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

Star Petroleum Refining Public Company Limited

For Quarter 4/2022 and Year 2022

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1. Company's Operating Result

(US$ Million)	Q4/22	Q3/22	+/(-)	Q4/21	+/(-)	2022	2021	+/(-)
Total Revenue	1,793	2,082	(288)	1,574	219	8,097	5,350	2,747
EBITDA	15	(150)	165	88	(73)	361	275	85
Adjusted EBITDA [1]	71	43	28	53	18	433	82	352
Gain (Loss) on foreign exchange	34	(17)	51	6	28	6	(2)	9
Net income	(6)	(137)	131	55	(62)	222	150	73
Net income (US$ per share)	(0.00)	(0.03)	0.03	0.01	(0.01)	0.05	0.03	0.02
Accounting gross refining margin (US$/barrel) [2]	1.77	(7.34)	9.12	8.16	(6.39)	9.22	7.50	1.72
Market gross refining margin (US$/barrel) [3]	5.39	6.00	(0.61)	5.97	(0.58)	9.64	3.66	5.98
Crude intake (thousand barrels/day)	163.2	155.4	7.8	139.2	24.0	156.3	135.1	21.2
Crude intake Utilization	93%	89%	4%	80%	14%	89%	77%	12%

(Baht Million)	Q4/22	Q3/22	+/(-)	Q4/21	+/(-)	2022	2021	+/(-)
Total Revenue	65,706	76,146	(10,440)	52,803	12,903	285,264	172,484	112,780
EBITDA	1,151	(5,532)	6,683	2,947	(1,796)	12,513	8,769	3,745
Adjusted EBITDA [1]	3,208	1,549	1,658	1,788	1,420	15,067	2,533	12,534
(Loss) gain on foreign exchange	1,225	(620)	1,845	199	1,026	207	(74)	282
Net income	260	(5,027)	5,287	1,855	(1,594)	7,674	4,746	2,927
Net income (Baht per share)	0.06	(1.16)	1.22	0.43	(0.37)	1.77	1.09	0.68

[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$)	Q4/22	Q3/22	+/(-)	Q4/21	+/(-)	2022	2021	+/(-)
Average FX	36.50	36.58	(0.09)	33.54	2.96	35.23	32.17	3.06
Closing FX	34.73	38.07	(3.33)	33.59	1.14	34.73	33.59	1.14

Oil markets have become bearish over Q4 due to the gloomy global economic outlook, expectations of a stronger US dollar, and concerns over oil demand in the face of interest rate increases by the U.S. Federal Reserve. There is continued decline in crude oil prices as a result of recession fears, a weakening economy, and China's COVID restrictions, despite OPEC+ agreeing to cut output by 2 million barrels per day from November to 2023 and improving international aviation demand. In Q4/22, the utilization rate for the crude intake was 163 thousand barrels per day, or equivalent to 93% of its refining capacity, which was higher than the prior quarter. However, SPRC maintained crude and product optimizations to maximize domestic demand.

NIAT for Q4/22 was a loss of US$6 million comparing to a loss of US$137 million in prior quarter. The accounting refining margin in Q4/22 was US$1.77/bbl compared to a negative US$(7.34)/bbl in the last quarter. A continuing decline in oil prices, especially at the end of the quarter, led to a stock loss in this quarter. Excluding stock losses, the market refining margin fell slightly from US$6.00/bbl in Q3/22 to US$5.39/bbl in Q4/22 due to a decline in gasoline spreads, which was pressured by increased exports from the Chinese mainland and recession fears, as well as low levels of synergy products with PTTGC during PTTGC's turnaround period, and SPRC had taken this opportunity to plan a shutdown to change the catalyst in the Heavy Vacuum Gas Oil Hydrotreating Unit (HVGO-HTU). Total operating expenditures were higher than the prior quarter's expenses due to catalyst costs, while a significant appreciation of Baht against US$ during the quarter resulted in a foreign exchange gain of US$34 million.

Compared to Q4/22 with Q4/21, sales revenue increased 14%, owing primarily to an increase in sales volume and an increase in product prices as a result of improved domestic demand from the resumption of more economic activities and more travel compared to the previous year quarter during the COVID-19 pandemic. EBITDA, EBIT and net earnings in Q4/22 were negative while they were positive in Q4/21. Accounting gross refining margin in Q4/22 was lower than the same quarter the previous year, owing to the drop in oil prices, which resulted in a stock loss. Excluding stock gain or loss, the refining margin in Q4/22 of US$5.39/bbl approximated US$5.97/bbl in Q4/21.

Compared 2022 with 2021, sales revenue increased by 51%, which was impacted by a significant increase in oil prices and an increase in sales volume from activity resumption. EBITDA, EBIT and net earnings in 2022 significantly improved from the prior year, mainly due to a strong refining margin and improving domestic demand. NIAT in 2022 was US$222 million, considerably increased over the previous year of US$150 million. Excluding stock gain or loss, the 2022 market gross refining margin significantly improved to US$9.64/bbl, compared to US$3.66/bbl in 2021, due to a greater crack spread of main products as a result of strong demand from the relaxation of travel restrictions and the Ukraine-Russia conflict, which impacted tight oil supply and caused a rise in oil prices.

2. Market Condition

Pricing	Q4/22	Q3/22	+/(-)	Q4/21	+/(-)
Dubai crude oil	84.77	96.68	-11.91	78.27	6.50
Light Naphtha (MOPJ)	74.78	79.09	-4.31	82.68	-7.90
Gasoline (premium)	94.30	109.76	-15.45	93.71	0.60
Jet Fuel	118.28	129.11	-10.83	88.48	29.80
Diesel	124.06	131.91	-7.85	89.72	34.35
Fuel Oil	62.44	74.44	-12.00	71.38	-8.93

Spread over Dubai	Q4/22	Q3/22	+/(-)	Q4/21	+/(-)
Light Naphtha (MOPJ)	-9.99	-17.60	7.60	4.41	-14.40
Gasoline (premium)	9.53	13.07	-3.54	15.44	-5.91
Jet Fuel	33.51	32.43	1.08	10.21	23.30
Diesel	39.29	35.22	4.07	11.45	27.84
Fuel Oil	-22.33	-22.24	-0.09	-6.89	-15.44

Average Dubai price for Q4/22 was US$84.77/bbl decreased from US$96.68/bbl in Q3/22. Crude prices have softened amid weaker demand anticipation alongside a global economic downturn. The endurance of the zero–COVID-19 policy dampened demand growth in mainland China.

Gasoline spread over Dubai in Q4/22 decreased to US$9.53/bbl due to weak domestic demand in mainland China resulting in elevated Chinese exports and pressure on the cracks. However, strong import demand from Vietnam and India have helped to limit the decline in cracks. The downward pressure on demand concern have been growing from a potential economic slowdown as an unavoidable recession. In the US, gasoline cracks fell due to seasonal demand weakness and continued builds in domestic inventories. Similarly, European gasoline cracks fell as supply in the region is picking up with the end of maintenance and recovery in French refinery throughput after the worker strikes ended. Cracks in Europe also had to fall further to offset higher clean freight costs and keep the transatlantic arbs open.

Naphtha spread over Dubai in Q4/22 increased to US$-9.99/bbl. Naphtha crack have strengthened as crude prices eased despite continued lackluster demand fundamentals. Supply uncertainties are also driving a stronger naphtha crack owing to the impending EU sanctions on Russian crude and oil products.

Jet and diesel crack spreads over Dubai increased from previous quarter to be US$33.51/bbl and US$39.29/bbl respectively. The arbitrage economics to flow middle distillate from East to the West due to EU sanctions on Russian crude and oil products has lifted cracks despite weaker PMI™ readings across most of the major markets in Asia. Improving international aviation activity and seasonal kerosene stockpiling have supported the region’s jet/kerosene demand. Major sporting event, such as World Cup 2022, has also boosted international aviation demand. In addition, ongoing kerosene stockpiling is pushing up the cracks and narrowing the jet-diesel differential. Global Middle distillate stocks remain at lowest levels below the 5 years average as the supply disruptions from the Russia-Ukraine war and higher jet fuel demand following the relaxation of COVID19 related travel restrictions. Global middle distillate inventory levels in 5 key areas were low levels. Singapore middle distillate stocks increased by 5% Q-o-Q to 7.7 million barrels, but still below 5 years average despite China's diesel exports are elevated in Q4/22.

Fuel oil spread over Dubai in Q4/22 was US$-22.33/bbl, close to the same level from Q3/22. Higher Russian inflows into East of Suez continues to pressure HSFO cracks. However, the return of Formosa's Residue Desulfurization Unit (RDS) in Taiwan and OPEC+ production cuts have likely reduced HSFO supply, tightening the HSFO market. Singapore onshore fuel oil inventories decreased by 7% Q-o-Q to 20.9 million barrels.

SPRC's average market refining margin in Q4/22 was US$5.39/bbl, which is slightly lower than US$6.00/bbl in Q3/22. In Q4/22, SPRC captured margin by increased domestic supply volume particularly in Jet due to aviation sector recovery and diesel demand from power plant, maximize fuel Oil upgrading thru feeding to RFCCU unit and maximize asphalt production, as well as feedstock optimization.

3. Financial Performance

Financial Results

	US$ Million			US$ Million		US$ Million		
	Q4/22	Q3/22	+/(-)	Q4/21	+/(-)	2022	2021	+/(-)
Total Revenue	1,793	2,082	(288)	1,574	219	8,097	5,350	2,747
Cost of sales	(1,819)	(2,225)	406	(1,510)	(308)	(7,736)	(5,133)	(2,603)
Gross profit	**(25)**	**(143)**	**118**	**63**	**(89)**	**361**	**217**	**144**
Other income	0	0	0	1	(0)	2	2	(0)
Gain (loss) on exchange rate	17	(12)	29	9	9	11	11	(0)
Administrative expenses	(13)	(9)	(4)	(1)	(12)	(82)	(24)	(58)
Finance costs	(4)	(2)	(2)	(2)	(2)	(9)	(7)	(2)
Fair value (loss) gain on derivatives	17	(5)	22	(3)	19	(5)	(14)	9
Income tax	1	34	(33)	(12)	14	(56)	(37)	(19)
Net income	**(6)**	**(137)**	**131**	**55**	**(62)**	**222**	**150**	**73**

	Baht Million			Baht Million		Baht Million		
	Q4/22	Q3/22	+/(-)	Q4/21	+/(-)	2022	2021	+/(-)
Total Revenue	65,706	76,146	(10,440)	52,803	12,903	285,264	172,484	112,780
Cost of sales	(66,015)	(81,416)	15,401	(50,677)	(15,338)	(272,833)	(165,598)	(107,234)
Gross profit	**(309)**	**(5,270)**	**4,961**	**2,126**	**(2,434)**	**12,432**	**6,886**	**5,546**
Other income	17	16	1	20	(3)	63	62	1
(Loss) gain on exchange rate	642	(433)	1,075	296	346	376	359	18
Administrative expenses	(457)	(333)	(124)	(24)	(433)	(2,791)	(749)	(2,042)
Finance costs	(141)	(77)	(64)	(51)	(90)	(316)	(212)	(105)
Fair value (loss) gain on derivatives	583	(187)	769	(97)	679	(169)	(433)	264
Income tax	(75)	1,257	(1,331)	(414)	340	(1,921)	(1,166)	(754)
Net income	**260**	**(5,027)**	**5,287**	**1,855**	**(1,594)**	**7,674**	**4,746**	**2,927**

Production Volumes

Thousands barrels

Petroleum products	Q4/22	Q3/22	Q4/21	2022	2021
Polymer Grade Propylene	347	346	373	1,396	1,610
Liquefied Petroleum Gas	652	586	583	2,501	2,358
Light Naphtha	738	818	786	3,413	3,159
Gasoline	3,803	3,816	3,964	15,523	15,348
Jet Fuel	1,404	929	322	3,842	1,171
Diesel	6,318	6,233	5,721	24,424	21,169
Fuel Oil	712	929	738	3,214	2,253
Asphalt	354	241	190	1,020	710
Mix C4	416	510	503	1,910	2,113
Other (1)	434	1,551	1,163	4,643	4,194
Total production	**15,178**	**15,958**	**14,342**	**61,885**	**54,086**

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

Total Sales Revenue

US$ Million

Petroleum products (1)	Q4/22	Q3/22	Q4/21	2022	2021
Polymer Grade Propylene	23	25	30	112	133
Liquefied Petroleum Gas	34	35	41	160	132
Light Naphtha	52	67	65	292	226
Gasoline	476	548	517	2,305	1,790
Jet Fuel	187	115	29	488	91
Diesel	852	865	672	3,559	2,301
Fuel Oil	61	74	61	251	145
Asphalt	28	15	13	86	51
Mix C4	42	47	43	202	163
Crude	0	161	0	190	2
Others (2)	37	128	103	451	316
Total Revenue	**1,793**	**2,082**	**1,574**	**8,097**	**5,350**

(1) Includes Government LPG and oil subsidies.
(2) Includes sulfur, reformate and products sold pursuant to our cracker feed exchange.

Sales revenue in Q4/22 decreased 14% from Q3/22 due to a decrease in average oil prices and a slightly lower sales volume of 16.4 million barrels in Q4/22 compared to 16.6 million barrels in Q3/22. Thailand oil demand continued to recover, particularly in the aviation sector from the travel season, but was partially offset by a drop in gasoline demand due to economic concern over recession risk as well as low synergy products with PTTGC during PTTGC's turnaround period and SPRC's planned shutdown to change the catalyst in the Heavy Vacuum Gas Oil Hydrotreating Unit (HVGO-HTU).

Comparing Q4/22 with Q4/21, sales revenue increased by 14%, which was impacted by significantly higher oil prices and an increase in sales volume after the easing of COVID measures, which increased from 14.9 million barrels in Q4/21 to 16.4 million barrels in Q4/22.

Similarly, sales revenue in 2022 also significantly increased by 51% compared to 2021, sale volume from 56.0 million barrels to 65.8 million barrels, from the recovery of product demand with more mobility after the relaxation of COVID.

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

Customer	Q4/22	Q3/22	Q4/21		2022	2021
Chevron	42%	45%	40%		41%	43%
PTT & PTTOR	50%	42%	44%		46%	41%
Other oil and petrochemical companies	8%	13%	16%		13%	16%
Total	**100%**	**100%**	**100%**		**100%**	**100%**

Cost of Sales

Comparing cost of sale for Q4/22 with Q3/22, cost of sale decreased 18%. The decrease was due to a decrease in sale volume, lower weighted average cost of sale, and also a reversal loss (net) from inventory write-down to net realizable value of US$34 million in Q4/22.

Comparing Q4/22 to Q4/21, cost of sales in Q4/22 increased 20% due to oil price increase and higher sales volume compared with the same quarter in prior year.

Cost of sales in 2022 increased 51% from 2021 due to the increase in cost of crude oil on weighted average inventory, a loss from inventory write-down, and also higher sales volume compared to prior year.

Gain / (loss) on Foreign Exchange and Financial Derivatives

In Q4/22 Thai Baht set to continue strengthening as Asian economies to benefit from China's reopening which resulting in exchange gain (including derivatives) of US$34 million in Q4/22 compared to the exchange loss in Q3/22 of US$17 million. Baht strengthening resulted in an increase in the value of Baht denominated receivables when converted to US$ equivalent.

Comparing Q4/22 to Q4/21, there was exchange gain in both quarters of US$34 million in Q4/22 and US$6 million in Q4/21. The value of Baht appreciated in both periods which resulted in exchange gain as SPRC had net Baht denominated receivables.

Comparing 2022 to 2021, Thai Baht value against $US slightly depreciated in 2022 with a total year exchange gain of US$6 million versus an exchange loss of US$2 million in prior year when Baht currency also declined.

Administrative Expenses

Administrative expenses were US$13 million in Q4/22 higher than in Q3/22, owing primarily to additional consultant fees, and other expenses.

Comparing Q4/22 to Q4/21, administrative expenses significantly increased to US$13 million in Q4/22 from US$0.6 million in Q4/21 as a result of incurred expenses relating to consultation fee and oil spill incident while in Q4/21 there were the reversal of accrued expenses of US$5.9 million and recovery from the loss of invoice payment from the cyber-attack which caused to low administration expenses.

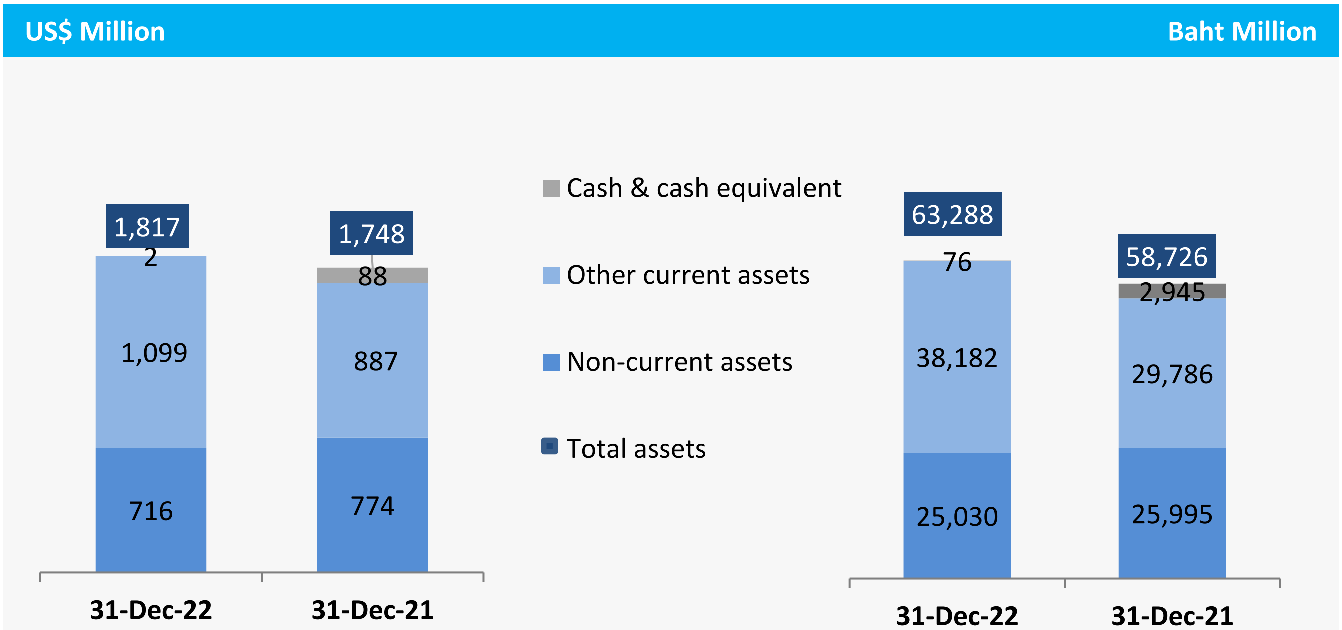
Comparing 2022 with 2021, total administrative expense significantly increased from US$24 million in 2021 to US$82 million in 2022 mainly due to the expenses related to the oil spill incident in early of 2022.

Income tax

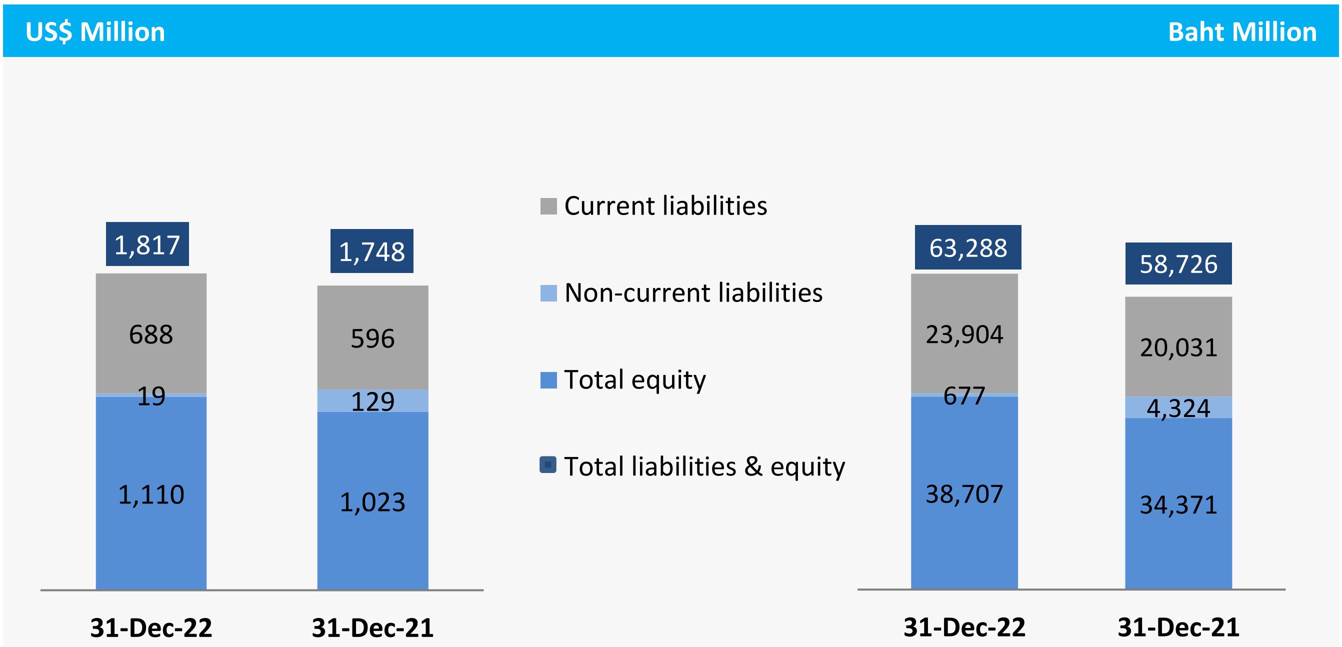
Operating profit in 2022 resulted in income tax in this period which partly offset with the deferred income tax on operating loss carry forward from prior year.

Analysis of Financial Position

Asset Breakdown



Liabilities & Equity



Assets

Total assets as of 31 December 22 increased by US$69 million (Baht 4,562 million) from 31 December 21.

Total current assets increased US$127 million (Baht 5,527 million) mainly due to:

a) an increase in inventory of US$193 million (Baht 7,276 million) mainly from increasing of inventory volume to support higher crude run and increase in strategic reserve from 4% to 5%; and

b) an increase in trade and other receivables of US$19 million (Baht 1,109 million) due to higher product selling price and higher outstanding oil fuel fund subsidy in December 22 comparing to December 21; but partly offset by

c) a decrease in cash and cash equivalent of US$85 million (Baht 2,869 million) due to net cash used in financing activities, mainly from dividend payments to shareholders of US$136 million (Baht 4,936 million), repayment of long-term borrowings of US$143 million (Baht 5,033 million), and to support higher working capital, which was partly offset by net cash generated from operating activities.

On the contrary, non-current assets decreased US$58 million (Baht 965 million) mainly due to a decrease in property, plant and equipment of US$66 million (Baht 1,483 million) due to depreciation expenses 2022, and a decrease in deferred tax assets of US$28 million (Baht 922 million) from the utilization of operating loss carryforward from profit in 2022.

Liabilities

Total liabilities as of 31 December 22 decreased US$17 million (but increase Baht 226 million from currency translation) from 31 December 21. The decremental was mainly from:

a) a decrease in trade and other account payables of US$48 million (Baht 1,180 million) from timing of crude payment in December 22 comparing to December 21; and

b) a decrease in Excise tax payable of US$17 million (Baht 544 million) from government reduction in excise tax rate of diesel since February 22 to control the selling price; but partly offset by

c) an increase in other current liabilities from short-term provision relating to oil spill incident of US$7 million (Baht 242 million); and

d) an increase in S-T borrowing of 189 million (Baht 6,562 million) to support working capital, but partly offset by a decrease in L-T borrowing of US$149 million (Baht 4,886 million) from repayment in 2022.

Shareholders' Equity

Shareholders' equity as of 31 December 22 increased US$86 million (Baht 4,336 million) from 31 December 21 resulting from the net profit in 2022 offset by dividend payment.

Statement of Cash Flow

	US$ Million		Baht Million	
	2022	2021	2022	2021
Net cash generated (used) in operating activities	13	121	156	3,782
Net cash used in investing activities	(8)	(3)	(278)	(103)
Net cash used in financing activities	(91)	(85)	(3,298)	(2,844)
Net (decrease) increase in cash and cash equivalents	**(86)**	**33**	**(3,421)**	**835**
Cash and cash equivalents at the beginning of the period	**88**	**54**	**2,945**	**1,635**
Adjustments from foreign exchange translation	1	1	551	475
Cash and cash equivalents at the end of the period	**2**	**88**	**76**	**2,945**

SPRC cash and cash equivalents was US$2 million at the end of December 2022, decreased from US$88 million at the end of December 2021.

Details of cash flow activities in 2022 are as follow.

a) Net cash generated from operating activities of US$13 million (Baht 156 million) which was primarily due to:

   a. Cash generated from 2022 net profit of US$222 million (Baht 7,674 million) from strong refining margin and non-cash items of US$110 million (Baht 3,733 million); Cash generated was partly offset by

   b. Cash used in operating liabilities of US$71 million (Baht 2,490 million) mainly from a decrease in trade and other payables US$47 million (Baht 1,673 million) from timing of crude payment, and a decrease in other current liabilities of US$22 million (Baht 792 million) mainly from the lower Excise tax rate on diesel to control the retail price in December 22 compared to December 21; and

c. Cash used in operating assets of US$249 million (Baht 8,762 million). The increase both in oil price and volume due to higher strategic reserve also gave rise to an increase in inventory US$235 million (Baht 8,278 million) and an increase in trade and other receivables of US$16 million (Baht 549 million) from higher selling price and an increase in outstanding oil fuel fund subsidy.

b) Net cash used in investing activities of US$8 million (Baht 278 million) mainly in reliability and environmental projects.

c) Net cash used in financing activities of US$91 million (Baht 3,298 million) for the principal repayment of long-term borrowings of US$143 million (Baht 5,033 million) and dividend payment of US$136 million (Baht 4,936 million), partially offset by proceeds of short-term borrowing of US$188 million (Baht 6,672 million) to support the increase in working capital.

Financial Ratios

		Q4/22	Q3/22	Q4/21	2022	2021
Current Ratio	(Time)	1.6	1.5	1.6	1.6	1.6
Gross Profit Margin	(%)	(1.4)	(6.9)	4.0	4.5	4.1
Net Profit Margin	(%)	(0.3)	(6.6)	3.5	2.7	2.8
Debt to Equity ratio	(Time)	0.6	0.8	0.7	0.6	0.7
Net Interest-Bearing Debt to Equity ratio	(Time)	0.3	0.2	0.2	0.3	0.2
Interest Coverage ratio	(Time)	(0.9)	(80.4)	45.2	32.5	29.2

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

Asian refined products demand is estimated to increase following the reopening of its borders and easing of COVID-19 curbs after protests last year. It is expected mainland China's refined products demand to record a more sustained and steady recovery. The biggest downside risks to demand are a resurgence in COVID-19 cases (especially in rural areas) following the peak travel period may result in uneven or volatile demand recovery over the next few months, as well as a worsening recession globally maybe dampen the demand recovery somewhat. Elsewhere, in major markets, there are signs of manufacturing activity slowing down, pressuring diesel consumption growth in 2023. However, the gradual easing of international travel requirements will relieve pent-up demand and support jet/kerosene demand growth in 2023. On the supply side, Asia and Middle East refinery throughputs are projected to improve as demand recovers and new refining capacities are added.

Refining margins are expected to improve, largely owing to the strengthening of light distillate crack, middle distillate cracks. Uncertainties from the looming EU embargo on Russian oil product exports amid low gasoil inventory, colder weather and the upcoming spring refinery maintenance should provide a floor for Asian gasoil cracks. Furthermore, the recovery of international aviation demand in various Asian markets will provide more support to jet/kerosene cracks.

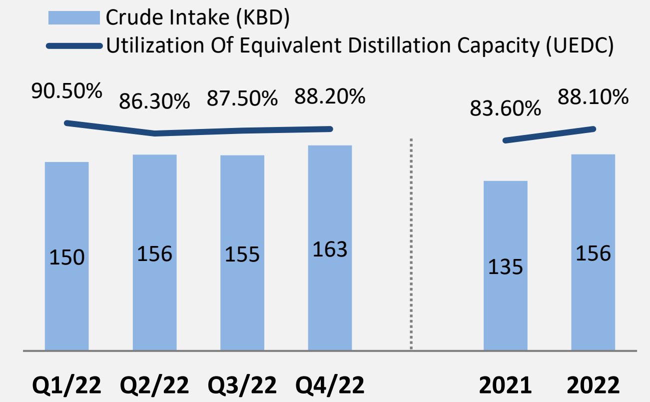
It is expected that Asian demand for light distillate will rise further in 2023, led by China as the country's COVID-19 situation is expected to stabilize and mobility improves. Demand in India, Japan, and Indonesia will also see some seasonal strength over Q2/23.

Middle distillates demand is expected to increase due to higher domestic aviation demand in mainland China gradually resulting in lower export volume. International aviation demand is expected to continue to improve steadily despite headwinds from the macroeconomics. However, end of winter season and clean product price cap at US$100 per bbl limit gain on the middle distillate price.

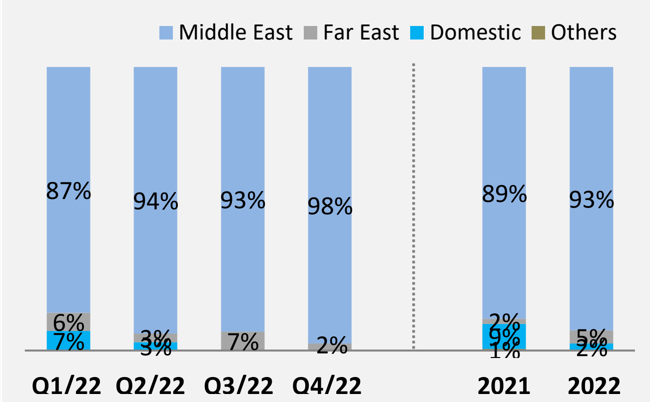
The residual fuel oil crack forecast to strengthen gradually in Q1/23 as total Russian fuel oil supplies are likely to be lowered owing to the EU ban / price cap results to higher demand from China and India. Gas-to-oil switching and winter power generation demand from Northeast Asia and South Asia will support the region's demand, although bunker demand is likely to remain lackluster. Downside risks to the cracks will come from a gloomier economic outlook, which will impact trade and bunker demand negatively.

5. Appendix

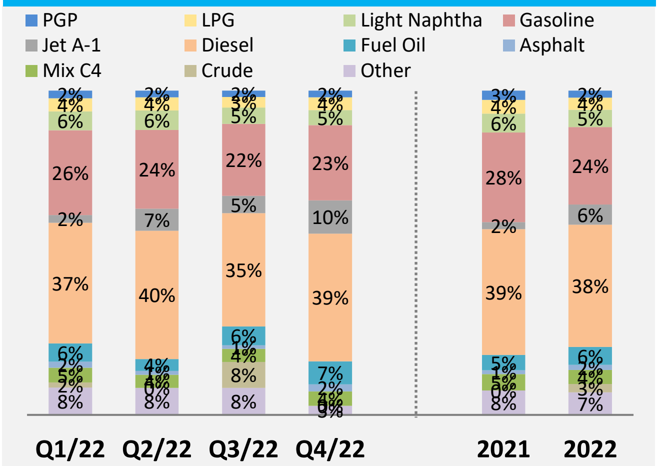
Crude intake



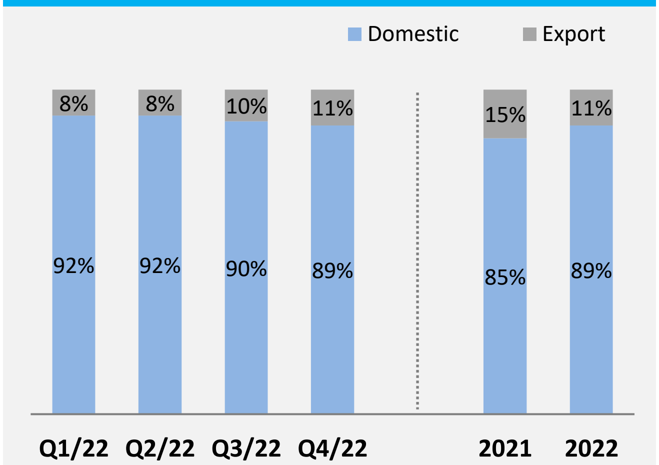
Crude Sources



Sales Volumes



Domestic Sales



Remarks: % of products sales only