

IRPC Public Company Limited

Management Discussion and Analysis

Operating Results for the First Quarter of 2022









Table of Contents

Executive Summary	1
Operating Performance	
1. Operating Performance by Business Units	3
1.1 Petroleum business unit	3
1.2 Petrochemical business unit	8
1.3 Power Plant and Utility business units	. 13
2. Total Operating Performance	1/
Financial Positions as of 31 March 2022	. 18





Management Discussion and Analysis (MD&A) IRPC Public Company Limited and its subsidiaries Operating Results for the First Quarter of 2022

Executive Summary

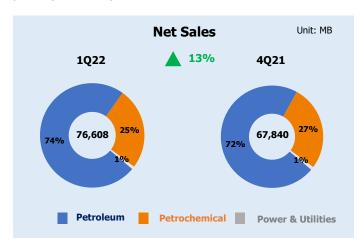
	Quarter			Chang	je	
	O.I.I.C	1Q22	1Q21	4Q21	YoY	QoQ
Crude Intake	Million bbl	17.46	16.73	18.23	4%	(4%)
Sales ^[1]	Million Baht	79,432	53,650	72,445	48%	10%
Net Sales [2]	Million Baht	76,608	48,388	67,840	58%	13%
Market GIM	Million Baht	4,105	6,965	6,680	(41%)	(39%)
	USD/bbl [3]	7.08	13.68	10.92	(48%)	(35%)
Accounting GIM	Million Baht	9,891	11,967	6,947	(17%)	42%
	USD/bbl	17.05	23.51	11.36	(27%)	50%
EBITDA	Million Baht	6,600	8,783	3,094	(25%)	113%
Net Profit	Million Baht	1,501	5,581	2,194	(73%)	(32%)

Note: [1] **Sales** include (1) Petroleum Sales (2) Petrochemical Sales (3) Power and Utilities Sales (4) Sales of tank farm and port service, etc

[2] Net Sales include (1) Petroleum Sales (excluding excise tax) (2) Petrochemical Sales (3) Power and Utilities Sales

[3] Market GIM per bbl : [(Market GIM / Crude Intake)/exchange rate]

The operating results in the first quarter of 2022 (1Q22) compared to those in the fourth quarter of 2021 (4Q21): In 1Q22, the Company reported net sales of Baht 76,608 million increasing by 13% from that in 4Q21. This attributed to a 16% increase in average selling prices following higher crude oil price while a 3% decrease in sales volume. The average crude intake was 194,000 barrels per day, down by 2%.



The Market Gross Integrated Margin (Market GIM) was Baht 4,105 million (USD 7.08 per barrel) decreasing by 39% as a drop in almost all Lube Base Oil and Petrochemical products spreads along with an increase in crude premium. Meanwhile, Diesel and Gasoline spreads significantly improved.



The crude oil price in 1Q22 significantly surged from USD 78.35 per barrel in 4Q21 to USD 95.56 per barrel as a result of the conflict between Russia and Ukraine. Furthermore, OPEC and its allies' remained control oil production. Hence, the Company had the net stock gain of Baht 5,786 million or USD 9.97 per barrel, rose by Baht 5,519 million from that in the prior quarter. These resulted in the Accounting Gross Integrated Margin (Accounting GIM) of Baht 9,891 million or USD 17.05 per barrel, which increased by 42%. Meanwhile, the operating expenses were Baht 3,018 million decreasing by 18%. As a result, the earnings before interest, tax, depreciation and amortization (EBITDA) amounted to Baht 6,600 million raising by 113%.

The Company recorded the depreciation expenses amounting to Baht 2,008 million decreasing by 3%. Besides, the net financial cost was Baht 398 million, which declined by 1%. The Company recorded gain on financial derivatives amounting to Baht 200 million increasing by 87%. Furthermore, there was gain on foreign exchange from US Dollar - borrowings of Baht 19 million that dropped by 73% because the Thai Baht in this quarter was less appreciated than that in the previous quarter. The Company had outstanding USD debt of 140 million at the end of 1Q22. There was gain on investments of Baht 129 million, down by Baht 86 million from that last quarter. However, the Company recorded unrealized loss on oil hedging amounting to Baht 2,699 million compared to an unrealized gain on oil hedging amounting to Baht 1,526 million in 4Q21. The Company had a corporate income tax of Baht 338 million that rose by 6%. All previously mentioned resulted in the net profit of Baht 1,501 million in 1Q22, which declined by 32%, QoQ.

The operating results in the first quarter of 2022 (1Q22) compared to those in the first quarter of 2021 (1Q21): The Company's net sales was up by Baht 28,220 million or 58% attributing to a 57% increase in the average selling prices following the higher crude oil price as well as a 1% increase in sales volume. The average crude intake was 194,000 barrels per day increasing by 4%. The Market GIM declined by Baht 2,860 million or 41% as a drop in almost all Lube Base Oil and petrochemical products spreads. The net stock gain increased by Baht 784 million or 16%. These led to the lower Accounting GIM of Baht 2,076 million or 17%. Meanwhile, the operating expenses reduced by Baht 83 million. Therefore, the EBITDA dropped by Baht 2,183 million or 25%, YoY.

The Company recorded a decrease in the depreciation by Baht 172 million. The net financial cost was down by Baht 43 million or 10%. The Company recorded gain on financial derivatives amounting to Baht 200 million in 1Q22 compared to loss on financial derivatives amounting to Baht 110 million in 1Q21. Furthermore, there was gain on foreign exchange from US Dollar - borrowings of Baht 19 million compared to loss on foreign exchange from US Dollar - Borrowings amounting to Baht 182 million in 1Q21. However, there was unrealized loss on oil hedging of Baht 2,699 million compared to unrealized gain on oil hedging of Baht 548 million in 1Q21. Also, there was a decrease in the gain on investments by Baht 27 million, while the corporate income tax dropped by Baht 634 million. These resulted in the net profit of Baht 1,501 million in this period dropping by 73%, YoY.

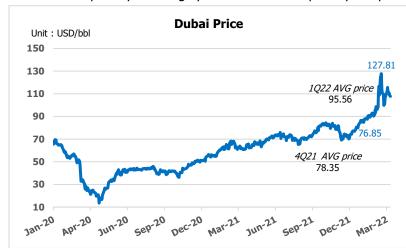


Operating Performance

1. Operating Performance by Business Units

- 1.1 Petroleum business unit
- 1.1.1 Petroleum Market Overview

Crude oil situation in the first quarter of 2022 (1Q22): The global oil consumption was 98.9 million barrels per day declining by 3.1 million barrels per day compared to the 4Q21 oil consumption of 102

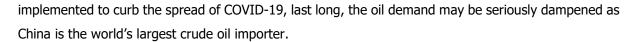


million barrels per day as prices of petroleum products hiked in parallel with the crude oil price, especially the prices of refinery products, after Russia started invading Ukraine in late February 2022. The Dubai price in 1Q22 moved between USD 76.85 per barrel and USD 127.81 per barrel, with an average of USD 95.56 per

barrel that rose by USD 17.21 per barrel from USD 78.35 per barrel in 4Q21. This was because the market concerned that Russian crude oil export would be affected by sanctions retaliating Russia's ferocious actions. Such circumstance was expected to tighten the crude oil supply robustly, hence the rapidly and significantly surging crude oil price. Also, OPEC and allies still dominated global crude oil production and they determined to gradually increase the production by 0.4 million barrels per day from August 2021 to May 2022 in order to meet the demand. In addition, the U.S. crude oil production level was still low while the oil demand recovered continuously resulting in a gradual decrease in the U.S. crude oil inventory. Meanwhile, concerns about COVID-19's Omicron variant alleviated over time owing to its low severity, albeit its transmissibility was high. This encompassed eases of COVID-19-related restrictions in worldwide countries, which supported the oil demand.

Crude oil outlook in the second quarter of 2022 (2Q22): Crude oil demand tends to increase from that in 1Q22 thanks to the COVID-19-related restriction eases in several countries throughout the world leading to recovering overall economic activities. The crude oil price is supposed to be greater than that in 1Q22 owing to the market's expectation that the sanctions on Russia will affect oil balances more intensely. Even if the war's aspect has not been clear so far, it is foreseen that the sanctions on Russian energy will be prolonged. Nevertheless, there are factors pressuring the crude oil price including the release of Strategic Petroleum Reserve (SPR) from the U.S. and allies in the International Energy Agency (IEA) corresponding to around 1 million barrels per day from May to October 2022, along with a prediction of higher Iranian crude oil export if the U.S. sanctions on Iran are thoroughly lifted in late 2Q22. Moreover, if lockdowns in several areas of China, which are





1.1.2 Crude Intake and Capacity

	Quarter			% Change	
Petroleum	1Q22	1Q21	4Q21	YoY	QoQ
Crude Intake					
Million barrels	17. 4 6	16.73	18.23	4%	(4%)
KBD	194	186	198	4%	(2%)
Utilization Rate					
Refinery	90%	86%	92%	4%	(2%)
RDCC	102%	113%	115%	(11%)	(13%)
Lube Base Oil	81%	82%	92%	(1%)	(11%)

Remark: Crude intake capacity is 215,000 barrels per day

In 1Q22, crude intake was 17.46 million barrels or 194,000 barrels per day. Refinery utilization rate was 90%.

In 1Q22, crude intake was 17.46 million barrels or 194,000 barrels per day (194 KBD). Refinery utilization rate was 90% declining by 2% from that in 4Q21 while rising by 4% from that in 1Q21 owing to a planned maintenance shutdown of ADU 1 unit in 1Q21 taking 17 days.

The utilization rate of RDCC plant in 1Q22 was 102% dropping by 13% from that in 4Q21 of 115%. Also, by comparing with 1Q21, the utilization rate was down by 11% as HYVAHL unit performed a planned maintenance shutdown to renew a catalyst taking around 1 month.

The utilization rate of Lube Base Oil plant in 1Q22 was 81% decreasing by 11%, QoQ, due to a planned maintenance shutdown of the Lube Base Oil plant taking 11 days. By comparing YoY, the utilization rate was approximate.

1.1.3 Petroleum Sales

	Sales Volume (Million Barrels)						
Products	Quarter						
	1Q22 1Q21 4Q21						
Refinery	13.36	12.85	13.66				
Lube Base Oil	1.73	1.69	1.87				
Total	15.09	14.54	15.53				

Sales Value (Million Baht)						
Quarter						
1Q22	1Q21	4Q21				
50,474	27,228	42,512				
5,785	4,622	6,145				
56,259	31,850	48,657				



In 1Q22, net sales of petroleum businesses increased by 16% from that in the prior quarter as the average selling prices increased by 19% following the rising crude oil price, while the sales volume declined by 3%.

In 1Q22, net sales of petroleum businesses were Baht 56,259 million increasing by Baht 7,602 million or 16% from that in 4Q21. This was mainly because of a 19% increase in the average selling prices following the rising crude oil price versus a 3% decrease in the sales volume, from 15.53 to 15.09 million barrels. The slump in the sales volume was mainly from Diesel and Naphtha, while the sales

volume of Fuel Oil improved.

By comparing YoY, the net sales of petroleum businesses escalated by Baht 24,409 million or 77%, mainly from a 73% increase in the average selling prices following the rising crude oil price and a 4% improvement in the sales volume being mainly from Naphtha and Diesel. Still, the sales volume of Fuel Oil lessened.

1.1.4 Petroleum Sales Breakdown

	Quarter					
Products	1Q22		1Q22 1Q21		4Q21	
	Local	Export	Local	Export	Local	Export
Refinery	66%	34%	66%	34%	63%	37%
Lube Base Oil	49%	51%	52%	48%	37%	63%
Total	64%	36%	64%	36%	60%	40%

In 1Q22, the proportion of domestic and export of petroleum products was 64:36. The percentage of domestic sales improved by 4% from that in the prior quarter thanks to an ease of the domestic lockdown restrictions. The increasing domestic proportion was mainly from Diesel and Gasoline. By comparing 1Q22 with 1Q21, the percentage of domestic sales unchanged.

The export products in 1Q22 were mostly shipped to Singapore, Cambodia and Laos respectively.

5



1.1.5 Petroleum Products Spread

A		Quarter	% Change		
Average price	1Q22	1Q21	4Q21	YoY	QoQ
Dubai Crude Oil (USD/bbl)	95.56	60.01	78.35	59%	22%
Petroleum (USD/bbl)					
Naphtha - Dubai	1.2	0.6	3.6	100%	(67%)
ULG95 - Dubai	17.8	7.1	15.5	151%	15%
Gas Oil 0.05%S - Dubai	19.6	4.7	11.4	317%	72%
FO 180 3.5%S - Dubai	(8.3)	(3.5)	(6.9)	(137%)	(20%)
Lube Base Oil (USD/MT)					
500SN - FO 180 3.5%S	522	777	671	(33%)	(22%)
150BS - FO 180 3.5%S	791	1,011	1,087	(22%)	(27%)
Asphalt - FO 180 3.5%S	(81)	23	(29)	(452%)	(179%)

The spread between Petroleum products and raw material

The spread between Petroleum products and Dubai

- Naphtha Spread Lower: Naphtha Dubai spread in 1Q22 was USD 1.2 per barrel declining by 67% from USD 3.6 per barrel in 4Q21. This was because Naphtha price was weighted by the unrecovered petrochemical market, even though Naphtha price rose in parallel with the crude oil price because of the Russia-Ukraine conflict. By comparing with 1Q21 of USD 0.6 per barrel, the spread improved by 100%.
- ULG95 Spread Higher: ULG95 Dubai spread in 1Q22 was USD 17.8 per barrel enhancing by 15% from USD 15.5 per barrel in 4Q21 as the demand improved regularly, especially in the U.S., owing to better overall COVID-19 pandemic situations. The Gasoline demand in China and India increased as well and surpassed their pre-pandemic levels. In addition, China's pollution control regulations amidst the Winter Olympics in February 2022 curbed petroleum production and exports leading to reducing overall Gasoline supply. By comparing with 1Q21 of USD 7.1 per barrel, the spread rose by 151%.
- Gas Oil Spread Higher: Gas Oil Dubai spread in 1Q22 was USD 19.6 per barrel improving by 72% from USD 11.4 per barrel in 4Q21. This was because most European countries shunned oil and energy being exported from Russia to retaliate Russia's violence on Ukraine and alternated the imports with those from Asia. Also, Diesel demand improved seasonally, especially in Asia where the demand recovered thanks to lockdown eases. Moreover, the Gas-to-oil switching also



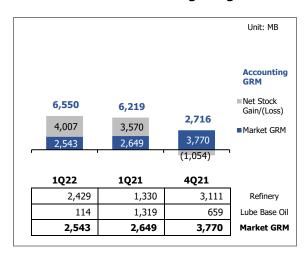
supported the Diesel price as the LNG price was progressively high. By comparing with 1Q21 of USD 4.7 per barrel, the spread was up by 317%.

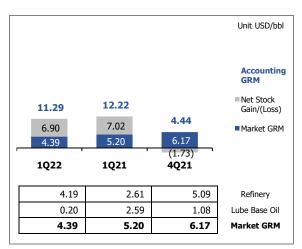
• Fuel Oil Spread - Lower: HSFO - Dubai spread in 1Q22 was USD -8.3 per barrel dropping by 20% from USD -6.9 per barrel in 4Q21 due to the increasing Fuel Oil supply from Russia to Asia. This followed energy sanctions of the U.S. and most European countries on Russia, hence adjusted Russian Fuel Oil export destination. What is more, China's pollution control measures amidst the Winter Olympics dampened Fuel Oil demand. By comparing with 1Q21 of USD -3.5 per barrel, the spread reduced by 137%.

The spread between Lube Base Oil products and FO 180 3.5%S

- **500 SN Spread Lower:** 500SN Fuel Oil spread in 1Q22 was USD 522 per ton dropping by 22% from USD 671 per ton in 4Q21 as the supply enhanced after the heavy turnaround period in China, South Korea and Japan was over. Also, the demand was pressured due to COVID-19 situations in China. By comparing with 1Q21 of USD 777 per ton, the spread was down by 33%.
- **Asphalt Spread Lower:** Asphalt Fuel Oil spread in 1Q22 was USD -81 per ton decreasing by 179% from USD -29 per ton in 4Q21 as the demand was weakened. This was due to health-focused budget allocation, thus tighter budget for infrastructure. By comparing with 1Q21 of USD 23 per ton, the spread was down by 452%.

1.1.6 Gross Refining Margin





In 1Q22, Market GRM was Baht 2,543 million or USD 4.39 per barrel decreasing by Baht 1,227 million or USD 1.78 per barrel, QoQ, mainly due to the rising crude premium.

In 1Q22, the Gross Refining Margin (Market GRM) was Baht 2,543 million or USD 4.39 per barrel declining by Baht 1,227 million or USD 1.78 per barrel compared to that in 4Q21, mainly because of the rising crude premium of USD 3.51 per barrel, even though most refinery products spread enhanced. Besides, by comparing YoY, the Market GRM decreased by Baht 106 million or USD 0.81 per



barrel, mainly from softer Lube Base Oil spread, especially Asphalt - Fuel Oil spread being down significantly. Meanwhile, refinery spread improved.

In 1Q22, there was a net stock gain equaling Baht 4,007 million or USD 6.90 per barrel comprising of a net stock gain of Baht 4,670 million and a reverse of Lower of cost or market (LCM) of Baht 4 million. Still, there was a realized oil hedging loss amounting Baht 667 million. This entailed the Accounting Gross Refining Margin (Accounting GRM) of Baht 6,550 million or USD 11.29 per barrel increasing by Baht 3,834 million or USD 6.85 per barrel, QoQ. Also, by comparing YoY, the Accounting GRM was up by Baht 331 million.

1.2 Petrochemical business unit

1.2.1 Petrochemical Market Overview

Petrochemical market situation in 1Q22: Petrochemical product demand softened as a result of higher prices caused by the Russia-Ukraine conflict leading to continuous rises of crude oil and raw material prices. Due to such circumstance, consumers tended to be more cautious about their spending. In addition, the demand in key markets such as China, Taiwan, and Vietnam declined owing to the Lunar New Year holidays, coupled with China's pollution control measures during the Winter Olympics taking place from late-January to mid-February and lockdowns being implemented in several major cities of China including Shenzhen and Shanghai to prevent the spread of COVID-19 according to the Zero-COVID policy in March. The demand from major markets such as electrical appliances and electronics remained unrecoverable because it was an off-peak season. Meanwhile, the supply had a downward trend due to the turnaround season and operation cut from some producers because of lower petrochemical products spread.

Petrochemical market situation in 2Q22: Petrochemical product demand is expected to improve from that in the prior quarter. The downstream manufacturers have started ordering more polymers as the prices tend to remain high amidst the Russia-Ukraine conflict. Factors that need to be monitored include the severity of such conflict, which may push crude oil and raw material prices up, along with the demand for petrochemical products from downstream industries such as food and beverage packaging, medical and health-related equipment being thought to grow continuously according to "New-normal" consumption behavior. In addition, the demand for plastic in the Electric Vehicles sector is growing rapidly as the plastic are key materials for assembling EVs car thanks to their light weights boosting the EVs' efficiency. Nevertheless, there are certain significant factors pressuring petrochemical prices. The obvious one is tremendously ascending new capacity in 2022, both on-plan and delayed from 2021. China owns most of the new capacity being accordance with Self-sufficiency policy. Besides, surging freight costs and port congestion are able to pull the prices down.



1.2.2 Petrochemical Capacity

		Quarter	% Ch	ange	
	1Q22	1Q21	4Q21	YoY	QoQ
Utilization Rate					
Olefins Group	93%	90%	96%	3%	(3%)
Aromatics and Styrenics Group	108%	102%	98%	6%	10%

In 1Q22, the utilization rate of Olefins group was 93% decreasing by 3% from that in 4Q21 of 96% as there was a planned maintenance shutdown of the Polyolefins plant in 1Q22 taking 12 days. Still, by comparing with 1Q21, the utilization rate rose by 3% due to a planned maintenance shutdown of Olefins plant in 1Q21.

The utilization rate of Aromatics and Styrenics group in 1Q22 was 108% rising by 10%, QoQ, and by 6%, YoY.

1.2.3 Petrochemical Sales

	Sales Volume (KMT)					
Products	Quarter					
	1Q22	1Q21	4Q21			
Olefins Group	267	269	256			
Aromatics and Styrenics Group	183	181	170			
Total	450	450	426			

Sales Value (Million Baht)						
Quarter						
1Q22	1Q21	4Q21				
11,278	9,724	10,708				
8,172	5,992	7,605				
19,450	15,716	18,313				

Remark: Included sales of Trading business (iPolymer) and New S-Curve business (Rakpasak)

Net sales of petrochemical businesses in 1Q22 rose by 6%, QoQ, due to an increase in sales volume.

In 1Q22, the net sales of petrochemical businesses amounted to Baht 19,450 million enhancing by Baht 1,137 million or 6%, QoQ. This was mainly due to an increase in sales volume of 24,000 tons, mainly from PS in Styrenics group.

By comparing YoY, the net sales of petrochemical businesses improved by Baht 3,734 million or 24% thanks to a 24% increase in the average selling prices being parallel with enhanced market situations.



1.2.4 Petrochemical Sales Breakdown

	Quarter						
Products	1Q22		1Q21		4Q21		
	Local	Export	Local	Export	Local	Export	
Olefins Group	70%	30%	65%	35%	67%	33%	
Aromatics and Styrenics Group	47%	53%	49%	51%	45%	55%	
Total	60%	40%	59%	41%	57%	43%	

Remark: Included sales of Trading business (iPolymer) and New S-Curve business (Rakpasak)

In 1Q22, the proportion of domestic and export petrochemical sales was 60:40. The domestic sales proportion was up by 3% from that in 4Q21 being mainly from PP in Olefins group along with ABS and PS in Styrenics group. In addition, by comparing with 1Q21, the domestic sales proportion was up by 1%, mainly from PP in Olefins group and PS in Styrenics group.

The petrochemical exports in 1Q22 were mainly shipped to Singapore, Hong Kong and Indonesia respectively.

1.2.5 The spread between key petrochemical products and raw material

Average Price		Quarter		%Cha	inge
(USD/MT)	1Q22	1Q21	4Q21	YoY	QoQ
Naphtha	877	557	745	57%	18%
Olefins					
Ethylene - Naphtha	297	401	348	(26%)	(15%)
HDPE – Ethylene	151	303	215	(50%)	(30%)
HDPE – Naphtha	448	70 4	563	(36%)	(20%)
Propylene – Naphtha	275	430	193	(36%)	42%
PP – Propylene	214	363	365	(41%)	(41%)
PP – Naphtha	489	793	558	(38%)	(12%)
Aromatics					
BZ - Naphtha	197	196	200	1%	(2%)
TOL - Naphtha	19	76	43	(75%)	(56%)
MX – Naphtha	100	110	28	(9%)	257%
Styrenics					
SM - Naphtha	404	567	409	(29%)	(1%)
ABS - Naphtha	1,078	1,780	1,462	(39%)	(26%)
PS (GPPS) - Naphtha	776	1,021	867	(24%)	(10%)



The spread between petrochemical products and raw material in 1Q22

The spread between Polyolefins group and Naphtha

- HDPE Spread Lower: HDPE-Naphtha spread was USD 448 per ton decreasing by 20% from USD 563 per ton in 4Q21. It was caused by the increasing Naphtha price being in parallel with Dubai crude oil price that was affected by the Russia-Ukraine conflict. On the other hand, the finished product price moved up at a slower pace than Naphtha price did because of lower demand as it was a low season for construction during winter. Plus, the impact of China's pollution control policies during the Winter Olympics curbed the price. When compared with 1Q21 of USD 704 per ton, the spread decreased by 36%.
- **PP Spread Lower:** PP-Naphtha spread was USD 489 per ton decreasing by 12% from USD 558 per ton in 4Q21. It was owing to the tensions between Russia and Ukraine escalating raw material costs in accordance with Dubai price. The demand also dampened due to the Lunar New Year festival as well as a rise in COVID-19 infections in the region. Besides, some supply from China exported to Southeast Asia as the cost competitiveness. When compared with 1Q21 of USD 793 per ton, the spread decreased by 38%.

The spread between Aromatics group and Naphtha

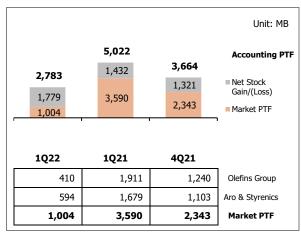
- **TOL Spread Lower:** Toluene Naphtha spread was USD 19 per ton decreasing by 56% from USD 43 per ton in 4Q21. This resulted from the escalating Naphtha price after crude oil prices soared, while the product price had moved at a slower pace. When compared with 1Q21 of USD 76 per ton, the spread decreased by 75%.
- MX Spread Higher: Mixed Xylene Naphtha spread was USD 100 per ton rising by 257% when compared to USD 28 per ton in 4Q21 as the unplanned shutdowns of MX plant after a strong earthquake in Japan. When compared with 1Q21 of USD 110 per ton, the spread decreased by 9%.

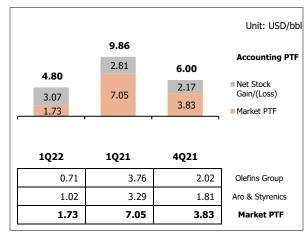
The spread between Polystyrenics group and Naphtha

- **ABS Spread Lower:** ABS Naphtha spread was USD 1,078 per ton decreasing by 26% from USD 1,462 per ton in 4Q21. It was derived from softer demand in major markets such as electrical appliances and electronics amidst an off-peak season. In addition, China's Zero-COVID policy with lockdowns in major cities also reduced products demand. Besides, the lockdowns obstructed production and transportation sectors lulling the demand. When compared with 1Q21 of USD 1,780 per ton, the spread decreased by 39%.
- **PS Spread Lower:** PS Naphtha spread was USD 776 per ton decreasing by 10% from USD 867 per ton in 4Q21 as the demand from major markets such as electrical appliances and electronics remained confined. When compared with 1Q21 of USD 1,021 per ton, the spread decreased by 24%.



1.2.6 Product to Feed Margin (Product to Feed : PTF)*





Remark: * Included Trading business (iPolymer) and New S-Curve business (Rakpasak)

In 1Q22, the Market PTF was Baht 1,004 million decreasing by Baht 1,339 million from that in the prior quarter as most petrochemical products spread softened.

In 1Q22, the Market Product to Feed Margin (Market PTF) was Baht 1,004 million or USD 1.73 per barrel being down by Baht 1,339 million or USD 2.10 per barrel from that in the prior quarter. This was because most petrochemical products spread reduced as Naphtha price rose rapidly in parallel with the crude oil price amidst the Russia-Ukraine conflict. In the meantime, the

petrochemical product prices enhanced at the lower paces due to softer demand being pressured by high raw material price as well as COVID-19 situations in China. By comparing YoY, the Market PTF declined by Baht 2,586 million or USD 5.32 per barrel because most petrochemical products spread was down.

In 1Q22, the net stock gain of the petrochemical businesses was Baht 1,779 million or USD 3.07 per barrel comprising of the stock gain equaling Baht 1,729 million and a reverse of the LCM amounting to Baht 50 million. Hence, the Company obtained the Accounting Product to Feed Margin (Accounting PTF) equaling Baht 2,783 million or USD 4.80 per barrel, which decreased by Baht 881 million or USD 1.20 per barrel, QoQ, and reduced by Baht 2,239 million or USD 5.06 per barrel, YoY.



1.3 Power Plant and Utility business units Capacity and Sales

	Quarter			% Change		
	1Q22	1Q21	4Q21	YoY	QoQ	
Utilization Rate						
Electricity	69%	73%	74%	(4%)	(5%)	
Steam	61%	61%	58%	0%	3%	
Sales (Baht million)						
Electricity	497	509	499	(2%)	(0.4%)	
Steam	343	251	314	37%	9%	
Others	59	61	57	(3%)	4%	
Total	899	821	870	10%	3%	

Utilization rates of Electricity and Steam In 1Q22, the utilization rate of Electricity was 69% being down by 5% from 74% in 4Q21; besides, by comparing YoY, the rate decreased by 4% owing to a planned maintenance shutdown of a power subunit in 1Q22. The utilization rate of Steam in 1Q22 was 61% increasing by 3%, QoQ, while unchanged by comparing YoY.

The net sales of Power and Utility businesses In 1Q22, the net sales of Power and Utility businesses were Baht 899 million rising by 3%, QoQ, and by 10%, YoY, mainly from the improving average selling prices of Steam.



2. Total Operating Performance

Total Operating Performance of IRPC and its subsidiaries for 1Q22 are as follows;

	Unit : Million Baht		Unit: USD per barrel			
	Quarter		Quarter			
	1Q22	1Q21	4Q21	1Q22	1Q21	4Q21
Average FX (THB/USD)	33.22	30.43	33.55			
Total Crude Intake (Mbbl)	17.46	16.73	18.23			
Average Crude (USD/bbl) ⁽¹⁾	102.08	61.62	81.36			
Sales (2)	79,432	53,650	72,445	136.95	105.38	118.45
Net Sales (3)	76,608	48,388	67,840	132.08	95.05	110.92
Variable Cost (Raw Material - Market Price)	(72,503)	(41,423)	(61,160)	(125.00)	(81.37)	(100.00)
Market GIM	4,105	6,965	6,680	7.08	13.68	10.92
Stock Gain (Loss)	6,399	4,982	2,122	11.03	9.79	3.47
Lower of Cost or Market	54	-	(54)	0.09	-	(0.09)
Realized Gain (Loss) on Oil Hedging	(667)	20	(1,801)	(1.15)	0.04	(2.94)
Net Stock Gain (Loss)	5,786	5,002	267	9.97	9.83	0.44
(Accounting GIM)	9,891	11,967	6,947	17.05	23.51	11.36
Other Incomes (4)	352	436	401	0.61	0.86	0.66
Selling Expenses	(625)	(519)	(584)	(1.08)	(1.02)	(0.95)
Accounting GIM and Other Incomes	9,618	11,884	6,764	16.58	23.35	11.07
OPEX	(3,018)	(3,101)	(3,670)	(5.20)	(6.09)	(6.00)
EBITDA	6,600	8,783	3,094	11.38	17.26	5.07
Depreciation	(2,008)	(2,180)	(2,068)	(3.46)	(4.28)	(3.38)
EBIT	4,592	6,603	1,026	7.92	12.98	1.69
Net Financial Cost	(398)	(441)	(402)	(0.69)	(0.87)	(0.66)
Gain (Loss) on Financial Derivatives	200	(110)	107	0.34	(0.22)	0.17
Gain (Loss) on Foreign Exchange from Borrowing	19	(182)	70	0.03	(0.36)	0.11
Unrealized Gain (Loss) on Oil Hedging	(2,699)	548	1,526	(4.65)	1.08	2.50
Gain (Loss) on Impairment and Disposal of Fixed Assets	-	(10)	(27)	-	(0.02)	(0.04)
Gain (Loss) on Investment	129	156	215	0.22	0.31	0.35
Other Expenses	(1)	(1)	-	(0.00)	(0.00)	-
Net Profit (Loss) before Income Tax	1,842	6,563	2,515	3.17	12.90	4.12
Income Tax	(338)	(972)	(319)	(0.58)	(1.91)	(0.52)
Gain (Loss) on non-controlling interests	(3)	(10)	(2)	(0.01)	(0.02)	-
Net Profit (Loss)	1,501	5,581	2,194	2.58	10.97	3.60
Earning per share (EPS) (Baht/Share)	0.07	0.27	0.11			

Note : $\[^{[1]}\]$ Average market prices of crude used in the production process

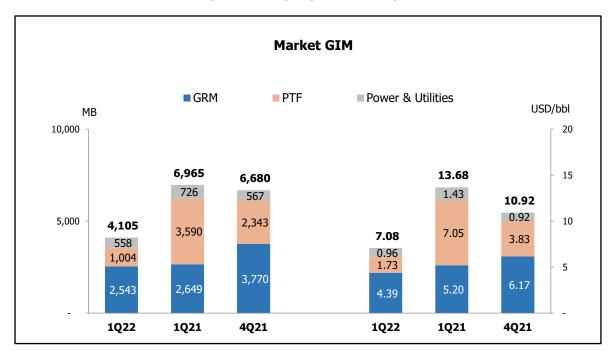
^[2] Sales include (1) Petroleum Sales (2) Petrochemical Sales (3) Power and Utilities Sales (4) Sales of tank farm and port service, etc.

^[3] Net Sales include (1) Petroleum Sales (excluding excise tax) (2) Petrochemical Sales (3) Power and Utilities Sales

 $^{^{[4]}\,\,}$ Other Incomes include land, tank farm and port service etc.



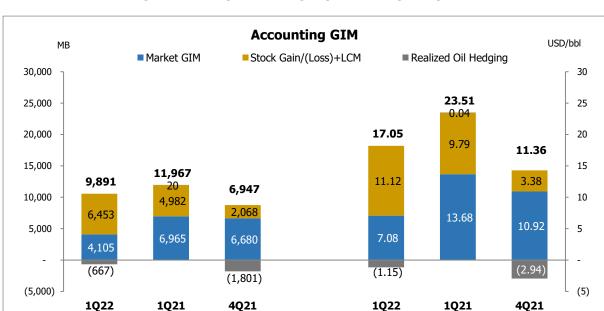
2.1 Market Gross Integrated Margin (Market GIM)



The Market Gross Integrated Margin (Market GIM) in 1Q22 was Baht 4,105 million or USD 7.08 per barrel declining by Baht 2,575 million or USD 3.84 per barrel, QoQ, mainly from lessened petrochemical and Lube Base Oil products spreads. Plus, the crude premium was up by USD 3.51 per barrel. Meanwhile, refinery products spread significantly escalated, especially Diesel and Gasoline spreads.

By comparing with 1Q21 of Baht 6,965 million or USD 13.68 per barrel, the Market GIM softened by Baht 2,860 million or USD 6.60 per barrel due to the narrower petrochemical and Lube Base Oil products spreads. Besides, the crude premium rose by USD 4.91 per barrel.





2.2 Accounting Gross Integrated Margin (Accounting GIM)

The Accounting Gross Integrated Margin (Accounting GIM) in 1Q22 was Baht 9,891 million or USD 17.05 per barrel increasing by Baht 2,944 million or USD 5.69 per barrel, QoQ. This was mainly owing to a rise in the net stock gain amounting to Baht 5,519 million or USD 9.53 per barrel versus a drop in the Market GIM of Baht 2,575 million or USD 3.84 per barrel. Meanwhile, the Company recorded the net stock gain of Baht 5,786 million or USD 9.97 per barrel in 1Q22. This comprised of the stock gain equaling Baht 6,399 million or USD 11.03 per barrel and a reverse of the Lower of Cost or Market (LCM) of Baht 54 million or USD 0.09 per barrel, while there was a loss on realized oil hedging of Baht 667 million or USD 1.15 per barrel.

By comparing with 1Q21 of Baht 11,967 million or USD 23.51 per barrel, the Accounting GIM was down by Baht 2,076 million or USD 6.46 per barrel as the Market GIM decreased by Baht 2,860 million or USD 6.60 per barrel, while the net stock gain was up by Baht 784 million or USD 0.14 per barrel.

2.3 Other Incomes

Other incomes consist of port and tank farm services and other services. In 1Q22, the Company had other incomes of Baht 352 million decreasing by Baht 49 million from that in the previous quarter. Also, by comparing YoY, other incomes dropped by Baht 84 million due to decreased incomes from port and tank farm services.

2.4 Operating Expenses

In 1Q22, the Company had operating expenses of Baht 3,018 million decreasing by Baht 652 million, QoQ, and by Baht 83 million, YoY, mainly from employee expenses.



2.5 Depreciation

In 1Q22, the depreciation was Baht 2,008 million decreasing by Baht 60 million, QoQ, and by Baht 172 million, YoY, mainly from fully depreciated assets.

2.6 Net Financial Cost

In 1Q22, the net financial cost was Baht 398 million declining by Baht 4 million, QoQ and by Baht 43 million, YoY, mainly from lower interest rates.

2.7 Gain (Loss) on Financial Derivatives

In 1Q22, there was gain on financial derivatives amounting to Baht 200 million, mainly from gain on Cross Currency Swap (CCS) of Baht 99 million and gain on Interest Rate Swap (IRS) of Baht 98 million. The gain rose by Baht 93 million, QoQ; besides, there was gain in 1Q22 compared to loss of Baht 110 million in 1Q21.

2.8 Gain (Loss) on Foreign Exchange from Borrowing

In 1Q22, the Company recorded gain on foreign exchange from U.S. dollar-borrowings of Baht 19 million decreasing by Baht 51 million, QoQ due to the less appreciated Thai Baht, from 33.59 Baht per USD at the end of 4Q21 to 33.46 Baht per USD at the end of 1Q22. Also, by comparing YoY, the gain improved by Baht 201 million from the loss of Baht 182 million in 1Q21. In any case, the Company had long-term liabilities in USD amounting to USD 140 million at the end of 1Q22.

2.9 Unrealized Gain (Loss) on Oil Hedging

In 1Q22, the Company recorded unrealized loss on oil hedging of Baht 2,699 million while there were gains in 4Q21 and 1Q21 amounting to Baht 1,526 million and Baht 548 million respectively.

2.10 Gain (Loss) on Investments

In 1Q22, there was gain on investments of Baht 129 million decreasing by Baht 86 million, QoQ, and by Baht 27 million, YoY, mainly from lessened profit sharing from investments in associates and joint ventures.

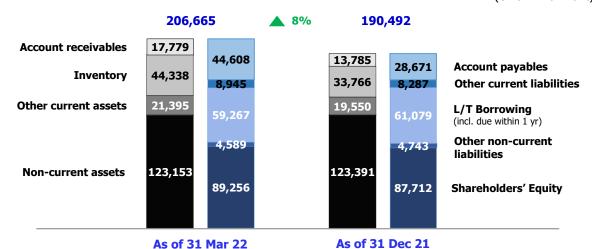
2.11 Corporate Income Tax

In 1Q22, the Company recorded a corporate income tax of Baht 338 million rising by Baht 19 million, QoQ, due to lower adoption of investment promotions. Still, by comparing YoY, the corporate income tax was down by Baht 634 million owing to the softened performance.



Financial Positions as of 31 March 2022

(Unit: Million Baht)



<u>Assets</u>

As of March 31, 2022, the Company had total assets of Baht 206,665 million increasing by Baht 16,173 million or 8% from that on December 31, 2021. It was due to the following reasons:

• **Trade receivables:** increased by Baht 3,994 million or 29% from that at the end of 2021, mainly due to a rise in average selling prices following the crude oil price. The Company's credit term policy is about 7 - 120 days and most customers made payment on schedule. As of March 31, 2022, there were trade receivables being overdue of over 3 months amounting to Baht 57 million which incorporated in the Company's provision for doubtful debt of Baht 31 million. The average collection period for 1Q22 was 18 days increasing by 1 day from that at the end of 2021.

Trade receivables by payment period are as follows;

		1Q22			2021	
(Unit : Million Baht)	Related	Other	Total	Related	Other	Total
,	parties	parties		parties	parties	
Current	10,186	7,435	17,621	4,911	7,533	12,444
Overdue	41	148	189	36	1,335	1,371
- less than 3 months	16	116	132	22	1,303	1,325
- over 3 months but less than 12 months	25	4	29	14	4	18
- over 12 months	-	28	28	-	28	28
Total	10,227	7,583	17,810	4,947	8,868	13,815
Less Allowance for doubtful accounts	-	(31)	(31)	-	(30)	(30)
Total Account Receivables	10,227	7,552	17,779	4,947	8,838	13,785

• **Inventory:** increased by Baht 10,572 million or 31% from that at the end of 2021, mainly due to a 19% increase in the crude oil price and products prices following market situations. The average inventory period was 49 days increasing by 5 days from that at the end of 2021.

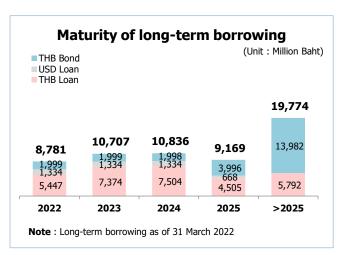


- Other current assets: increased by Baht 1,845 million or 9% from that at the end of 2021. This was mainly attributed to a rise in cash and cash equivalents by Baht 3,895 million and an increase in other receivables by Baht 1,038 million. Meanwhile, there was a decrease in amounts due from related parties equaling Baht 2,780 million.
- **Non-current assets:** decreased by Baht 238 million from that at the end of 2021, mainly due to a decline in fixed assets and investment properties of Baht 1,085 million. Most of which dropped due to an increase in the accumulated depreciation. Meanwhile, there was an increase in deferred tax assets by Baht 513 million and a rise in investments in subsidiaries, joint ventures and associates by Baht 132 million.

Liabilities

As of March 31, 2022, the Company had total liabilities of Baht 117,409 million increasing by Baht 14,629 million or 14% from what was stated as of December 31, 2021. It was due to the following reasons:

- **Trade payables:** increased by Baht 15,937 million or 56% compared to that at the end of 2021. It was mainly due to an increase in the crude oil price following the market situations as well as an increase in accrued crude payable volume. The average payment period was 46 days increasing by 4 days from that at the end of 2021.
- Other current liabilities: increased by Baht 658 million or 8% compared to that at the end of 2021, mainly due to an increase in current derivative liabilities of Baht 2,699 million and a rise in corporate income tax payable of Baht 824 million while a decrease in accrued bonus expenses of Baht 1,719 million and a decrease in advance receipts for goods of Baht 959 million.



• Long - term borrowing including current portion within one year: decreased by Baht 1,812 million compared to that at the end of 2021, mainly due to loans repayment to financial institutions of Baht 1,800 million.



The details of long-term borrowings are shown below;

(Unit: Million Baht)

	Mar 31, 2022	Dec 31, 2021	Change
Thai Baht Bonds	23,974	23,972	2
USD Loan	4,671	4,688	(17)
Thai Baht Loan	30,622	32,419	(1,797)
Total	59,267	61,079	(1,812)
less current portion of long-term borrowing	(9,031)	(10,585)	1,554
Net Outstanding Borrowing	50,236	50,494	(258)

Note: As of March 31, 2022, the Company had Cross Currency Swap (CCS) in a total amount of USD 110 million.

Shareholders' Equity

As of March 31, 2022, shareholders' equity amounted to Baht 89,256 million, which increased from what was stated as of December 31, 2021 by Baht 1,544 million or 2%. This was mainly from a rise in the net profit amounting to Baht 1,501 million.

Statement of Cash Flow

(Unit: Million Baht)

		Jan – Mar 22	Jan – Mar 21
1	EBITDA	6,600	8,783
2	Change in operating assets and liabilities	429	(14,016)
3	Net cash flows from (used in) operating activities	7,029	(5,233)
4	Net cash flows from (used in) investing activities	(892)	(486)
5	Net cash flows from (used in) financing activities	(2,242)	1,366
6	Net increase (decrease)	3,895	(4,353)
7	Cash at beginning	11,236	8,851
8	Cash at ending	15,131	4,498

As of March 31, 2022, the ending cash was Baht 15,131 million. Net cash flow increased by Baht 3,895 million, which was mainly contributed from the following items:

• **Net cash inflow from operating activities:** of Baht 7,029 million. The cash inflow was mainly from EBITDA of Baht 6,600 million, an increase in trade payables of Baht 15,936 million and a decrease in amounts due from related parties of Baht 2,780 million. Nevertheless, the cash outflow was mainly from an increase in inventory of Baht 10,543 million, an increase in trade receivables of Baht 3,995 million, an increase in other receivables of Baht 1,038 million, a decrease in accrued bonus expense of Baht 1,719 million and a decrease in advance receipts for goods of Baht 959 million.



- **Net cash outflow from investing activities:** of Baht 892 million, mainly from disbursement for the completion of the expansion and efficiency improvement projects of Baht 869 million.
- **Net cash outflow from financing activities:** of Baht 2,242 million. The cash outflow mainly comprised of loans repayment to financial institutions of Baht 1,800 million and interest payment of Baht 441 million.

Key Financial Ratios

	Hait	Quarter				
	Unit	1Q22	1Q21	4Q21		
Profitability Ratios						
EBITDA Margin	%	8.31	16.37	4.27		
Net Profit Margin	%	1.89	10.40	3.03		
Earnings Per Share	Baht/share	0.07	0.27	0.11		
Return on Equity*	%	6.80	28.73	17.79		
Liquidity Ratios						
Current Ratio	time	1.33	1.11	1.41		
Quick Ratio	time	0.53	0.36	0.53		
Financial Policy Ratios						
Net Interest Bearing Debt to Equity	time	0.50	0.75	0.57		
Net Interest Bearing Debt to EBITDA*	time	1.79	1.61	1.92		

Note: *Annualized

Liquidity and Capital Structure

In 1Q22, current ratio was 1.33 times decreasing by 0.08 times compared with that in 4Q21 of 1.41 times. This was mainly owing to a rise in trade payables. Thus, the Company has sufficient liquidity for its operations.

At the end of 1Q22, net interest bearing debt to equity ratio was 0.50 times decreasing by 0.07 times from that in 4Q21 of 0.57 times. This was mainly due to a decrease in debt from the repayment of long term loans. The Company could complete all payments on due date and comply with all of the Financial Covenants.

Note:

Account Receivable Turnover = Sales / Average Account Receivable Before Doubtful Account [average]

Collection Period = 365 / Account Receivable Turnover

Inventory Turnover = Cost of Goods Sold / Average Inventory [average]

Inventory Period = 365 / Inventory Turnover

Account Payable Turnover = Cost of Sales / Average Account Payable [average]

Payment Period = 365 / Account Payable Turnover
EBITDA Margin = EBITDA / Revenue from Sales

Profit Margin = Net Profit (Owner of the Parent) / Revenue from Sales





Return on Equity = Net Profit (Owner of the Parent) / Average Shareholders' Equity (Owner of the

Parent)

Current Ratio = Current Assets / Current Liabilities

Quick Ratio = (Cash + Marketable Securities + Account Receivable) / Current Liabilities

Net Interest Bearing Debt to Equity = (Interest Bearing Debt – Cash) / Total Equity

Net Interest Bearing Debt to EBITDA = (Interest Bearing Debt – Cash) [average] / EBITDA