



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

Star Petroleum Refining Public Company Limited

For Quarter 2/2023 and 6 months ended June 2023

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1. Company's Operating Result

(US\$ Million)	Q2/23	Q1/23	+ /(-)	Q2/22	+ /(-)	6M/23	6M/22	+ /(-)
Total Revenue	1,557	1,736	(180)	2,254	(698)	3,293	4,222	(928)
EBITDA	(55)	67	(122)	278	(333)	12	496	(484)
Adjusted EBITDA ⁽¹⁾	(15)	62	(77)	223	(238)	47	319	(272)
(Loss) on foreign exchange	(4)	(0)	(3)	(18)	15	(4)	(11)	7
Net income	(61)	37	(98)	206	(268)	(25)	365	(390)
Net income (US\$ per share)	(0.01)	0.01	(0.02)	0.05	(0.06)	(0.01)	0.08	(0.09)
Accounting gross refining margin (US\$/barrel) ⁽²⁾	(1.45)	6.90	(8.35)	22.93	(24.38)	2.75	21.80	(19.05)
Market gross refining margin (US\$/barrel) ⁽³⁾	1.34	6.36	(5.02)	18.92	(17.58)	3.86	13.82	(9.95)

Crude intake (thousand barrels/day)	159.0	162.2	(3.2)	156.0	3.0	160.6	153.1	7.4
Crude intake Utilization	91%	93%	-2%	89%	2%	92%	88%	4%

(Baht Million)	Q2/23	Q1/23	+ /(-)	Q2/22	+ /(-)	6M/23	6M/22	+ /(-)
Total Revenue	53,883	59,130	(5,246)	78,008	(24,125)	113,013	143,412	(30,400)
EBITDA	(1,891)	2,242	(4,133)	9,632	(11,523)	350	16,894	(16,543)
Adjusted EBITDA ⁽¹⁾	(499)	2,082	(2,581)	7,732	(8,231)	1,559	10,882	(9,323)
(Loss) on foreign exchange	(134)	(18)	(116)	(639)	506	(151)	(397)	246
Net income	(2,105)	1,219	(3,323)	7,156	(9,261)	(886)	12,440	(13,326)
Net income (Baht per share)	(0.49)	0.28	(0.77)	1.65	(2.14)	(0.20)	2.87	(3.07)

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

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

⁽³⁾ margin is calculated based on current replacement cost.

Exchange rate (Baht/US\$)	Q2/23	Q1/23	+ /(-)	Q2/22	+ /(-)	6M/23	6M/22	+ /(-)
Average FX	34.66	34.08	0.58	34.60	0.06	34.36	33.89	0.47
Closing FX	35.75	34.26	1.49	35.46	0.29	35.75	35.46	0.29

In Q2/23, oil prices faced significant pressure, influenced by a combination of factors, such as worries about a global recession, China's slower than expected economic growth, uncertainty surrounding the U.S. debt ceiling and interest rate hikes to control inflation rate. Additionally, there were anticipated increased export levels from China and Russia, further contributing to the downward pressure on oil prices. Despite receiving some support from OPEC+ production cuts, notably Saudi Arabia's decision to cut output by 1 MBD in July, as well as the ongoing turnaround season, and increased demand for aviation during the summer travel period, those reasons are resulted to oil prices remained volatile.

In Q2/23, the utilization rate for the crude intake was 159 thousand barrels per day, or equivalent to 91% of its refining capacity, slightly lower than the prior quarter. SPRC maintained crude and product optimizations to maximize domestic demand. Similar to the prior quarter, SPRC maintained a good margin captured by our Bottom Line Improvement Program (BLIP) refinery optimizations across all areas (Crude, Product and Synergy).

A continuing fall-off in oil prices this quarter caused a loss in SPRC's EBITDA, EBIT and net earnings for Q2/23. NIAT for the quarter was loss of US\$61 million compared to gain of US\$37 million in the prior quarter. Accounting refining margin in Q2/23 was negative at US\$(1.45)/bbl compared to US\$6.90/bbl last quarter, impacted by a stock loss, which also included a loss from an inventory write-down to net realizable value due to the declining oil prices, especially at the end of the quarter. Excluding stock gain (loss), the market refining margin of US\$1.34/bbl, dropped from US\$6.36/bbl due to declining product spreads that were pressured by

weak refined product demand as a result of concerns about a global recession and uncertainty surrounding interest rate hikes, and exports from China and Russia. Furthermore, the foreign exchange loss of US\$4 million from the depreciation of the Baht against the US dollar during the quarter was partially offset by lower operating expenditures this quarter compared with the prior quarter.

Compared Q2/23 with Q2/22, sales revenue decreased 31%, mainly due to a decrease in product prices, partially offset by slightly higher sales volume due to demand from the driving season. Negative EBITDA, EBIT and net loss in Q2/23, while they were positive in Q2/22. There was a significant drop in earnings due to the lower market refining margin in Q2/23 of US\$1.34/bbl compared to US\$18.92/bbl in Q2/22 and a stock loss in Q2/23 due to the declining in oil price, on the contrary to a stock gain in Q2/22 from an increase in oil price as a result of the Russian-Ukraine conflict.

Compared 6M/23 with 6M/22, sales revenue decreased 22%, which was impacted by a significant decline in oil prices, partly offset by higher sales volume compared with the same period in the prior year. Negative EBITDA, EBIT and net loss in 6M/23 were mainly due to weak margins and stock losses after oil prices decreased in this period. NIAT in 6M/23 was a loss of US\$(25) million, considerably lower than the previous period of US\$365 million in 6M/22. Excluding stock gain (loss), the market gross refining margin fell from US\$13.82/bbl in 6M/22 compared to US\$3.86/bbl in 6M/23 due to a lower crack spread of main products from the fear of economic slowdown while the market was strong in prior year due to tight supply from Russia-Ukraine conflict.

2. Market Condition

Pricing	Q2/23	Q1/23	+/(-)	Q2/22	+/(-)
Dubai crude oil	77.59	80.23	-2.64	108.22	-30.63
Light Naphtha (MOPJ)	66.66	76.48	-9.82	97.03	-30.37
Gasoline (premium)	94.13	98.94	-4.81	143.36	-49.23
Jet Fuel	91.56	106.26	-14.70	147.84	-56.28
Diesel	92.13	105.04	-12.91	151.83	-59.70
Fuel Oil	69.01	64.22	4.79	104.67	-35.66

Spread over Dubai	Q2/23	Q1/23	+/(-)	Q2/22	+/(-)
Light Naphtha (MOPJ)	-10.93	-3.75	-7.18	-11.19	0.26
Gasoline (premium)	16.54	18.71	-2.17	35.14	-18.60
Jet Fuel	13.97	26.03	-12.06	39.62	-25.65
Diesel	14.54	24.81	-10.27	43.6	-29.06
Fuel Oil	-8.58	-16.01	7.43	-3.55	-5.03

Average Dubai price for Q2/23 was US\$77.59/bbl decreased from US\$80.23/bbl in Q1/23 despite OPEC+ production curtailment. Asian refining margins in the region fell to the lowest level since late-October and Asian refinery maintenance season added pressure to the Dubai price. In addition, global economic uncertainties, heightened by the US debt ceiling impasse, hurt consumer confidence amid lackluster manufacturing activity in several major locations. The high interest rates and high inflation continue to weigh on the economic outlook and oil demand.

Naphtha spread over Dubai in Q2/23 decreased to US\$-10.93/bbl. The weakness in naphtha cracks was a result of tepid petrochemical demand in Q2/23. With propane-naphtha spread averaging under US\$-70/t, steam cracker operators have turned to cheaper LPG feedstock. Aside from these, spot buying appetite has been weak given that offline cracker capacity peaks in May. On top of planned outages, the restart of several petrochemical plants have reportedly been delayed. In addition, influx of US olefins cargoes have resulted in negative olefins margins, which dealt a further blow to naphtha demand.

Gasoline spread over Dubai in Q2/23 decreased to US\$16.54/bbl as a concern of higher export from China. The release of the second batch of Chinese export quotas and lower imports from Indonesia have weakened the gasoline cracks. Furthermore, the deferment of Vietnam's Dung Quat refinery turnaround to third quarter has also added more pressure to the cracks. On the other hand, rare imports by India due to supply disruption

in the west coast of India and unplanned refinery outages in the US amid low inventory have limited the decline in cracks.

Jet crack spreads over Dubai decreased from the previous quarter to be US\$13.97/bbl. Climbing stocks in US and ARA have narrowed the East-West differential, resulting in lower export demand outside of the region. Consequently, jet-diesel spread has flipped into discount, signaling the market has an ample supply of jet/kerosene. China's international flights in and out of the country have rebounded, albeit from a very low base of less than 10% of pre-pandemic levels in January to nearly 40% as of early May. The recovery in China's international air travel has recently stalled, with little increase in international flights. There are three major factors behind the recent slowdown in China's international air travel recovery: low seat occupancy rate reflects slow recovery in travel appetite, backlog in passport and visa applications, and closure of Russian airspace. Festive travel in Ramadan and recovering international aviation demand have limited the decline in the cracks.

Diesel crack spreads over Dubai decreased from the previous quarter to be US\$14.54/bbl. Lower import requirement from Europe, a narrower East-West differential, higher Middle Eastern export volumes into Asia, lower imports from Indonesia and a flurry of spot cargo offers from several Asian refiners have weighed on cracks. However, supply disruption at the west coast of India, the delay of third CDU startup in Al-Zour refinery and unplanned refinery outages in the US amid low inventory have limited the decline in cracks.

Fuel oil spread over Dubai in Q2/23 increased from previous quarter to be US\$-8.58/bbl. The HSFO crack remains supported owing to spring turnaround season, tight heavy feedstock supply due to lower medium-heavy crudes production from the OPEC+ production cuts, and steady bunker demand in Singapore. In addition, stockpiling for summer power generation in the Middle East adds further supported the crack.

SPRC's average market refining margin in Q2/23 was US\$1.34/bbl, which is lower than US\$6.36/bbl in Q1/23. In Q2/23, SPRC continued to optimize feedstocks by optimizing freight cost and continue processing Atmospheric residue. SPRC also continues maximizing asphalt production to minimize FO production which is a low value product.

3. Financial Performance

Financial Results

	US\$ Million			US\$ Million		US\$ Million		
	Q2/23	Q1/23	+ / (-)	Q2/22	+ / (-)	6M/23	6M/22	+ / (-)
Total Revenue	1,557	1,736	(180)	2,254	(698)	3,293	4,222	(928)
Cost of sales	(1,618)	(1,676)	58	(1,968)	349	(3,294)	(3,692)	398
Gross profit (loss)	(62)	60	(122)	287	(348)	(1)	529	(530)
Other income	0	1	(1)	0	0	2	1	1
(Loss) gain on exchange rate	(18)	(0)	(18)	(9)	(9)	(18)	6	(24)
Administrative expenses	(9)	(12)	4	(9)	1	(21)	(60)	39
Finance costs	(3)	(3)	(0)	(2)	(1)	(6)	(3)	(3)
Fair value gain (loss) on derivatives	14	0	14	(10)	24	14	(17)	31
Income tax	15	(9)	25	(51)	67	6	(91)	97
Net income	(61)	37	(98)	206	(268)	(25)	365	(390)

	Baht Million			Baht Million		Baht Million		
	Q2/23	Q1/23	+ / (-)	Q2/22	+ / (-)	6M/23	6M/22	+ / (-)
Total Revenue	53,883	59,130	(5,246)	78,008	(24,125)	113,013	143,412	(30,400)
Cost of sales	(55,989)	(57,108)	1,119	(68,069)	12,081	(113,096)	(125,402)	12,306
Gross profit (loss)	(2,106)	2,022	(4,128)	9,939	(12,045)	(84)	18,010	(18,094)
Other income	15	47	(33)	14	1	62	30	33
(Loss) gain on exchange rate	(633)	(19)	(614)	(302)	(331)	(652)	167	(819)
Administrative expenses	(300)	(425)	125	(318)	18	(726)	(2,001)	1,275
Finance costs	(106)	(94)	(13)	(58)	(48)	(200)	(98)	(101)
Fair value gain (loss) on derivatives	499	1	498	(337)	836	501	(565)	1,065
Income tax	526	(305)	831	(1,782)	2,308	222	(3,103)	3,324
Net income	(2,105)	1,219	(3,323)	7,156	(9,261)	(886)	12,440	(13,326)

Production Volumes

Petroleum products	Q2/23	Q1/23	Q2/22	Thousands barrels	
				6M/23	6M/22
Polymer Grade Propylene	353	340	324	693	704
Liquefied Petroleum Gas	574	620	636	1,194	1,263
Light Naphtha	913	766	953	1,679	1,857
Gasoline	3,893	4,044	3,785	7,937	7,904
Jet Fuel	1,646	1,675	1,043	3,322	1,509
Diesel	5,686	5,932	6,057	11,619	11,872
Fuel Oil	498	552	822	1,050	1,572
Asphalt	418	431	188	849	425
Mix C4	532	493	465	1,025	985
Other ⁽¹⁾	1,475	1,337	1,343	2,812	2,658
Total production	15,989	16,191	15,615	32,180	30,749

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

Total Sale Revenue

Petroleum products ⁽¹⁾	Q2/23	Q1/23	Q2/22	US\$ Million	
				6M/23	6M/22
Polymer Grade Propylene	23	25	29	48	64
Liquefied Petroleum Gas	27	37	47	63	91
Light Naphtha	60	55	85	114	173
Gasoline	498	519	669	1,018	1,280
Jet Fuel	152	172	146	324	186
Diesel	587	706	1,008	1,293	1,842
Fuel Oil	26	32	49	58	116
Asphalt	33	35	19	68	43
Mix C4	40	47	52	87	113
Crude	-	-	-	-	29
Others ⁽²⁾	111	108	152	220	286
Total Revenue	1,557	1,736	2,254	3,293	4,222

⁽¹⁾ Includes Government LPG and oil subsidies.

⁽²⁾ Includes sulfur, reformat and products sold pursuant to our cracker feed exchange.

Sales revenue in Q2/23 decreased 10% from Q1/23 mainly from lower average oil prices and product sale volume. Sale volume slightly decreased to 16.5 million barrels in Q2/23 compared to 16.8 million barrels in Q1/23 due to lower demand, particularly Gasoline and Diesel.

Comparing Q2/23 with Q2/22, sales revenue decreased 31%, which was impacted by lower oil prices but partially offset by an increase in sales volume, which increased from 15.6 million barrels in Q2/22 to 16.5 million barrels in Q2/23.

Similarly, sales revenue for 6M/23 also decreased 22% compared to 6M/22, while sales volume increased from 31.4 million barrels to 33.4 million barrels.

The table below presents the breakdown of revenues from the sales of petroleum products to the company's customers.

Customer	Q2/23	Q1/23	Q2/22	6M/23	6M/22
Chevron	40%	42%	40%	41%	39%
PTT & PTTOR	45%	45%	46%	45%	46%
Other oil and petrochemical companies	15%	13%	14%	14%	15%
Total	100%	100%	100%	100%	100%

Cost of Sales

Comparing the cost of sales for Q2/23 with Q1/23, there was a decrease of 3%. The decrease was in line with the decrease in sales revenue and a lower weighted average cost of sales in relation to the drop in oil prices in this quarter, which included an inventory write-down to a net realizable value of US\$6 million in Q2/23.

Comparing Q2/23 to Q2/22, cost of sales in Q2/23 decreased 18% which was reflected from the oil price drop in this quarter partly offset by higher sales volume compared with the same quarter in prior year.

Cost of sales in 6M/23 decreased 11% from 6M/22. The decrease in cost of crude oil on weighted average inventory partly offset by higher sales volume compared with the same period in the prior year.

Gain / (loss) on Foreign Exchange and Financial Derivatives

Comparing Q2/23 with Q1/23, SPRC had a net foreign exchange loss (including derivatives) of US\$3.8 million in Q2/23 owing to Thai Baht depreciation compared to an exchange loss of US\$0.4 million in Q1/23.

Comparing Q2/23 to Q2/22, there were exchange losses in both quarters of US\$3.8 million in Q2/23 and US\$18.4 million in Q2/22. The value of the Baht declined, which resulted in an exchange loss when SPRC has net Baht-denominated receivables.

Comparing 6M/23 to 6M/22, Thai Baht value continued to decline due to the US dollar strengthening on interest rate hikes to control the inflation rate, which impacted an exchange loss of US\$4 million (including derivatives) compared to an exchange loss of US\$11 million in the same period of the prior year.

Administrative Expenses

Comparing Q2/23 with Q1/23, administrative expenses were lower due to the expenses related to the oil spill incident in the prior quarter.

Comparing Q2/23 with Q2/22, administrative expenses were approximately the same quarter as the prior year.

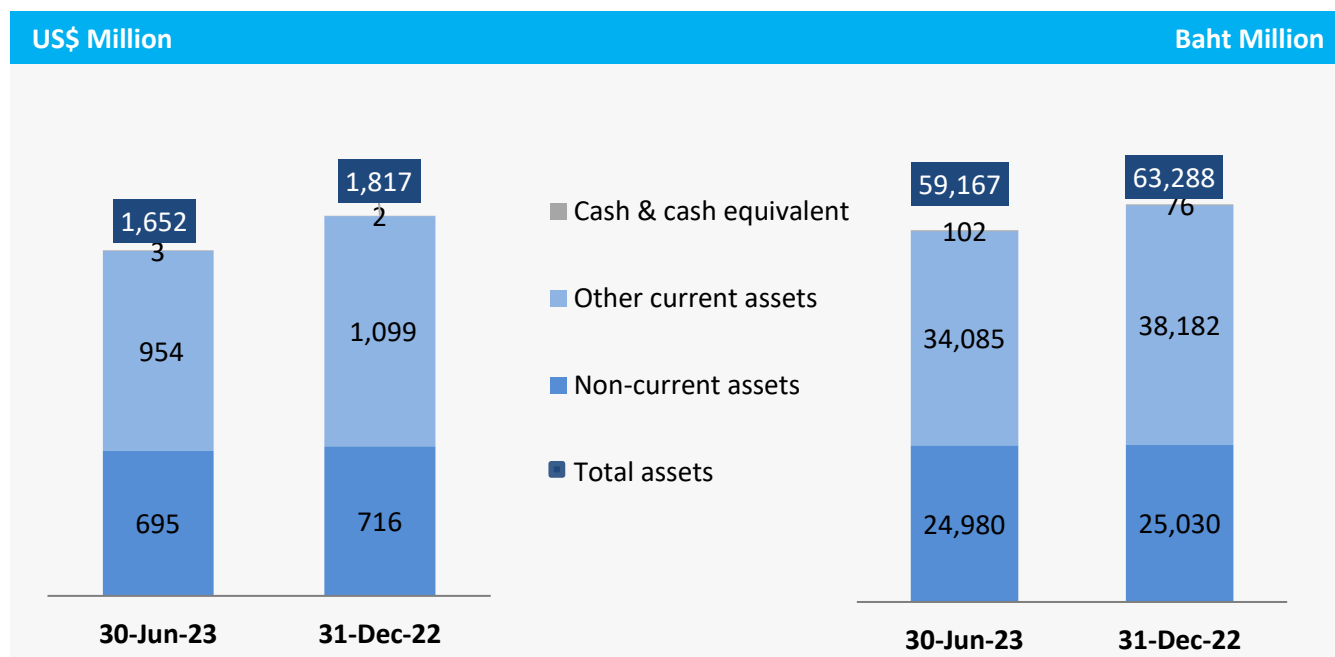
There were the expenses relating to oil spill incident in early of 2022 of US\$44 million in 6M/22 while it was down to US\$3 million in 6M/23. This decrease caused to the lower administrative expenses in 6M/23 comparing to the same period of prior year.

Income tax

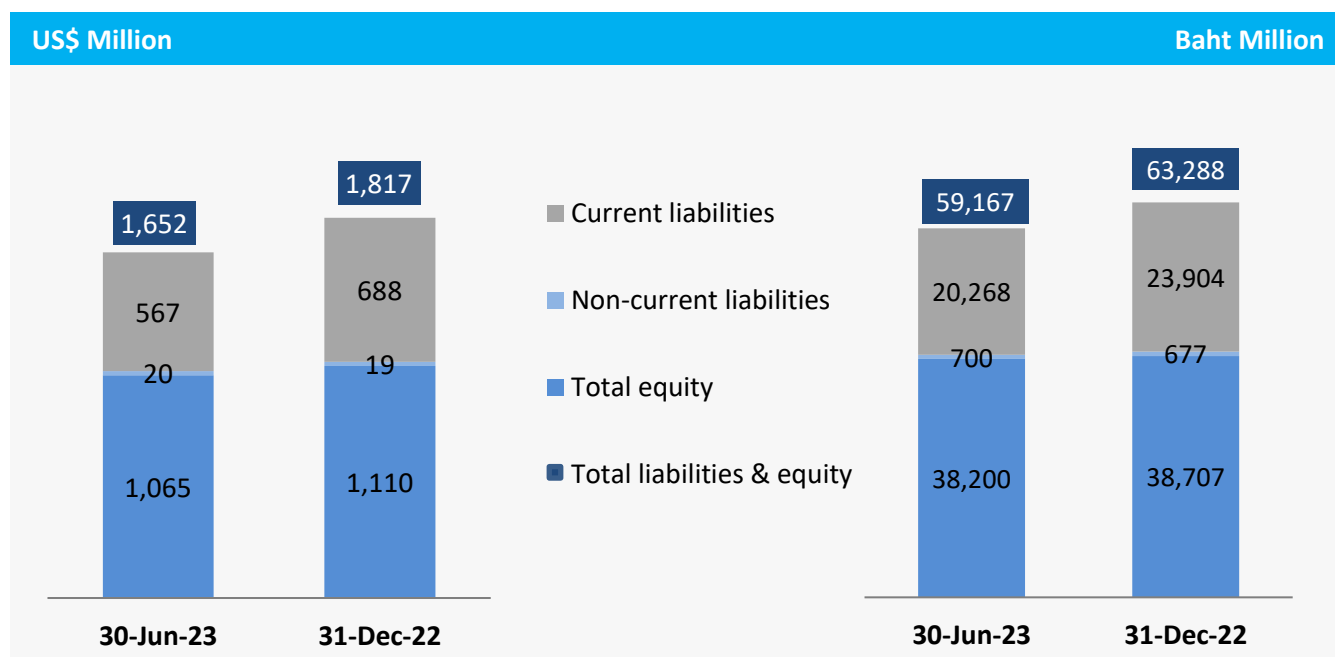
Income tax in 6M/23 reflected deferred income tax on operating loss which will be carried to offset future income.

Analysis of Financial Position

Asset Breakdown



Liabilities & Equity



Assets

Total assets as of 30 June 23 decreased by US\$166 million (Baht 4,121 million) from 31 December 22.

Total current assets decreased by US\$145 million (Baht 4,070 million) mainly due to:

- a decrease in trade and other receivables of US\$84 million (Baht 2,568 million) due to lower product selling price and sales volume in June 23 compared to December 22 and a reduction in oil fund subsidy receivables; and
- a decrease in inventory of US\$68 million (Baht 1,751 million) mainly from lower inventory price due to dropped in oil price at end of June 23 compared to December 22; but partly offset by
- an increase in other current assets of US\$6 million (Baht 222 million) mainly from advance to supplier of US\$7 million.

Non-current assets also decreased US\$21 million (Baht 51 million) mainly due to a decrease in property, plant and equipment of US\$34 million (Baht 563 million) due to depreciation expenses in 6M/23, but partly offset by an increase in deferred tax assets mainly from deferred tax from operating loss US\$9 million and an increase in other non-current assets mainly from prepaid expenses of US\$10 million.

Liabilities

Total liabilities as of 30 June 23 decreased by US\$121 million (Baht 3,613 million) from 31 December 22. The decrement was mainly from:

- a) a decrease in S-T and L-T borrowing of US\$133 million (Baht 4,451 million) from loan repayment in 6M/23; but partly offset by
- b) an increase in trade and other account payables of US\$14 million (Baht 889 million) from timing of crude payment in December 22 to be paid before year end which resulted to low trade payable at end 2022.

Shareholders' Equity

Shareholders' equity as of 30 June 23 decreased US\$45 million (Baht 507 million) from 31 December 22 resulted from the net loss in 6M/23 of US\$25 million (Baht 886 million) and dividend payment of US\$19 million (Baht 650 million). Shareholders' equity in Baht also included the impact from exchange rate translation.

Statement of Cash Flow

6M/2023	US\$ Million	Baht Million
Net cash generated from operating activities	160	5,463
Net cash used in investing activities	(2)	(76)
Net cash used in financing activities	(157)	(5,354)
Net increase in cash and cash equivalents	1	33
Cash and cash equivalents at the beginning of the period	2	76
Adjustments from foreign exchange translation	0	(6)
Cash and cash equivalents at the end of the period	3	102

SPRC cash and cash equivalents were US\$3 million at the end of June 2023, compared with US\$2 million at the end of December 2022.

Details of cash flow activities in 6M/23 are as follow:

- a) Net cash generated from operating activities was US\$160 million (Baht 5,463 million) was primarily due to:
 - a. 6M/23 net loss was US\$25 million (Baht 886 million) and added back non-cash items of US\$13 million (Baht 441 million); and
 - b. Cash generated from operating assets was US\$163 million (Baht 5,599 million). A decrease in inventory of US\$103 million (Baht 3,527 million) from lower inventory price and volume and a decrease in trade and other receivables of US\$74 million (Baht 2,547 million) from lower product selling price and sales volume, partially offset by an increase in other current and non-current assets of US\$14 million (Baht 475 million) mainly from prepaid expenses; and
 - c. Cash generated from operating liabilities was US\$9 million (Baht 308 million) mainly from an increase in trade and other payables US\$15 million (Baht 513 million) due to timing of crude payment, but partly offset by short-term provision paid of US\$4 million (Baht 163 million) relating to the oil spill incident.

- b) Net cash used in investing activities was US\$2 million (Baht 76 million) for miscellaneous capital expenditure in small projects.
- c) Net cash used in financing activities was US\$157 million (Baht 5,354 million) for the loan repayment of US\$138million (Baht 4,703 million) in 1H/23 and dividend payment of US\$19 million (Baht 650 million) from 2022 earnings.

Financial Ratios

		Q2/23	Q1/23	Q2/22	6M/23	6M/22
Current Ratio	(Time)	1.7	1.6	1.7	1.7	1.7
Gross Profit Margin	(%)	(4.0)	3.5	12.7	(0.0)	12.5
Net Profit Margin	(%)	(3.9)	2.1	9.2	(0.7)	8.6
Debt to Equity ratio	(Time)	0.6	0.7	0.7	0.6	0.7
Net Interest-Bearing Debt to Equity ratio	(Time)	0.1	0.2	0.1	0.1	0.1
Interest Coverage ratio	(Time)	(24.1)	17.7	155.4	(4.3)	158.8

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. Market Outlook

In third-quarter margins are expected to be slightly stronger than second quarter, incentivizing refiners to increase their utilization rates. Expect Asia refined products demand growth with slow rate in third quarter 2023. Demand growth remains uncertain owing to slowing economies in the US and Europe, impacting export volumes from Asia. Rising interest rates amid slowing economic growth and high inflation continue to weigh on the economic outlook while the unpredictability of the Russia-Ukraine conflict continues to be a major risk to the oil market. Asian refined product demand is estimated to increase by about 1.7 million b/d year over year in the third quarter of 2023. For the supply side, expect to increase in July and August as more supplies enter the market after the end of spring maintenance in Asia. Margins should see an uptick in September during autumn maintenance. There is upside potential from unplanned outages and/or delays to the start-ups of upcoming projects, such as Oman's Duqm refinery and the third CDU train at Kuwait's Al-Zour refinery (both anticipated in September) and potential financial issues at Vietnam's Nghi Son refinery may weigh on the refinery's runs in the second half of 2023.

Expect an uptick in naphtha demand with several South Korean crackers returning from planned maintenance in the coming months, such as Hanwha Total, YNCC, and Hyundai Chemical. This should widen Asia's naphtha deficit, especially in August and September. As this coincides with the seasonal increase in petrochemical demand, margins could improve during this period before easing again in Q4/23.

Asian gasoline cracks are expected to strengthen in July before easing from August onward. The demand in China and India should remain healthy despite the monsoon season. Gasoline crack is supported by the continued use of two-wheelers for shorter and essential trips. Further support may come from reduced retail fuel prices at domestic service stations. China's gasoline exports is expected to be limited during July and August (despite improved export margins) due to strong demand during the summer school holiday. The US is entering its peak driving season should provide some support to Asian gasoline cracks as well. US gasoline inventories are still below the five-year average, even though gasoline yields at domestic refineries have been at seasonal highs in recent weeks. Downside risk to cracks will likely come from uncertain global economic outlook as the US and Europe continue to increase interest rates.

Jet/kerosene cracks are expected to remain firm in July and August as recovering international aviation demand and the start of summer air travels will support the cracks. China's air travel demand will continue to recover. According to the latest data from the Civil Aviation Administration of China, international flights during the upcoming school holiday season are 5% higher than 1H June levels. Flights to popular tourist destinations such as Southeast Asia, Japan, and South Korea will continue to lead the rebound in tourism demand. Expect China's international air travel to reach 60-65% of pre-pandemic levels by the end of the year, as the backlog in issuing travel documents eases and travel appetite increases further. Estimate China's jet fuel demand will fully recover to 2019 levels by the end of 2023. The US and Europe are expected to register strong summer travel volumes. This will be the first summer travel season with no major restrictions deterring travelers. Travelers may encounter airport congestion and lack of manpower from airlines, which may disrupt their travel plans. High inflation, high interest rates and uncertain economic growth will continue to weigh on demand and cracks.

Gasoil crack spreads are estimated to remain firm in July and August, supported by European driving season, reduction in Chinese interest rates and potential further economic stimulus from mainland China. In addition, Chinese exports are expected to remain low, supporting the diesel cracks. In addition, strong aviation demand is expected to support the middle distillate cracks as well. Furthermore, PMITM readings in several Southeast Asian markets continue to be strong, supporting the region's demand. However, monsoon season in India may dampen diesel demand.

HSFO crack spreads are expected to soften in July and August as HSFO demand for power generation during summer has been lackluster so far this year, especially in South Asian countries such as Pakistan and Bangladesh. Meanwhile, Bangladesh has been resorting to austerity measures due to the lack of foreign exchange reserves to pay for fuel supplies. Kpler data show that HSFO imports into the country fell by some 30 kb/d y-o-y to 48 kb/d in June. In addition, the availability of new crude oil import quota is expected to dampen the demand for heavy residual feedstocks in mainland China. Furthermore, the return of Russian refineries from turnarounds will increase fuel oil export availability.

5. Appendix

