832</b>	<b>5,239</b>
Other income	16	20	(4)	13	3
Gain on exchange rate	470	296	174	256	214
Administrative expenses	(1,683)	(24)	(1,659)	(238)	(1,445)
Finance costs	(41)	(51)	11	(53)	12
Fair value loss on derivatives	(228)	(97)	(131)	(304)	76
Income tax	(1,321)	(414)	(907)	(501)	(820)
<b>Net income (Loss)</b>	<b>5,284</b>	<b>1,855</b>	<b>3,430</b>	<b>2,006</b>	<b>3,279</b>

## Production Volumes

Thousands barrels			
Petroleum products	Q1/22	Q4/21	Q1/21
Polymer Grade Propylene	380	373	444
Liquefied Petroleum Gas	628	583	648
Light Naphtha	904	786	759
Gasoline	4,119	3,964	3,913
Jet Fuel	466	322	311
Diesel	5,816	5,721	5,123
Fuel Oil	750	738	477
Asphalt	237	190	144
Mix C4	520	503	571
Other <sup>(1)</sup>	1,315	1,163	1,085
<b>Total production</b>	<b>15,134</b>	<b>14,342</b>	<b>13,474</b>

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

## Total Sale Revenue

US\$ Million			
Petroleum products <sup>(1)</sup>	Q1/22	Q4/21	Q1/21
Polymer Grade Propylene	35	30	37
Liquefied Petroleum Gas	44	41	33
Light Naphtha	88	65	47
Gasoline	611	517	411
Jet Fuel	40	29	13
Diesel	834	672	522
Fuel Oil	67	61	25
Asphalt	25	13	11
Mix C4	61	43	42
Crude	29	0	0
Others <sup>(2)</sup>	134	103	72
<b>Total Revenue</b>	<b>1,967</b>	<b>1,574</b>	<b>1,213</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.

Sale revenue in Q1/22 increased 25% from Q4/21 from the increase in both average oil prices and sale volume from 14.9 million barrels in Q4/21 to 15.8 million barrels in Q1/22 due to a stronger domestic demand, particularly diesel and gasoline after relaxation of Covid measures, and power plant's feedstock demand during the natural gas price was high.

Comparing Q1/22 with Q1/21, sale revenue increased 62%, which was impacted by both of significantly higher oil prices and increase in sale volume which increased from 13.7 million barrels in Q1/21 to 15.8 million barrels in Q1/22.

The table presents breakdown of revenues from sale of petroleum products to company's customers.

Customer	Q1/22	Q4/21	Q1/21
Chevron	40%	40%	46%
PTT & PTTOR	45%	44%	37%
Other oil and petrochemical companies	15%	16%	17%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

**Cost of Sales**

As a result of higher crude intake in Q1/22, the cost of sale increased 14% compared to prior quarter. The increase in cost of sale was in line with the increase in sales revenue due to higher domestic demand in this quarter.

Comparing Q1/22 to Q1/21, cost of sales in Q1/22 increased 54% which reflected from oil price significantly rose in this quarter and also higher in sale volume compared with the same quarter in prior year.

**Gain / (loss) on Foreign Exchange and Financial Derivatives**

Comparing Q1/22 with Q4/21, SPRC had a net foreign exchange gain of US\$ 7.4 million in Q1/22 which was higher than the US\$ 5.9 million in Q4/21, owing to a slightly stronger Baht than in the previous quarter. Baht strengthen resulted in an increase in the value of Baht denominated receivables when converted to US\$ equivalent.

Comparing Q1/22 to Q1/21, SPRC had a net of exchange loss of US\$ 1.5 million in Q1/21 due to a loss of mark to market on derivatives fair value of US\$10 million in Q1/21.

**Administrative Expenses**

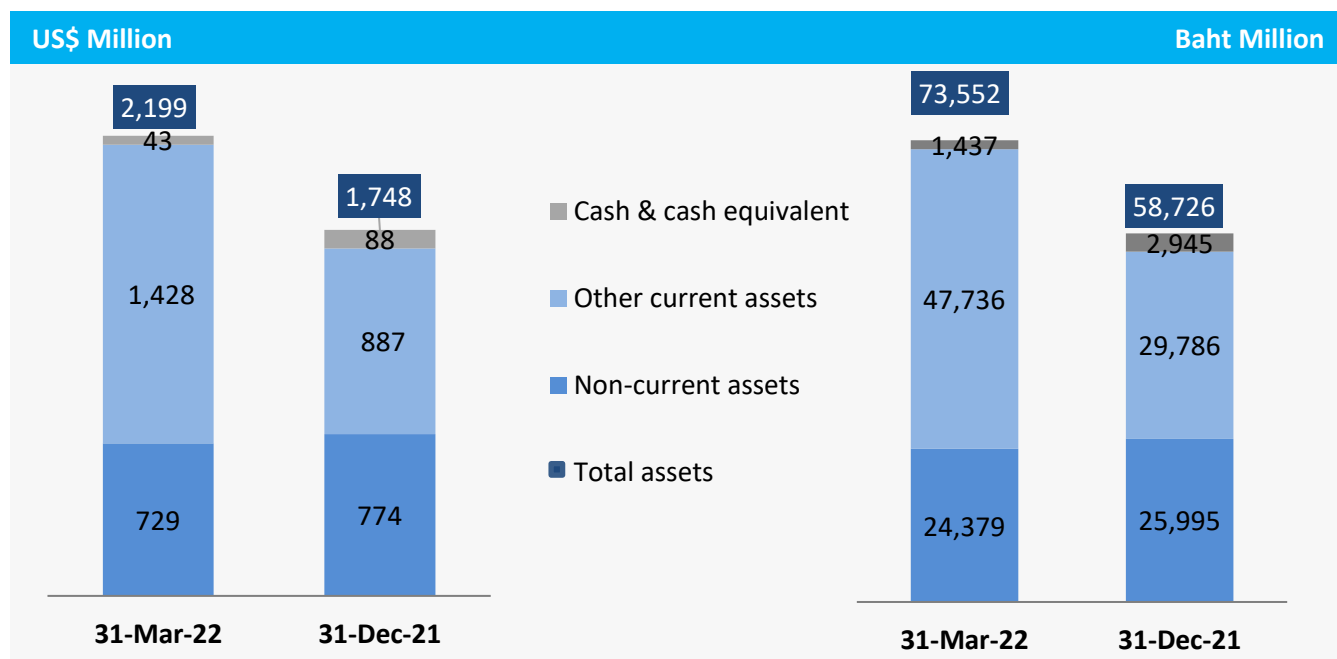
Comparing Q1/22 with Q4/21 and Q1/21, administrative expenses significantly increased to US\$ 50.7 million in Q1/22 from US\$0.6 million in Q4/21 and US\$7.8 million in Q1/21 as a result of the expenses and its provision related to SPM incident of US\$42 million in this quarter, while SPRC had a reversal accrual expense of US\$5.9 million and received the recovery from the loss of invoice payment from the cyber-attack approximately US\$1.2 million in Q4/21.

**Income tax**

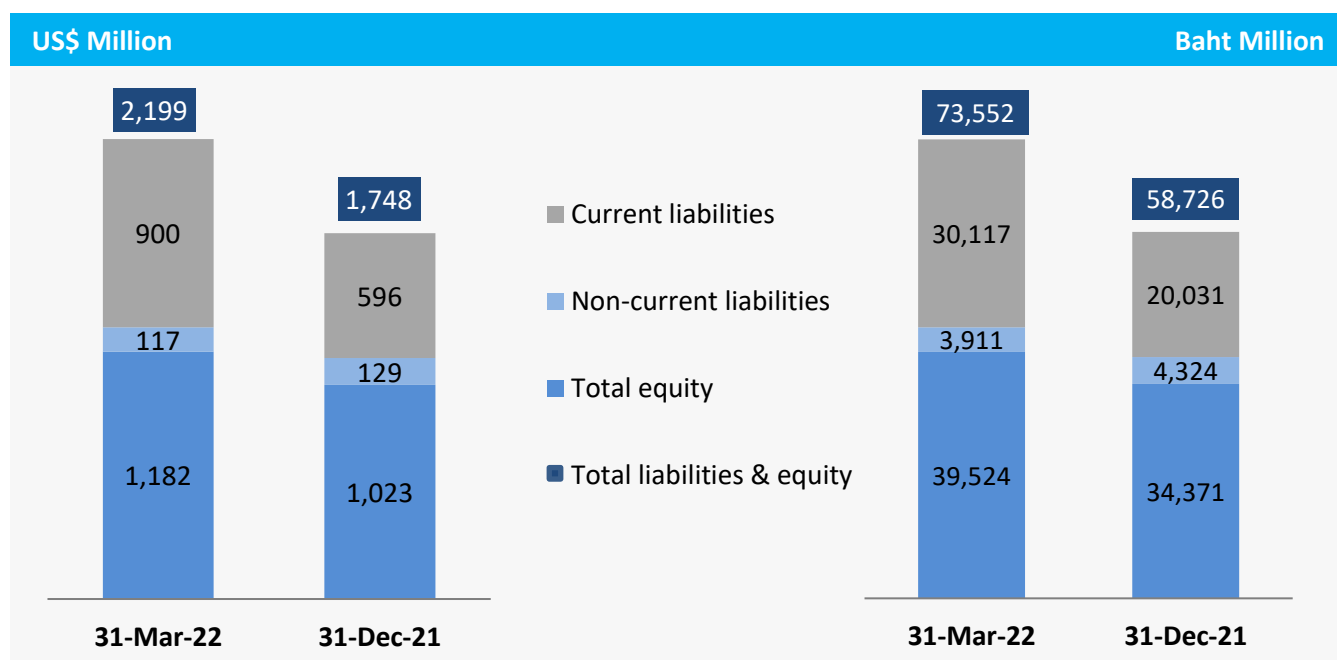
Operating profit in Q1/22 resulted in income tax in this period which offset with the deferred income tax on operating loss carry forward.

## Analysis of Financial Position

### Asset Breakdown



### Liabilities & Equity



### Assets

Total assets as of 31 March 22 increased by US\$450 million (Baht 14,803 million) from 31 December 21.

Total current assets significantly increased US\$496 million (Baht 16,442 million) mainly due to:

- an increase in inventory of US\$283 million (Baht 9,400 million) mainly from higher inventory price due to increasing in oil price and increasing of inventory volume due to timing of crude shipment; and
- an increase in trade and other receivables of US\$257 million (Baht 8,520 million) due to higher product selling price in March 22 and also higher sales volume from higher domestic demand comparing to December 21; but partly offset by



- c) a decrease in cash and cash equivalent of US\$45 million (Baht 1,508 million) due to net cash used in operating activities and repayment of long-term borrowings of US\$15 million (Baht 505 million) during the quarter.

On the contrary, non-current assets decreased US\$46 million (Baht 1,639 million) mainly due to a decrease in deferred tax asset of US\$27 million (Baht 916 million) from the utilization of operating loss carryforward from high profit in Q1/22, and a decrease in property, plant and equipment of US\$17 million (Baht 679 million) due to depreciation expenses in Q1/22.

### Liabilities

Total liabilities as of 31 March 22 increased US\$291 million (Baht 9,651 million) from 31 December 21. The increment was mainly from:

- a) an increase in trade and other account payables of US\$291 million (Baht 9,671 million) from an increase in crude oil price in March 22 and higher crude purchase volume comparing to December 21; and
- b) an increase in other current liabilities from short-term provision relating to oil spill incident of US\$12 million (Baht 394 million) and income tax payable of US\$12 million (Baht 386 million); but partly offset by
- c) a decrease in L-T borrowing of US\$22 million (Baht 764 million). The decrease was impacted from loan repayment of US\$15 million, and exchange rate impact on non-US\$ borrowing.

### Shareholders' Equity

Shareholders' equity as of 31 March 22 increased US\$159 million (Baht 5,153 million) from 31 December 21 resulted from the net profit in Q1/22.

### Statement of Cash Flow

Q1/2022	US\$ Million	Baht Million
Net cash used in operating activities	(29)	(940)
Net cash used in investing activities	(1)	(42)
Net cash used in from financing activities	(15)	(505)
<b>Net decrease in cash and cash equivalents</b>	<b>(45)</b>	<b>(1,487)</b>
<b>Cash and cash equivalents at the beginning of the period</b>	<b>88</b>	<b>2,945</b>
Adjustments from foreign exchange translation	0	(21)
<b>Cash and cash equivalents at the end of the period</b>	<b>43</b>	<b>1,437</b>

SPRC cash and cash equivalents was US\$43 million at the end of March 2022, decreased from US\$88 million at the end of December 2021.

Details of cash flow activities in Q1/22 are as follow.

- a) Net cash used in operating activities of US\$29 million (Baht 940 million) which was primarily due to:
  - a. Q1/22 net profit of US\$159 million (Baht 5,284 million) and non-cash items of US\$69 million (Baht 2,287 million);
  - b. Cash generated from operating liabilities of US\$283 million (Baht 9,417 million) mainly from an increase in trade and other payables US\$291 million (Baht 9,664 million) due to the increase in the price of crude oil purchase and higher purchase volume in March 22 but partly offset by a decrease in other current liabilities of US\$7 million (Baht 247 million) mainly from lower Excise tax in March 22 comparing to December 21. Cash generated was more than offset by

- c. Cash used in operating assets of US\$539 million (Baht 17,929 million). The increase both in oil price and volume also gave rise to an increase in inventory US\$283 million (Baht 9,413 million) and an increase in trade and other receivables of US\$256 million (Baht 8,500 million) from higher selling price and volume.
- b) Net cash used in investing activities of US\$1 million (Baht 42 million). An ongoing COVID-19 pandemic in Q1/22 resulted to low capital expenditure.
- c) Net cash used in financing activities of US\$15 million (Baht 505 million) for the principal repayment of long-term borrowings in March.

## Financial Ratios

		Q1/22	Q4/21	Q1/21
Current Ratio	(Time)	1.6	1.6	1.9
Gross Profit Margin	(%)	12.3	4.0	7.7
Net Profit Margin	(%)	8.1	3.5	5.4
Debt to Equity ratio	(Time)	0.9	0.7	0.8
Net Interest-Bearing Debt to Equity ratio	(Time)	0.2	0.2	0.2
Interest Coverage ratio	(Time)	163.5	45.2	48.5

### Note:

Current Ratio	= Current Assets / Current Liabilities	(Time)
Gross Profit Margin	= Gross Profit (Loss) / Sales Revenue	(%)
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)
Interest Coverage ratio (Accrual basis)	= Earnings before interest and taxes (EBIT) / interest expenses	(Time)

## 4. Company's significant event

On 25 January 2022, an oil spill incident occurred at the Single Point Mooring (SPM) operated by SPRC. The combined response efforts of the Company and Government agency which focused on minimizing impact to the shoreline and sensitive areas - are complete. The assessment of long-term impacts or any required rehabilitation actions to the impacted areas are ongoing and will have to be assessed by the Government authorities, external experts and communities. To date, the refinery operations are continuing normally.

The Company has established a short-term and long-term recovery plan to assist those who have been affected and is currently working on the recovery under insurance policies from insurers.

The Company has recognized the related expenses in the statement of income for the three-month period ended 31 March 2022 totalling US\$42 million or Baht 1,393 million as part of the administrative expenses. Such expenses and provisions mainly consist of the costs incurred for the emergency response to the oil spill incident and financial relief to impacted parties.

As at 31 March 2022, the related expenses already included the provision from the oil spill incident and the Company might incur future additional expenditures.

## 5. Market Outlook

There is a growing divide between oil consumers and producers. On demand side, expected to remain strongly supported by a firm economic recovery all over the world, however a major concern is from Mainland China with unpredictable COVID-19 lockdown decisions from many cities as China is the most important oil market in terms of demand growth. On world GDP growth projection throughout 2022, many countries are expected to increase GDP growth slowly however, severe supply disruptions from Russia-Ukraine conflict as well as lower consumer confidence from uncertainty situation will pose a downside risk. Furthermore, the global trend current despite the increase in new COVID-19 cases, hospitalizations and deaths remain low, and many countries are expected to open up.

On the Supply side, oil markets are facing an almost-unprecedented period of uncertainty following Russia's invasion of Ukraine up to 7 mmb/d of Russian oil exports which include crude and products are at risk when many countries such as the United States and European allies imposed more sanctions on Russia and blocked some Russian banks from a global payments system, which could cause severe disruption to its oil exports. However, foresee any loss of Russian oil exports could be replaced for at least several months through a mix of higher production from Saudi Arabia and the United Arab Emirates (UAE) which have spare production capacity and the release of government-controlled oil reserves. Furthermore, during Mar-April 2022, the IEA has announced to release more strategic reserve controlled by members of the IEA which could add about 1.3 MMb/d of supply to the market for several months. However, OPEC+ reaffirmed a long-planned oil output increase of modest size for the remaining month of the year, in effect rejecting consumer calls for extra supply to reverse a recent upward in prices

On the refinery margins projection, although supply uncertainties boosted refining margin in Mar, the refining margins are projected to ease but remain strong in April-May and expected to ease in third quarter. Supply tightness should ease gradually as the markets attempt to rearrange the trade flows while many refineries are commencing into maintenance season, which tighten the balance further.

Light distillates crack expected to remain firm in Apr and May as low Chinese exports amid the peak maintenance season will tighten the market. In addition, higher travel volume are expected to be stronger year over year as the gradual opening of country borders will also increase tourism activities, which in turn to boost driving activities. However, high retail prices remain a dampener to demand recovery.

Middle distillates crack which includes Jet and diesel were largely supported by the wider East-West gasoil spread from supply disruption after the Russia-Ukraine conflict increased demand preference to non-Russian diesel. There could be a potential continued pull of barrels to the Europe. As supply has lagged demand, oil companies have drained inventories to meet demand resulting in extremely low middle distillate inventory. Further pushing up Jet/kerosene crack is from higher international aviation demand gradually recovery back in many regions and demand continues to improve as more countries' economies opening. Through all this perspective momentum, expected to see middle distillate crack remain strong in second quarter.

The residual fuel oil crack is expected to maintain due to seasonal demand for summer power generation and bunker demand will support consumption in the second quarter with further upside from higher gas prices.

## 6. Appendix

